The role of journals in preventing overdiagnosis

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Outline...

• How are CMAJ, JAMA Internal Medicine, and The BMJ covering the topic of overdiagnosis?

• DEBATE: What is the role of journals in preventing overdiagnosis?
  • Where do journals fit in the world of overdiagnosis?
  • In what ways are journals part of the problem?
  • What part can journals play in moving towards responsible global solutions?
CMAJ and overdiagnosis

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Approach

- Moving from evidence to action
- Across all content
- Using all channels
- Involving The CMAJ Group
- Partnerships
- Content
  - Commissioned
  - Unsolicited
Overdiagnosis

Overmedication
Examples

- Series
  - Choosing Wisely Canada
  - Polypharmacy and deprescribing

- Research
  - Quality of care
  - Screening
  - Diagnostic testing

- Guidelines
  - Canadian Task Force on Preventive Health Care

- Special issues
The Role of Journals in Preventing Overdiagnosis

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Disclosures & Relevant Relationships

Disclosures
- No financial conflicts

Relevant Relationships
- Editor, JAMA Internal Medicine
- Medicare Payment Advisory Commissioner
Personal Influences

- Growing up in Brooklyn
- Working through college and med school
- John Eisenberg at Univ of Pennsylvania
- Living/studying in Great Britain – early 80’s
- RWJ Health Policy Fellow – 2003 - 4
Perspective from academic journals

- Traditional focus is on new technology, drugs, procedures
- Important to also publish negative trials
- All treatments have harms
  - Include in article
- JAMA IM – Less is More, launched 2010
- ABIMF – Choosing Wisely, 2012
- Choosing Wisely Canada
- BMJ – Too Much Medicine, 2013
- CMAJ
Current Paradigms

- If some medical care is good, more care is better
- Newer technology is always better than older methods
- Getting a medical test can’t hurt
- Prevention is about getting the right test at the right time
  - Cancer screenings - PSA, colonoscopy
  - Cardiac screenings - CT, carotid ultrasound
What to do instead

- Prevention founded on lifestyle choices and public health measures
  - Diet, activity level, and not smoking
- Medical care needs to be: the right test/treatment for the right patient at the right time
- Almost all care has benefits AND risks
- If test/treatment has no known benefit, no risk is acceptable
LESS IS MORE

Less Is More

How Less Health Care Can Result in Better Health

If some medical care is good, more care is better. Right? Unfortunately, this is often not the case. Across the United States, the rate of use of common medical services varies markedly, but measures of health are not better in areas where more services are provided.1 In fact, the opposite is true—some measures of health are worse in areas where people receive more health services.2
CLINICIAN & PATIENT EXPECTATIONS
“Brush with Overdiagnosis”

- Incidentalomas: Abnormalities picked up by CT scans ordered for other reasons
  - Could be cancer so lead to more testing
  - Most often, false alarm
- “Harm is interpreted as benefit”
  - False presumption of benefit: Cost of testing outweighs harm
  - Most cancerous incidentalomas regress or grow too slow to kill

Instead, Patients Can

- Ask: Is this abnormal finding really an incidentaloma, i.e., related to order?
- Get second radiologist’s opinion
- Wait & see with retesting is safe option
- Ensure any testing is necessary:
  - “Do I really need this test? Can we proceed without it?”
  - “Can we try treating this symptom and only resort to testing if treatment does not work?”

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Overdiagnosis at The BMJ

• Too much medicine campaign
• Overdiagnosis series of articles
• Other articles: research, news, features, opinion, analysis
• Theme issues of the journal
• Founding partner of Preventing Overdiagnosis conference
  • Helen Macdonald on conference scientific committee
• Host Royal College of General Practitioners’ overdiagnosis campaign on our website
• On steering group for Choosing Wisely UK
Overdiagnosis in mammography screening: a 45 year journey from shadowy idea to acknowledged reality

Alexandra Barratt summarises and debates overdiagnosis in breast cancer screening and discusses how myriad uncertainties might be resolved so we can move forward.

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- Clinical context—Breast cancer is the most common cancer in women worldwide with a significant burden of morbidity and mortality in developed and developing countries.
- Diagnostic change—Mammography screening has provided expanded opportunities to detect breast cancer over the last three decades, and more recently through incremental improvements in detection provided by digital mammography and tomosynthesis.
- Rationale for change—Mammography screening can detect breast cancer earlier, leading to improved patient outcomes.
- Leap of faith—The benefits of early detection and treatment of breast cancer (lives saved) far outweigh the adverse physical and psychosocial effects of early detection and treatment.
- Impact on prevalence—Breast cancer incidence has increased significantly in recent decades, most strikingly among women aged 50-69 years in countries where there is good uptake of mammography screening.
- Evidence of overdiagnosis—Strong increases in the incidence of early breast cancer without proportionate reductions in advanced cancer incidence, and evidence from randomised trials and observational studies showing excess cancers detected among women during screening which are not compensated by decreases in incidence once women cease screening.
- Harms of overdiagnosis—All women diagnosed with early breast cancer are treated comprehensively for breast cancer, even though some have overdiagnosed (harmless) cancers; these women cannot benefit from treatment but are exposed to the physical and psychosocial harms of cancer treatments.
- Limitations—High quality evidence about overdiagnosis and overtreatment in the context of contemporary breast cancer screening and treatment is extremely limited, leading to divisive debates between experts.
- Conclusion—Agreement between experts about overdiagnosis in breast cancer screening is urgently needed so that women can be better informed; advances in mammographic technology should be restrained until incremental net improvements in health outcomes are demonstrated; screening programmes should not be expanded to other age groups (older and younger women) pending results from the UK trials.
ATTENTION-DEFICIT/HYPERACTIVITY DISORDER: ARE WE HELPING OR HARMING?

A broader definition of attention deficit/hyperactivity disorder (ADHD) has contributed to a steep rise in diagnosis and prescriptions, particularly among children, warn Rae Thomas and colleagues.
What is the role of journals in preventing overdiagnosis?
Are journals part of the problem?
Possible drivers

- Culture
  - Beliefs; for example, more = better
  - Faith in early diagnosis
  - Intolerance of uncertainty
  - Biased media reporting
  - Medicalisation

- Health system
  - Financial incentives
  - Expanding disease definitions
  - Quality measures
  - Complexity of care
  - Guidelines
  - Screening

- Industry and technology
  - Industry promotion
  - Diagnostic test sensitivity
  - Medicine as a business
  - Industry expands markets

- Professionals
  - Fear of litigation
  - Fear of missing disease
  - Flaws in training
  - Lack of confidence or knowledge
  - Over-reliance on tests

- Patients and public
  - Over-reliance on tests
  - Lack of confidence or knowledge
  - Expectation clinicians will “do something”

Possible solutions

- Culture
  - Awareness/information campaigns
  - Healthy scepticism about early diagnosis
  - Address uncertainty
  - Improve media reporting

- Health system
  - Reform incentives from quantity to quality
  - Reform disease definition
  - Reform quality measures
  - Reform guidelines
  - Reform screening
  - More research on OD and OU
  - Multicomponent interventions

- Industry and technology
  - Better regulate promotion
  - Better evaluation of tests
  - Declare, reduce, exclude COIs
  - Better evaluate disease definitions

- Professionals
  - Reform litigation driver
  - Comfort with uncertainty
  - Educate and inform
  - Interventions for providers
  - Reduce test over reliance

- Patients and public
  - Shared decision making
  - Education and information campaigns
  - Promote “doing nothing”
How can journals be part of the solution?