

A Public Health and Personal Endoscopy: The Tail End of Mankind

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ResearchGate: https://www.researchgate.net/profile/Melanie_Tassos/contributions

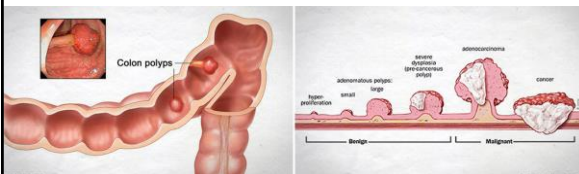


Objectives and Outcomes

- Brief introduction to bowel cancer and risks
- National Bowel Cancer Screening Program
- Fecal Occult Blood Test (FOBT) Screening Test
- History of endoscopy
 - Physician -> Nurse Endoscopist

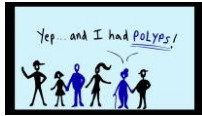
What is Colorectal Cancer?

- Colorectal/Bowel/Colon Cancer
- Starts with benign growths called polyps
- If left to grow, polyps may become cancerous



Who gets bowel cancer?

- 2nd most common form of cancer death
- 1 in 13 Australians will be diagnosed with bowel cancer
- Leading cause of premature death in 45-74yo
- After 50yo, spike in number diagnosed



https://www.youtube.com/watch?v=ktgt_SQawVw

Cancer Deaths in 2017 - Australia

Estimated most common cancers deaths in 2017

Cancer type	Number of deaths 2017	% of all cancer deaths 2017
Lung	9,021	18.9
Colorectal (bowel)	4,114	8.6
Prostate (among males)	3,452	12.7
Breast	3,114	6.5
Breast (among females)	3,087	14.9
Pancreatic	2,915	6.1

<https://cancer australia.gov.au/affected-cancer/what-cancer/cancer-australia-statistics>

Risks of Bowel Cancer

Modifiable

- Smoking
- Diet – red meat, processed foods (salted, cured, smoked)
- Alcohol
- Obesity
- Activity levels

Non-modifiable

- Family History
- Genetics/Hereditary
- Age
- Personal health history – Type II diabetes, Crohn's Disease, Inflammatory Bowel Disease etc.

Public Health - Definition

"...the science and art of preventing disease, prolonging life and promoting human health through organized efforts and informed choices of society, organizations, public and private, communities and individuals." (Winslow, 1920).

Winslow, C. E. A. (1920). The Unfilled Fields of Public Health. *Science*, 51(1306), 23-33.



Public Health Screening Programs

- Screening programs - most basic tool of preventative medicine
- Aiming for early detection
- Successful programs are:
 - Easy to convey
 - Easy to understand
 - Easy to access

Let's look at the NBCSP.



National Bowel Cancer Screening Program (NBCSP)

- 2006, initial funding provided to Bowel Cancer Australia
- Phase I (55 and 65yo) and Phase II (50, 55 and 65yo)
- In 2014, CoA govt. announced \$95.9million over four years:
 - Acceleration of screening
 - Available to all Australians 50 to 75yo by 2020.

**NATIONAL
BOWELCANCER**
SCREENING PROGRAM



National Bowel Cancer Screening Program (NBCSP)

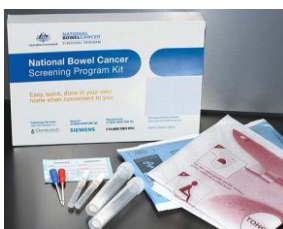
Phase	Start Date	End Date	Eligible Ages
1	7 August 2007	30 June 2008	55 and 65
2	1 July 2008	30 June 2011 ^(a)	50, 55 and 65
2 ^(b)	1 July 2011	30 June 2013	50, 55 and 65
3	1 July 2013	ongoing	50, 55, 60 and 65
3	1 January 2015		50, 55, 60, 65, 70 and 74
3	1 January 2016		50, 55, 60, 64, 65, 70, 72 and 74
3	1 January 2017		50, 54, 55, 58, 60, 64, 68, 70, 72 and 74
3	1 January 2018		50, 54, 58, 60, 62, 64, 66, 68, 70, 72 and 74
3	1 January 2019		50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72 and 74

<https://www.ncsr.gov.au/>



National Bowel Cancer Screening Kit (FOBT)

<https://www.youtube.com/watch?v=f1ccXBiqiCk>



<http://www.bowelcancer.org.au/screening.php>



National Bowel Cancer Screening Program (NBCSP) Effectiveness

- Non-invasive
- Safe
- Self-test conducted in your own home
- Easy to translate to masses
- However, uptake only 37%
 - Does not break taboo of poo



<http://www.cfhi-fcass.ca/Search/ResultsNews/09-12-01/96a2ba7f-c114-410e-a9fe-123b74682ecc.aspx>

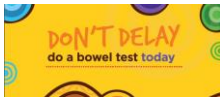


Under Screened Communities

- Greek
- Italian
- Arabic
- Indigenous communities

Possible Reasons for not participating:

- Taboo poo culture
- Language barrier
- Fear of unknown/cancer
- Prefer ignorance
- Symptoms are not obvious
- Poor health literacy/education



https://www.moncrief.edu.au/page/Research/Indigenous_Health/Cancer/National_Indigenous_Bowel_Cancer_Screening_Program/



What does a positive test (FOBT+) mean?

- Blood identified in your stool
- Causes:
 - Ulcers
 - Diverticulosis
 - Inflammatory bowel disease
 - Hemorrhoids
 - Surface scratch
- What do you do next?



http://seemaking.pb/blood-in-stool-means-freshet-healthy-poop-amazing-blood-in-stool-means-freshet-4-14-fun-fact-blood-in-stool-what-it-means_cool-blood-in-stool-during-menstruation-means-colon-cancer-gratify-what-does-blood-in-stool-mean-to/



From FOBT+ to Colonoscopy

- Bowel prep required
- Day procedure (approx. 6h)
- Insertion of colonoscope through anal canal
- Visualise all large bowel



<http://www.draenresearchgroup.com/2012/03/screening-and-prevention-of-colorectal.html>

<https://www.doimed.com/listing/colonoscope/olympus-pcf-q180ba1327082>



NBCSP Colonoscopy Results

- Between 2006-2014, 2.5 million Australians were screened
 - 3,989 suspected or confirmed cases
 - 12,294 diagnosed with polyps
- Expected 2016-2020 results
 - 9,000 suspected or confirmed cases
 - 26,000 diagnosed with polyps

Gastroenterologist or Nurse Endoscopist?



Photo: Simon O'Dwyer

The Advanced Practice Nurse Endoscopist (APNE)

- History
 - First established 1970s in United States
 - Expanded to UK, Canada, The Netherlands
- Introduced in Victoria
 - 2012 at Austin Health (QLD follows Nurse Practitioner model)
- Drivers of APNE in Victoria
 - Demand for procedures
 - National Bowel Cancer Screening Program
 - Financial issue

Financial Implications

- Cost effectiveness still uncertain across literature
 - Per session (at Austin Health) NEs prove cost effective
 - However, use of postprocedural resources proves physicians to be cost effective (Richardson, 2009).
 - Training costs vary
 - » For NEs and physicians
- Costs Victoria Wide – Enterprise Agreement

– APNE	\$47.83 /hr
– VMO Yr 5	\$145.50 /hr



<https://www.pinterest.ie/pin/466052261428685807/>

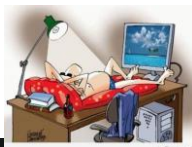
Our trainee Nurse Endoscopists



Photo: Melanie Tassos

State Endoscopy Training Centre (my role)

- Organise training
- Facilitate training
- Communicate with APNEs in VIC and SA
- Liaise with surgeons, doctors, nurses and admin staff
- Ensure curriculum regularly updated
- Monitor and gather data



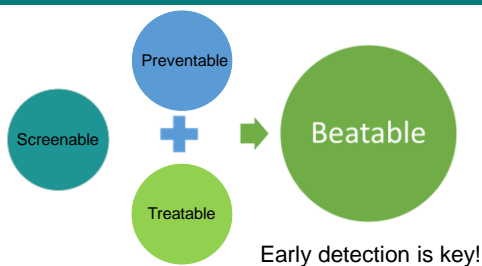
<http://efunny.net/funny-office-sunbathing-cartoon/>

My Proposed MAppSc Research

- Firstly, scoping review on Nurse Endoscopists in Australia
- Key Themes
 - Differing titles of NEs internationally
 - Occupational role and competency
 - Training standards
 - Efficiency and effectiveness
 - Accessibility



Bowel Cancer is...



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<https://giphy.com/gifs/detail/BackAdoredDonkey>