

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

Melanie Tassos, *BSc (Melb)*
Project Officer, State Endoscopy Training Centre
BHS Academic Tutor, La Trobe University
Public Health Seminar Series 8 August 2018

La Trobe Fineshare: <https://doi.org/10.26181/5b6954b62130e>
ResearchGate: https://www.researchgate.net/profile/Melanie_Tassos/contributions

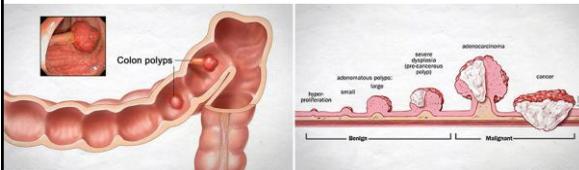


Objectives and Outcomes

- 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=iktgt_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 Untilled 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.



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

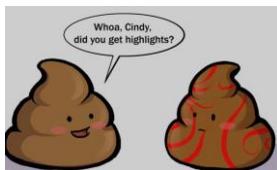


https://www.monash.edu.au/page/Research/Indigenous_Health/Cancer/National_Indigenous_Bowel_Cancer_Screening_Program



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?

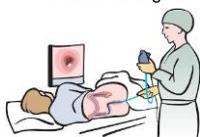


<http://scoring-pw-blood-in-stool-means-freshet-healthy-poop-amazing-blood-in-stool-means-divulge-4-define-a-blood-in-stool-what-it-means-ool-blood-in-stool-during-metastasis-means-colon-cancer-gratly-what-does-blood-in-stool-mean-fo/>



From FOBT+ to Colonoscopy

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



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

<https://www.doimed.com/listing/colonoscope-olympus-pcf-q180af-1327082>



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/466052261428688807/>



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/>



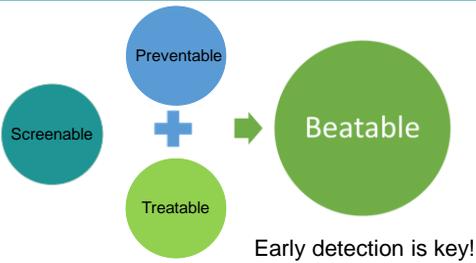
My Proposed MAppSc Research

- 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



http://theskysothelimit.org/professional-student/2016/09/28/relearning-how-to-read

Bowel Cancer is...



References

- Bowel Cancer Australia. (2017). *Bowel Cancer – The Facts*. Retrieved from <https://www.bowelcanceraustralia.org/bowel-cancer-facts>
- Bowel Cancer. (2018) Screening. Retrieved from <http://www.bowelcancer.org.au/screening.php>
- Duffield, C., Chapman, S., Rowbotham, S., & Blay, N. (2017). Nurse-Performed Endoscopy: Implications for the Nursing Profession in Australia. *Policy, Politics & Nursing Practice*, 18(1), 36-43. doi:10.1177/1527154417700740
- Hoffman, R. M., Espey, D., & Rhyne, R. L. (2011). A public-health perspective on screening colonoscopy. *Expert Review of Anticancer Therapy*, 11(4), 561-569. doi:10.1586/era.11.16
- Rastogi, A., & Wani, S. (2017). Colonoscopy. *Gastrointestinal Endoscopy*, 85(1), 59-66. doi:10.1016/j.gie.2016.09.013
- Scheirer, M. A., & Dearing, J. W., (2011). An agenda for research on the sustainability of public health programs. *American Journal of Public Health*, 101(11), 2059-67.
- Stoto, M. A., Almaro, D. A., & McCormick, M. C. (Eds). (1999). *Reducing the Odds: Preventing Perinatal Transmission of HIV In The United States*. Washington, D.C.: National Academies Press (US).
- Winslow, C.-E. A. (1920). The Untilled Fields of Public Health. *Science*, 51(1306), 23-33.



Acknowledgments

- Dr. Lindsay Carey
- Marilyn Riley
- Dr. Susan Chong
- Dr. Rhys Vaughan
- Dr. Marios Efthymiou
- Sylvia Constantinou



<https://giphy.com/gifs/detail/Back-AdoredDonkey>
