

Melanoma in the news

A discourse analysis on articles in The Australian newspaper

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Overview

- Melanoma Epidemiology
- Risk Factors & Pathogenesis
- Methods
- Results Main themes identified
- Discussion
- Limitations
- Implications
- Reflection understanding of Public Health

The Paper

- Objectives
 - Analyse and synthesise articles discussing melanoma
 - Extract dominant ideologies & attitudes
 - Obtain a snap shot of discourses informing public perceptions of melanoma

The Paper

- Thematic discourse analysis on articles
 - The Australian between 2000 2015
 - Revealed negative discourse
 - Genetic factors beyond the individual's control
 - Very poor prognosis
 - Managed with experimental pharmaceuticals

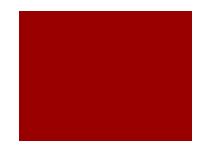


- 4th most commonly diagnosed cancer 11,057 annually
- 2012 22, 800 DALYs
 - 17,200 due to premature death
- Highest annual incidence 49.8 cases / 100, 000 (recently NZ took over)
 - U.S.A 14.2 (California 18.5)
 - U.K 12.5

Why public health messages matter in melanoma discourse

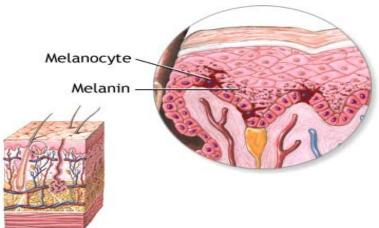
- Aware of effective and inexpensive preventative measures and interventions
 - sun block, sunglasses, hats and shade seeking behaviours
- Impact of such interventions is largely dependent on public perceptions of melanoma
- Success of public health messages is influenced by the communication and transfer of information from Dr's to pt's



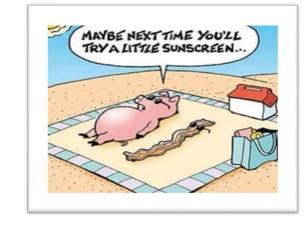




- Melanocytes are found in the basal layer of the epidermis
- Melanin
 - Protein protects skin cells by absorbing UVR
- Melanoma
 - Uncontrolled proliferation of melanocytic stem cells that have undergone genetic transformation







Risk Factors & Pathogenesis

- Genetic 10% of melanomas are familial, 2% attributable to rare high penetrance genes
- 2. Environmental ~80% of melanomas develop in intermittently sun exposed areas. UVA & UVB damage.
- 3. Phenotypic manifestations of gene-environment interactions e.g atypical melanocytic naevi, Ephelides & Solar lentigines

Methods - Discourse Analysis

Qualitative research methodology

Examines frames of communication at the "meta" level to identify thematic patterns and trends

 Socio-political ideologies and belief systems are sculpted by the words and rhetorical devices used in texts

Methods

- Systematic search EBSCO host Newspaper Source Plus
- The Australian newspaper
- Articles 2000 2015
- Keyword "melanoma" in the heading
- Retrieved 19 articles
- Each article closely read & assessed for the presence of dominant themes and connotations.
- Three main themes were deciphered through critical appraisal of textual content and literary techniques employed to convey meaning.
- Close attention paid to the degree to which public health messages regarding melanoma and sun exposure were evident as a subtextual theme.

Results

Three dominant discourses:

- 1) New pharmaceutical agents
- 2) Melanoma a terribly morbid prognosis
- 3) Genetic predisposition, Metastasis & disease trajectory



 53% (10/19) articles centered on breakthrough pharmaceutical developments

" Exclusive breakthrough melanoma drug"

"Shrank brain tumours in 90% of patients."

- Diction suggestive of a one-to-one ratio of effect "The drugs attack a mutated protein called BRAF, specific to melanoma cells, causing them to die, while sparing normal cells."
- Agents vemurafenib, ipilimumab, pembrolizumab

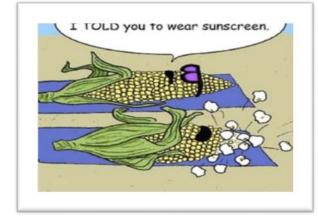


- 42% (8/19) articles strongly alluded to the significant mortality of the disease
- Life expectancy of those with metastatic disease
 - "six to ten months"
 - "the chances of 2 year survival being 10-20 per cent"

3. Genetic predisposition & disease process

- 63% (12/19) focused on mechanisms of disease at the familial genetic level
- 6/12 focused on the role of genetic susceptibility & gene mutation
 - "Gene puts 200,000 at risk of melanoma"
- Gene mutations
 - BRAF (which is in fact acquired V600E)

Reference to Public Health messages



- Primary measures were not the feature of any article.
- No reference made to skin checks.
- 3/19 conveyed some vague and indirect public health message or educational information.
- The word "sun" appeared in only two articles.

Discussion

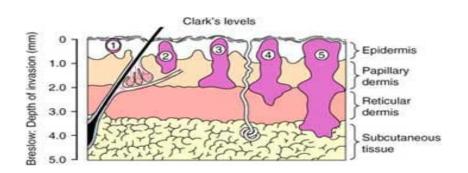
- Driven by 3° measures
 - Novel experimental pharmaceuticals
- Negated importance of early diagnosis
- No dialogue concerning 1° & 2° interventions
 - Behavioural modification
 - Skin checks
- Failure to explicitly connect sun exposure as the 1° modifiable RF with MM



"You were smart to come see me, Mr. Lewis. These moles on your back definitely look suspicious."



- Sinister media presentation of melanoma
 - However prognosis good when caught early
- Overall 5 year survival rate
 - ♀ 93% & ♂ 87%
- Stage IV disease (visceral metastases)
 - 9% five year survival
- Prognosis
 - Breslow thickness
 - Ulceration
 - Sentinel lymph node status
 - Local invasion
 - Distant metastases





- Only appraised articles from one publication
- One snap shot of time
- Not necessarily indicative of what the wider public reads
- Does not indicate how members of the public reading these articles react to this discourse or how it might alter their behavior.
- In 2015 The Australian readership 663,000,
 - **333**, 000 aged over 50

NB Daily Telegraph 599,000, SMH 724,000

Implications

- Results could be used to stimulate or re-ignite discussion among the profession about the implications of unbalanced information
- Does the public health profession have a responsibility in this area?
- What drives health stories in the media?

Reflection

- Great impact on my own understanding of public health messages, vehicles & research methods.
- Self learning how to conduct a discourse analysis, via reading multiple examples and applying methods of analysis to my own evaluation of texts.
- Enhanced my appreciation of AFPHM competencies:
 - Methods of health promotion and disease prevention
 - Research and evaluation
 - Cultural understanding

IF YOU DON'T READ
THE NEWSPAPER, YOU
ARE UNINFORMED; IF
YOU DO READ THE
NEWSPAPER, YOU ARE
MISINFORMED.
- MARK TWAIN

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- Australian Institute of Health and Welfare & Australasian Association of Cancer Registries 2012. Cancer in Australia: an overview, 2012. Cancer series no. 74. Cat. no. CAN 70. Canberra: AIHW.
- Australian Institute of Health and Welfare. Young Australians: Their Health and Wellbeing 2011. Catalogue No.: PHE 140. Canberra (AUST): AIHW; 2011.
- Australian Cancer Incidence and Mortality (ACIM) Books Melanoma of the skin for Australia (ICD10 C43).
 http://www.aihw.gov.au/acim-books/ [Accessed March 2015].
- Balch CM, Buzald AC, Soong SJ, et al: Final version of the American Joint Committee on Cancer staging system for cutaneous melanoma. J Clin Oncol 2001;19:3635-3548.
- Bolognia JL, Jorizzo JL, Schaffer JV. *Dermatology*. 3rd edition. Vol. 2. Elsevier Saunders; 2012.
- Clara Curiel-Lewandrowski, Risk factors for the development of melanoma. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA
- Cancer Council Australia, Sun Safety, http://www.cancer.org.au/preventing-cancer/sun-protection/, April 2015, accessed June 2015.
- Cresswell, A. Gene puts 200,000 at risk of melanoma, The Australian, 14/11/2011.
- Cresswell, A. Successful anti-melanoma drug approved for distribution, The Australian, 15/07/2011.
- Cresswell, A. Melanoma drugs point to "biggest breakthrough" in 50 years, The Australian, 05/11/2010.
- Cresswell, A, Melanoma drug shrinks tumours, The Australian, 25/09/2009.
- Cresswell, A. New drug can double melanoma survival, The Australian, 24/02/2012.
- Cresswell, A. Push to Unlock melanoma genome secrets, The Australian, 29/08/2011.
- Cresswell, A. Ray of Hope offered in Melanoma fight, The Australian, 19/05/2012.
- Cresswell, A. TB jab cuts 60pc off risk of melanoma, 02/11/2009.

References

- Elks, S. One visit to solarium raises melanoma risk, The Australian, 15/01/2008.
- Gluyas, R. Financier floats melanoma mission, The Australian, 26/10/2010.
- Hodges, B., Kuper, A., Reeves. Discourse Analysis. BMJ, 2008; 337;a879
- Lens MB, Dawes M. Global perspectives of contemporary epidemiological trends of cutaneous malignant melanoma. *Br. J. Dermatol.* 2004; 150: 179–85.
- Lupton, D. Discourse analysis: a new methodology for understanding the ideologies of health and illness. *Australian Journal of Public Health*, 1992; 16:145-50.
- N.A Melanoma genetic culprit found, The Australian, 15/06/2002.
- N.A. Newly discovered genes point to doubled risk of melanoma, The Australian, 07/06/2009.
- Oakley, A. Melanoma, Dermnet NZ, http://dermnetnz.org/lesions/melanoma.htmlMarch 2015, Accessed June 2015.
- Pemble, L. On the Table Melanoma, The Australian, 05/04/2003.
- RACGP, Melanoma, http://www.racgp.org.au/afp/2012/july/melanoma-guide/ [Accessed March 2015]
- Rigel DS, Carucci JA. Malignant melanoma: prevention, early detection, and treatment in the 21st century. CA Cancer J Clin. 2008;50(4):215-36.
- Rivers JK, Melanoma, Lancet. 1996;347(9004):803.
- Roy Morgan Research, The Australian Readership, http://www.roymorgan.com/industries/media/readership/newspaper-readership, 2016.
- Urban, R. PBS listing with strings for melanoma drug, The Australian, 22/05/2015.