A qualitative content analysis of the representations of health, income and income distribution in the Canadian press.

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A Thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the

requirements for the Master of Public Health Degree (Health Studies)

Lakehead University

April 29, 2008

Abstract

For both the lay public and policy makers, the media are an important source of health information. While media discourses about health are not uniform, some perspectives are more commonly reported than others. In reviewing Canadian media on health, the biomedical, the lifestyle, and the social determinants' models of disease aetiology can all be found; however, more critical components of the social determinants' model, such as income and income distribution, receive limited attention. Income and its distribution is a key social determinant of health because of its interconnectedness with many other health determinants, yet it remains an underreported theme in media discourse. Using a qualitative content analysis, this study examines the relationship between health, income and its distribution as represented in two major national Canadian newspapers.

My findings illustrate that in such agenda-setting Canadian newspapers, the relationship between health, income and income distribution was not presented as a salient determinant of health. This was manifest through low frequency of coverage, article positioning and news article structure. Health researchers and health care professionals contributed little to the discussion of the health-income relationship within Canadian media. When the relationship was acknowledged, it was journalists themselves who attempted to move the agenda forward. The responsibility and burden for this complex relationship was primarily positioned from a systemic perspective. While the focus on social responsibilities rather than on individual responsibilities was encouraging, the overall discussion of the health-income relationship was located primarily within the access to health care debate; where poverty or low income was positioned as a barrier to access. These observations highlight tensions around current views of health and the

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challenges for policymakers, health researchers, health professionals and the lay public to move

away from biomedical notions of health.

- My deepest thanks go to my husband. Jeremy, without your support I would not have started this process let alone finished it. You provided me the time, the encouragement and the love that I needed. You worried about me, you motivated me, and you reasoned with me. And thank you for telling me about Foucault! Also to my children Forrest and Ella, I would like to thank you for being on your best behaviour for Daddy. I know you did not understand why I was on the computer so much, but you were both so very patient. My wonderful son Forrest….Mommy did it! You inspired me through your own perseverance. You climbed your own mountain and got over to the other side. Sweet Ella, I missed you too, but I am done now.

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Chapter 1 – Introduction

This thesis is an exploration of representations in two major national newspapers of the relationship between health, income and its distribution in the reporting on health. By exploring this aspect of current media representations on health, I provide a context for improving communications about these issues and thereby help to increase their social and political significance. The impetus for my research stems from around-the-water-cooler discussions about health and my own concerns with gaps in media health coverage. Additionally, my views on health were shaped by my professional experience in the food industry where healthy choices and healthy lifestyle are increasingly considered in the research and development process. With the biomedical and lifestyle approaches to health portrayed as the dominant model in mass media, it was my initial intention to approach my health media research from this perspective. My view of health broadened during my time at Lakehead University and it is now the socio-ecological approach to health that is the lens through which I view health. My thesis topic was shaped by this shift. In the past, I gravitated towards linear causal explanations of health grounded in objectivity; and as such viewing health from a broader perspective ran counter to my socialized views of health. However, as a visible minority, the socio-ecological approach to health resonated with my personal interests around social justice at the broader level. My graduate school experience allowed me to explore areas of health I had not considered and introduced me to the social, economic and political actors involved in shaping health at the individual, community and population level, while still acknowledging the value of biomedicine. I was intrigued by what Harold P. Freeman (2004:72) identifies as a "critical disconnect between what we discover and what we deliver" and "what we know and what we do" as it relates to health policy in the Canadian context. That is, despite the policy rhetoric around the social

determinants over the past 30 years there continue to be health disparities among Canadians (Frohlich, Ross, Richmond 2006:133).

For many people one of the most important sources of information about health is the mass media (Einsiedel 1992:89). Media headlines such as "Carnivorous women at greater risk of breast cancer…" (Johnson and Marchione 2006) or "New procedure spares girl open-heart surgery" (Canadian Press 2006) dominate headlines and grab the attention of readers. In order for an individual or a community to engage in the public and private dialogues about health, medicine, scientific knowledge and cultural beliefs, a degree of health literacy is required (Zarcadoolas, Pleasant, and Greer 2005:196). As it relates to health literacy, a civic literate individual is aware of public issues about health and has the ability to understand sources of information, information agendas, and how to interpret information (Zarcadoolas, Pleasant, and Greer 2005:197). An understanding of health discourses is important because media establish a public framework for the health consumer, where decisions can be made about such things as individual health behaviours, health policies and the use of health care services (McMurray 2007:19; Larsson et al. 2003:324; Oxman et al. 1993:987). In other words, media agendas impact the public agenda; however the significance of the role of media extends further. Media also influence the health policy agenda and furthermore, through these interrelationships the public agenda impacts the health policy agenda (Soroka 2002:265-266).

The messages conveyed through mass media are socially constructed and therefore cannot be considered simple truths. Instead we should see the discursive language of media as influenced by the cultural and ideological views of society. Accordingly, media establish a framework by providing a common vocabulary, a shared sense of place, and communal resources for understanding health (Hodgetts, Bolam, and Stephens 2005:126-128). Health

discourses in media include the biomedical, the lifestyle, and the social determinant models of disease aetiology (Clarke 1991:287; Commers, Visser, and De Leeuw 2000:322), however it has been well established that the predominant models portrayed are the medical and lifestyle models (Clark, Feldberg, and Rochon 2002:2; Clarke 1991:289, 2004:548; Commers, Visser, and De Leeuw 2000:322; Higgens et al. 2006:34; McMurray 2007:234). In these representations the responsibility for health falls primarily to the individual (Lyons 2000:353). These models are grounded in an ideological shift to healthism which has occurred over the past three decades (Hodgetts, Bolam, and Stephens 2005:124), where there is an assumption that the individual is an intentional and rational actor (Lupton 1995:57). In other words, healthism suggests that as individuals we are the source of our own health and illness and that our health outcomes are a direct result of our personal choices and will power (Hodgetts, Bolam, and Stephens 2005:124). We are obliged through an individual morality to follow the tenets of healthism – balance and control, vigilance, self-restraint and the avoidance of risk (Hodgetts, Bolam, and Stephens 2005:124). Through this individualization of health, health has become removed from a broader social context (Lupton 1995:71). Despite this shift, the emphasis on the medical and lifestyle model has not resulted in a substantive decrease in the rate of disease or improvement of the health of populations; rather it is the socio-structural influences that have been shown to result in more substantial improvements in population health (Cutler and Miller 2005:2,).

One must be mindful that media representations of health are influential at the individual level, but also impact society's views on health (Lyons 2000:356); the infrequent representations of other notions of health, such as the social determinants of health, speaks to the social and political relevance, or irrelevance, of these issues. Furthermore, these representations are "central to the formation and legitimization of policies and public responses to health concerns

(Hodgetts, Bolam, and Stephens 2005:126). Interestingly, many European countries have successfully put the social determinants of health on the public agenda through mass media (Moss 2000:1633). In North America, the policymaker-media-public triad focuses little attention on these issues and consequently the research needs and gaps regarding the social determinants of health are extensive. In addition, research on the role public policy plays in influencing health outcomes is an area of limited study.

Another component of this research gap is the lack of understanding of media discourses about the social determinants of health (Raphael 2006:667; Raphael et al. 2006:S18). Raphael (2006:660) intimates that in Canada there is relatively little representation of the social determinants of health and their interrelationships in public health discourse or in government policymaking and that the infrequent representation of the social determinants of health is reflected in mass media. But according to the Public Health Agency of Canada (PHAC), the Canadian health policy of today is guided by the population health approach and one of the underlying assumptions of this approach is that the "…health of a population is closely linked to the distribution of wealth across the population" (Health Canada 1994:Section 2.4). The apparent disconnect between the public, media and policy agendas can be attributed to the medicalization and individualization of life where everything is pathologized; thereby making it difficult to identify health through other perspectives (Clarke 1991:303). These dominant views are in conflict with an understanding of health from a socio-ecological approach. An investigation into these discourses requires an understanding of (1) the journalistic barriers to the reporting of the social determinants of health; (2) the representation of the social determinants of health in mass media; and (3) the lay perceptions and policy implications of coverage, or lack of coverage, of the social determinants of health. In other words, we do not have a comprehensive

understanding of health media's contribution to the "….social and physical environments that are supportive of health and wellbeing." (Renaud et al. 2006:149).

Communicating the complexity of the health and income relationships is challenging within the research community, and the goal for health communicators is to facilitate the translation of these messages. We must consider that the use of media can be a powerful tool in the promotion of the social determinants of health because media significantly impact both the public agenda and the policy agenda. A 2004 report from the Canadian Population Health Initiative workshop on the communication gap between researchers and policymakers highlighted that along the information chain the key decision makers in the health policy process rely extensively on media for information: "Every day, probably the first thing a politician will do is go through the media," (Canadian Institute for Health Information 2004b:26). Support for policies specific to the social determinants of health requires acknowledgement of the relationship between social issues and health. The use of media is but one instrument in facilitating improvements in civic literacy as it relates to health information agendas, and ultimately in health.

Research Goals

The purpose of my study was to examine Canadian national newspapers' representation of the relationship between health, income and its distribution. I selected income and its distribution because it is identified as a key social determinant (Canadian Institute of Health Information 2004a:28). My research is based on the assumption that the coverage of health in mass media is a social representation, and that media acts as a '…major cultural and ideological force; influencing the way in which social relations and political problems are defined and addressed." (Paalman 1997:86). The purpose of my study was not to establish the accuracy or

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quality of the content, or as Collins et al. (2006:90) suggest whether news media act primarily as informers. My intention was to investigate what the Canadian press is telling the media consumer about what and how to think about the relationships between health and income, that is, whether media are acting as agenda-setters and framers. Furthermore, I evaluated who is saying the relationship does or does not exist between income and health, in other words whether media are acting as persuaders; and where the responsibility falls for these issues. Therefore, the goals of this research were:

- To understand if Canadian media are telling us that there is a relationship between health and income inequalities, that is, whether the relationship is a high priority issue. The prominence of articles addressing this relationship helps to determine the saliency of the relationship.

- To understand within coverage of health and income inequality relationship who is presented as being responsible for these relationships. In other words, who is to blame for the existence of the relationship? Is it individuals or society? To identify whether the mechanism by which this relationship exists is explained.

- To understand within a media context, who is addressing whether or not a relationship between income and health exists. In other words, to understand who are the actors, sources and authorities around this issue.

At the outset of the research process it was my expectation that the health and income relationship would be underrepresented in Canadian print media. Furthermore, I anticipated that the relationship would be represented primarily in longer more in-depth pieces where blame was located at the level of individual or specific groups, and that the relationship would be positioned in terms of material deprivation. Indeed my findings illustrated that there was an

underrepresentation of articles that discussed a relationship between health and income and its distribution and was found in pieces that provided relatively significant coverage. However, the relationships between health and income and its distribution were less focused around individual responsibility and more around systemic responsibility, or some combination of both.

My hope is that these findings contribute to the limited research in the area of Canadian mass media representations of the social determinants of health, in particular the popular representations of the impact of income and income distribution on health. There is a growing body of research measuring the social determinants of health and my study illustrates that continued work must be done in the production of and dissemination of evidence of these relationships. Furthermore, my study addressed one of the 31 gaps/needs identified by Raphael et al.'s (2006:S18) environmental scan of Canadian research and public policy activities on the income and health relationship which was the development of an understanding of media discourses about the social determinants of health.

Thesis plan

Chapter two of this thesis reviews three areas. First, I briefly discuss media effects and the intimate relationship between the production, representation and reception of mediated messages. By viewing media as agenda setters, I present a précis of the dominant discourses of health and their representation in contemporary print media. Second, in order to contextualize the relationship between health, income and its distribution, I present an overview of the current income and income distribution trends in Canada. The third area addresses the conceptualization of the social determinants of health within a Canadian health policy context and the dominant frameworks, mechanisms and pathways that aim to explain the relationship between health, income and its distribution.

Study methodology is outlined in Chapter 3. I briefly describe the landscape of Canadian print news media and highlight my rationale for selecting the two newspapers under study. Next, I outline the sampling method, inclusion/exclusion criteria and the process of discursive analysis. Additionally, I present limitations, delimitations and issues around trustworthiness.

The results of my analysis are presented in Chapter 4. The analysis begins with an attempt to establish whether print news media are telling readers that a relationship between income and health exists. If a relationship was identified in these articles, then I examined how messages were conveyed to the reader. This included the location of the relationship between income and health in a thematic organization of health discourses. I conclude this chapter with an analysis of where the responsibility lies for the burden and blame of the relationship, and who is conveyed as being an authority on these matters.

In Chapter 5, I specifically discuss the dominant theme uncovered in my analysis, and suggest why this particular issue is associated with income on both the media's and the public's agenda. Finally, I discuss the implications of these media effects on various stakeholders.

Chapter 2 – Theoretical Orientation

There is an increasing body of literature that addresses the impact of the social determinants of health (Fox 2006:396; Raphael and Bryant 2006:236); however as noted previously, there is limited research that examines media discourses on health from a social determinants model. Furthermore, there is no research examining media discourses on the impact of income and income inequality on health. In this brief review, I highlight media and health research from the overarching production, representation and reception approaches of media analysis. Next, I present an overview of income and its distribution within a Canadian context. Finally, I discuss research that focuses on the relationship between income and its distribution and health.

Media and health

There are three broad approaches to examining media. The first is to examine the production of media. This process acknowledges that media messages are produced, that the producers have particular agendas, and that the process of news production is influenced at many levels (Shoemaker et al. 2001:233-234). Next, one can examine the reception of media by examining the media audiences under the premise that audiences are actively involved with the mediated messages (Seale 2003:516). The final approach to media studies, and the one that is of particular interest in my study, is representation in the media: an analysis of the media messages themselves (Seale 2003:515). When examining the representations in media we do not focus on the actual effects, but rather the potential or intended effects (Collins et al. 2006:92). These three approaches to understanding media cannot be considered in isolation from one another, because often the lines are blurred between the producers and the audience and this will ultimately impact the mediated representations (Seale 2003:516).

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Media effects illustrate the interconnectedness between the production, representation and reception of mediated messages. The four potential or intended effects of media are to act as (1) informers, (2) agenda setters, (3) framers, or (4) persuaders (Iynegar as cited by Collins et al. 2006:90). Since media are a major source of health information for various stakeholders, there is an assumption that by consuming the medium people will become more informed about a particular issue. Journalists struggle to convey health information that is accurate and relevant (Winsten 1985:6), and the content often presumes the reader can contextualize the provided information (Saari, Gibson, and Olser 1998:61). With the increasing tabloidization of issues in media (Collins et al. 2006:90), critics of the coverage of health reports in mass media often dismiss it as being sensational, misleading and ambiguous (Finer, Tomson, and Björkman 1997:72). Audience acceptance, rejection and resistance to health information is dependent on social structural position, personal knowledge, and personality characteristics (Clarke et al. 2007:517; Seale 2003:517); but if media are to act as informers they are dependent on the quality of the information provided (Collins et al. 2006:90).

Valid and useful information is required (Oxman et al. 1993:324) in order for the lay public to make informed health decisions based on those messages (Finer, Tomson, and Björkman 1997:72). The informative value of health news should not only be measured against information accuracy but should acknowledge the usefulness of the information as well. That is, health news reports with high informative value would allow the media consumer "…to draw conclusions about the applicability of the information to personal or policy decisions, the strength of the evidence upon which the report is based (or the degree of uncertainty), [and] the size of the effects, risks, associations, or costs that are reported" (Larsson et al. 2003:324). There are barriers to providing quality, or highly informative health news. Journalistic lack of time,

knowledge, and space; the need for newsworthiness; complex terminology; use and type of sources; and lack of editorial support all impact the production of media (Finer, Tomson, and Björkman 1997:71; Hansen 1994:111; Larsson et al. 2003:329; Saari, Gibson, and Olser 1998:78).

Agenda setting in media is often described as a dose-response relationship because it is a direct function of the quantity of exposure. The more coverage there is of a particular issue by media, the more salient that issue becomes for the public (Collins et al. 2006:90; Seale 2003:513). By emphasizing or de-emphasizing particular issues, the media do not tell us what to think, but what to think about (Einsiedel 1992:90); and as a result "…media coverage precedes in time what people think is important…" (Caburnay et al. 2003:710). In a generalized model of agenda setting effects, health news media expose the general public, health professional, and policy makers to the issues. The coverage legitimizes an issue and thereby engages the audience into thinking and talking about the issue (Paalman 1997:89). This engagement increases the likelihood that individuals, communities or policy makers will act (Caburnay et al. 2003:710). One must also consider that the converse of this model holds true, and with infrequent exposure the saliency of an issue decreases. Through the measurement of variables such as frequency of coverage, prominence of coverage (headline size, location in paper, total area, location, visuals) and story type, we can establish the perceived or intended importance of a particular issue (Caburnay et al. 2003:710).

The medical, the lifestyle and the social determinants models of disease aetiology are three health discourses portrayed in media (Commers, Visser, and De Leeuw 2000:322; Clarke 1991:292). The medical model of health localizes health and illness within the individual (Westwood and Westwood 1999:54) thereby removing the individual from the wider socio-

political context of health (Clarke 1991:289). There is a curative focus to this model with a concentration on the biological pathways of disease and illness (Clarke 1991:289). From this perspective there is an emphasis on healthcare (Higgins et al. 2006:346) and the patient is considered a passive recipient of medical interventions and technology (Westwood and Westwood 1999:54).

The lifestyle discourse of health is considered by some scholars to be a sub-discourse of the medical model (Higgins et al. 2006:346). The focal point is still the individual, and again the broader social and political framework is overlooked. This model focuses on the impact of lifestyle risk factors on health where the individual independently makes decisions about changing their own health habits. The cause of disease and illness is often attributed to poor lifestyle choices such as diet, exercise, smoking and so on, which are proposed to be controlled at the individual level (Clarke 1991:303). A cure is not the objective; rather prevention is the goal (Clarke 1991:291).

The social determinants model of disease aetiology is also identified as the political economy view (Clarke 1991:289) or the population health model (Higgins et al. 2006:346). The main tenet of this approach is that disease results from social inequalities. Population rates of morbidity and mortality are impacted by social structural positions such as race or ethnicity (i.e. Aboriginal status), early life, education, employment and working conditions, food security, health care services, housing, income and its distribution, social safety net, social exclusions, unemployment and employment security and gender (Raphael 2006:653). The aim is to decrease material and power inequalities (Clarke 1991:291) and in so doing impact population health outcomes (Higgins et al. 2006:346).

Of these three health frameworks, the biomedical and lifestyle approaches to health appear more frequently in mass media. In an examination of popular North American news and women's magazines, Clarke (1991:303) found that cancer, heart disease and AIDS were all portrayed predominantly from the medical and lifestyle perspective. Caburnay et al. (2003:710) argue that that the lifestyle model does not receive as much attention as previously thought. Their review of four American newspapers over a 12 month period highlighted that articles about chronic disease aetiology and its relationship to human behaviour accounted for only 1.7% of the stories (Caburnay et al. 2003:714). Additionally, Clarke (1991:294) examined the portrayal of cancer, heart disease and AIDS in mass magazines and found the medical model and lifestyle models accounted for the majority of coverage. There was a poor representation of disease aetiology from a social determinants perspective. They comprised, less than 6 per cent of the articles reviewed, and all of them focused on cancer (Clarke 1991:294).

The Australian press also represent the medical model more prominently and more positively than the public health model where the public health model was operationalized as articles that focused on health promotion and primary health care (Westwood and Westwood 1999:53). Approximately one-third of all health related articles were about public health, with less than 4% of all articles discussing the social determinants of health. From a Canadian perspective, Higgins et al. (2006:347) found that less than 4% of articles covered the social determinants of health over a four year period; while health care delivery discourses received the most attention. Similarly, Hayes et al. (2007:1842) found that approximately 6% of health articles reviewed had a focus on the social determinants of health as a central topic.

In contrast, European countries have put the social determinants of health on the public agenda (Moss 2000:1633). A review of articles relating to health in the Dutch press found that

just under half of the articles were from a social determinants focus; however 20% of those articles focused on policy and law as an etiological factor of disease (Commers, Visser, and De Leeuw 2000:325). The infrequency of the "…mediation of vulnerability by socioeconomic status, race and ethnicity…" suggests a focus on the acute social determinants rather than the chronic social determinants; where the chronic social determinants are identified as "…systemic and persistent over time…" (Commers, Visser, and De Leeuw 2000:329).

In addition to the quantity or frequency of reporting, it has been hypothesized that other variables shape or influence prominence in media agenda setting. The publication day, page item, location on the page, headline size, text size and the use of photographs are thought to play a role. Both Commers, Visser, and De Leeuw (2000:327) and Westwood and Westwood (1999:60) found that different newspapers dedicated similar amounts of space to articles covering the social determinants of health. With the exception of story type, none of these prominence variables differed significantly in articles covering health from either the public health model or the medical model perspectives (Westwood and Westwood 1999:60; Caburnay et al. 2003:714).

How an issue is presented in the news is termed 'framing'. Framing differs from agenda setting in that it tells us what to think and not what to think about (Collins et al. 2006:91). Iyenger as cited by Collins et al. (2006:91) suggests that media frame a story either episodically or thematically. Episodic framing relates to specific instances of an issue where there is a significant coverage over a short time span. This type of framing normally attributes responsibility to the individual by depicting the issue in terms of personal experiences (Bullock, Wyche & Williams 2001:234). This depiction deflects responsibility from public officials and institutions; in essence perpetuating the status quo (Collins et al. 2006:91). On the other hand

thematic framing is an approach that is abstract and impersonal (Bullock, Wyche, and Williams 2001:234) where there is repeated coverage of societal issues over extended periods of time (Collins et al. 2006:91). Responsibility falls to society thereby challenging the status quo (Collins et al. 2006:91). It is suggested that episodic framing appears most frequently in U.S. media and perpetuates the assumption that the individual is responsible for remedying social problems; however in particular reference to the social determinants of health, media coverage was found to be framed thematically (Higgins et al. 2006:352).

How do media persuade the news consumer about the issue? Collins et al. (2006:91) suggest three factors that are important: message representation, the audience, and the sources. The ability of media to persuade the audience is a function of the audience itself (Collins et al. 2006:91). Audience theory was beyond the scope of my analysis, however it must be emphasized that the audience is not a passive recipient of information, and to fully understand media's ability to persuade requires a reception study. The sources or actors are another component of media's ability to persuade. An actor (Collins et al. 2006:91) is the authority "…who says the article's theme relates to health…" through discussion, quotation or reference within the article (Commers, Visser, and De Leeuw 2000:324). From a public health perspective, Westwood & Westwood (1991:60) found that approximately 40% of articles used "experts" to convey mediated messages; however "experts" is not clearly defined in their presentation. This is supported by Commers, Visser, and De Leeuw (2000:326) whose findings suggest that professionals, such as health professionals and governments have "…considerable …power and ample exposure within the Dutch press..." in relation to the social determinant of health media coverage. In their "mini" media study of links between health and the social determinants Raphael et al. (2003:26) found little input from professionals (health care workers

or public health units) focusing attention on these relationships in media. Rather the limited coverage concentrated on the activities of the social development and antipoverty sectors or, on occasion coverage from progressively-minded newspapers.

Income and income distribution trends in Canada

The Canadian Institute of Health Information (CIHI) (2004a:24) reports that life expectancy and incomes of Canadians have risen over the past 25 years, but that poorer health is observed at lower incomes. From a historical perspective, incomes have risen over time in Canada until reaching a plateau in the mid-80s; however by the late 90s incomes began to climb again (Canadian Centre for Policy Alternatives [CCPA] 2007:11; CIHI 2004a:29; Phipps 2003:7). However, while income levels in general have risen, the disparity between rich and poor has dramatically increased (CCPA 2007:3).

Before discussing the relationship between income, income distribution and health, it is important to outline the income inequality trends in Canada. Economic status can be either measured at the micro level (individual) or the macro level (population). At the individual level, the potential sources of income for the Canadian population include employment, investments, private and public pensions, and transfer income (Employment Insurance, social assistance, tax credits etc). The "…most appropriate, readily available…" measure at the individual level is annual disposable income (Phipps 2003:3). It is imperative in this discussion to acknowledge that at the individual level not all groups experienced the noted rise in income (CCPA 2007:11; CIHI 2004a:29; Statistics Canada 2006:5). In the context of an industrialized country, poverty is assessed in terms of the impact of material and social deprivation on the ability of citizens to participate in society's customary activities (Raphael 2007:13). This relative approach view is favoured over a more absolute approach because in addition to examining material resources, it

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positions social resources as an equally important aspect of living. Within a Canadian

framework, measures of poverty are in essence measures of low income. For example, Low

Income Cut-Offs, Low Income Measure and the Market Basket Measure are the most common

assessment tools and are all relative measures that are useful for describing poverty in Canada

and identifying associations between poverty and health indictors (Raphael 2007:47).

An examination of income inequality looks at the relative distribution of income within a

population; in other words, the gap between the rich and poor. Similar to measuring individual

incomes, population measures are subject to many different methods; for example, the Gini

coefficient measures statistically the degree of income inequality within a country, thus allowing

for international comparison. A large Gini coefficient indicates a greater level of inequality with

a country's population.   From an international perspective, Canada has a Gini coefficient of

0.29, which is much less than the United States and the United Kingdom, but higher than Central

European and Nordic countries (Statistics Canada 2005:7). By examining the Gini coefficient

over time, it appears that income inequality has remained relatively stable, but on a closer

examination of the income change of the top ten per cent (decile) of the population versus the

bottom decile of the population we see an increase in the gap by 15% from 1990 to 2000 (Phipps

2003:9; Statistics Canada 2005:9). It is suggested that this increasing gap is a due to faster rising

incomes at the top decile (Statistics Canada 2005:9); while family incomes changed little

(Statistics Canada 2005:9), or were actually reduced (Phipps 2003:7), at the bottom of the

income distribution. In other words, the top 10% of Canadians had an approximate 30% increase

in income over a generation while the bottom half of the income spectrum had a 25% decrease in

income (CCPA 2007:11). From a population perspective, it is discouraging that despite a

vigorous Canadian economy the income gap between rich and poor is considerable and appears

to be growing. The top 10% earn 82 times more than the poorest 10%; a 2.5 fold widening of the gap over 35 years (CCPA 2007:17).

Health and income inequality

The concept that social forces threaten health and well being is not a new one (Cutler and Miller 2005:2; Raphael 2006:652). Canada has played a significant role, internationally, in the conceptualization of the social determinants of health (Raphael et al. 2005:218). The Canadian government first recognized the contribution of the social determinants of health in the 1974 Lalonde report. It identified four determinants of health that impacted individual and population health: human biology, health care systems, lifestyle and environment (Glouberman and Millar, 2003:388), where the environment included physical, social and economic factors. Although there was recognition of the non-medical determinants of health, it was the lifestyle component of Lalonde's explanatory model that was taken up at a policy and health promotion level. This health discourse was emphasized in the institutionalized health promotion policy and program initiatives of the mid-70s to the mid-80s which concentrated on behavioural change at the individual level (Robertson 1998:156). Health promotion interventions focused on such lifestyle factors as smoking, alcohol and drug use, physical activity and nutrition (Glouberman and Millar 2003:389).

In the mid-80s there was a policy shift from a lifestyle focus to one that unambiguously acknowledged the social determinants of health through such documents as the World Health Organization's (WHO) Ottawa Charter for Health Promotion [1986] and Canada's Epp Report [1986]. Often identified as the new health promotion (Robertson 1998:157), the main emphasis was the reduction of inequalities in health. Researchers established that the social determinants of health were not only observed at the individual level, but also at the community and national

levels. By the mid-90s, the new health promotion evolved into the population health approach.

The population health approach proffered that the reduction of health inequalities among

Canadians required an inter-sectorial approach to policy development that focused on upstream

causes of health outcomes and that concentrated on the interrelated factors affecting life course

health (WHO 2005:11). Health Canada and provincial health agencies endorsed this framework

and identified the determinants of health which were to be considered in health policy and

research processes: income and social status; social support networks; education, employment

and working conditions; social environments; physical environments; biology and genetic

endowment; personal health practices and coping skills; healthy child development; health

services; gender; and culture (Health Canada 1994). In addition to acknowledging the entire

range of individual and collective factors that contribute to health, the population approach

recognizes the complex interrelationships of these factors and how they too can impact health

(Health Canada 1994).

The concept of the social determinants of health has evolved out of the need to explain

health disparities from a perspective other than the biomedical or behavioural approach and

stems from the social health gradient, that is "…members of different socioeconomic groups

come to experience varying degrees of health and illness" (Raphael 2006:652). From this health

perspective, the socio-ecological approach highlights twelve key social determinants of health:

Aboriginal status, early life, education, employment and working conditions, food security,

health care services, housing, income and its distribution, social safety net, social exclusions,

unemployment and employment security and gender (Raphael 2006:653). Assessing income and

its distribution is important because income impacts many of the other social determinants of

health outcomes (Moss 2000:1630; Muennig et al. 2005:2023; Raphael, Byrant, and Curry-

Stevens 2004:272). Health status has been associated with social status and in most in Westernized countries social status is measured by income (Sanmartin et al. 2006:1136). As a positive health factor, income can directly or indirectly impact health (WHO 2006a:20). By focusing on this broad upstream risk factor to health, we acknowledge that there is growing disparity between the rich and the poor in Canada, and internationally, and that the focus on the individual lifestyle and biomedical approaches to health promotion has not improved society's health overall (WHO 2006a:10).

However a significant challenge is that the dominant discourses, the biomedical and lifestyle approaches to health emphasize the individual's lack of social responsibility in the absence of the broader social context. By viewing the relationship between health and income and its distribution through a lens of individual responsibility there is a resulting tension when attempting to elucidate the broad pathways and mechanisms which frame this relationship in terms of material and social deprivation. While an individual approach to discussing the health and income relationship may be useful in the identification of issues around income and health, it cannot be used effectively in the discussion of pathways. There are four broad pathways used to describe the iterative nature of the health and income relationship. First, the materialist framework suggests that the material deprivation of health enhancing resources results in disparities in health (Ross 2004:17); and does so by impacting individual and family life development and community environments (Raphael 2006:657). It is argued that individual income is a determinant of health because material conditions predict the likelihood of poor health; where those with lower incomes are exposed to a greater number of negative health risks (Raphael 2006:657). For example, Janzen, Green, and Muhajarine's (2006:442) recent study

suggest that as observed with single mothers, low income single fathers had low self-reported health scores.

Second, the neo-materialist framework, a more complex conceptualization of the poverty and health relationship, extends the materialist framework one step further. It examines the effects of social infrastructure as well as the impact of material conditions on health. The focus of this approach is on the distribution of wealth through an examination of the gaps between the rich and poor (Raphael 2006:657); that is, relative wealth rather than absolute wealth. In essence this approach is an examination of the interplay between the quantity of resources and factors that impact the quality of these resources (Raphael 2007:250). An examination of the degree of health disparities between neighbourhoods of varying socioeconomic status found that low income neighbourhoods had significantly high rates of health care utilization (Lemstra, Neudorf, and Opondo 2006:435). Health care utilization was used to quantify the level of health disparity within an urban centre, and through this classification the greatest disparity was found between the low income and affluent neighbourhoods for most variables (Lemstra, Neudorf, and Opondo 2006:438). Further to this need for a more complex conceptualization is the idea that a combination of the (neo)-materialist and psychosocial approach would provide a more comprehensive picture (Raphael et al. 2003:11). Adding to the challenge of conceptualizing the relationship is the myriad of health outcome measurements and income measurements (see Raphael et al. 2003 and Raphael et al. 2005 for a more detailed discussion of the issue).

Third, the life-course perspective examines influences on health across the lifespan. That is, "[l]ife course factors...would be seen to interact with contemporary circumstances at various levels of social aggregation on a moment-by-moment basis and over time, with differential health status emerging as a function of these interactions..." (Hertzman 1999:87). This

perspective has been the primary framework for the discussion of healthy child development in relation to how childhood poverty has a lasting impact on adult health (Wethington 2005:119); however, there is limited study within a Canadian context (Raphael 2007:249). Concepts such as trajectories, transitions, turning points, culture and contextual influences, timing in lives, linked lives, and adaptive strategies all influence individual change and adaptation over the life course (Wethington 2005:116). The resulting health effects associated with these concepts are said to have potential latent, pathway and cumulative effects on health. For example, researchers examined the associations of adult health outcomes to child poverty related factors such as prenatal tobacco exposure, low birth weight, exposure to environmental toxins, nutritional deprivation, cognitive readiness, parental status, poor quality neighbourhoods, schools and housing (Raphael 2007:249).

The final broad pathway for the poverty and health relationship is the social comparison approach which focuses less on the effects of material and social deprivation and more on an individual's or a community's interpretation of their place in the social hierarchy (Raphael 2007:251). Poor health outcomes are a result of negative comparisons that produce stress from low self-esteem and shame (Ross 2004:17). Perceptions of our place in the social hierarchy result in a psychobiological impact on health at the individual level (Lynch et al. 2004:17), that is there is both a behavioural and a biological outcome. As a society, these comparisons weaken social capital and cohesion which are themselves determinants of health, and as a result population health suffers (Ross 2004:17). Because work is an important component of health and well being during particular stages of the life-cycle, there is a body of evidence that demonstrates the role of psychosocial work-related stress on health variations in working populations. For example, the Godin and Kittel study (as cited by Siegrist and Marmot

2004:1467) suggest that unstable work settings, and its associated stresses, are more likely to be linked to employees with lower socioeconomic status, and in turn are associated with an increased risk of ill health. Raphael (2007:251-252) argues that by removing the social and material factors from the analysis of the relationship between income and health, one ignores the significant impact of these factors on those living in poverty. And to that end, there is a depoliticization of the health-income relationship because the proposed mechanisms, perception and experiences at the individual level and social cohesion at the community level, are not considered against a political, economic or social backdrop.

Using the theoretical foundations outlined in this chapter that positioned health in relation to its social determinants; that proposed pathways linking health and income; and that considered media in terms of its ability as informers, agenda setters, framers, and persuaders, the next chapter outlines the method and methodological considerations that inform my research. I provide a short overview of the newspapers selected for my study. Next, I present the conceptualization and operationalization of the key concepts under study and address issues of trustworthiness. And finally, I outline the reflexive approach I used for sampling and coding of data.

Chapter 3 – Context of Discovery and Analysis

In order to establish and to understand the relationship between income and its distribution in Canadian mass media, this study was conducted using a qualitative content analysis approach. This approach was determined to be the most appropriate method because my primary goal was not to quantify the use of particular phrases or terminology, but rather to interpret "… the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh and Shannon 2005:1278). However, as established by Roy (2004:168), recording and analysing some descriptive information about the specific articles included in this study was useful in providing structure for the qualitative analysis.

Broadly, there are three approaches to qualitative content analysis all of which examine data from a naturalistic paradigm: conventional content analysis, directed content analysis and summative content analysis (Hsieh and Shannon 2005:1277). My research was guided by the directed content analysis approach. This approach uses existing theory to establish key coding categories, however it allows for the development of emergent themes, and to this end the findings can either support or oppose the theory. Therefore, similar to Roy (2004), I did not use an *a priori* list of health topics or key word searches to collect relevant newspaper articles; rather I approached the data collection naturally, as a lay person would interact with this medium.

Throughout the following discussion of the study methodology, I address issues of trustworthiness, methodological limitations and delimitations. The incorporation of these issues in the context of discovery and analysis informs the reflexive nature of this process.

The newspapers: *The Globe and Mail* and *The National Post*

The ownership of the Canadian press has concentrated over time, and as a result the ownership of the 91 English newspapers is spread across 13 owners (The Canadian Newspaper

Association 2006a). It is noted by Paalman (1991:89) that a nation's press is divided along

political lines, and issues can be polarized due to quick politicization. In order to represent two

differing ideological positions within Canadian media, I selected *The Globe and Mail* (a liberal

perspective) and *The National Post*, (a conservative perspective) for this content analysis. These

news outlets have high circulation rates and reach a national audience; with a weekly circulation

of greater than 2 million and 1.4 million for *The Globe and Mail* and *The National Post*

respectively (The Canadian Newspaper Association, 2006b). Furthermore, *The Globe and Mail*

and *The National Post* were selected for this study because they have the ability to cover issues

from a national perspective and thereby can influence broad national agendas (Roy, Faulkner and

Finlay 2007:3).

The process of sampling and coding

I employed purposive prospective sampling over a six month time period, January 27,

2007 to July 26, 2007. Considering the time restrictions of a Masters thesis, a six month

timeframe was considered comprehensive for this study. I sampled every other day during this

six month period. This sampling strategy collected data for 13 constructed weeks from each

daily newspaper (Appendix A). Although neither newspaper is published on Sundays, Sunday

was still considered in the sampling cycle thus ensuring that the remaining six days are

represented equally over the 13 constructed weeks. As a result, I purchased a hardcopy of each

newspaper on Monday, Wednesday and Friday in one week; and on Tuesday, Thursday and

Saturday in the following week. As a result, the total number of newspapers required for

collection was 156: 78 editions of *The Globe and Mail* and 78 editions of *The National Post*.

During this sampling cycle two statutory holidays occurred: Victoria Day (May 21) and Canada

Day (July 2). *The National Post* did not publish on either of these days. One hundred and fifty-

four newspaper editions were collected; 78 from *The Globe and Mail* and 76 from *The National Post*.

The methods used to search media for the purposes of a newspaper content analysis can include, but are not limited to, hand searching of newspaper hardcopies; searching published news indexes like the Canadian Periodical Index; or online searches of electronic databases such as Canadian Newstand Major Dailies offered through Proquest Company (Roy et al. 2007:2). I used a hand search technique of each newspaper edition, and although a time-consuming exercise, this search method allowed me to fully immerse myself in the material and was a similar process to how media consumers read the newspaper (Roy, Faulkner, and Finlay 2007:3).

The unit of analysis as noted above was articles from the two national newspapers, over a six month period. A constructed 13 week time period allowed for an extensive framework from which to sample. The inclusion criterion for the articles in this study is two-fold. First articles must be considered a health news story as defined below. Second, of the health related articles the content must explicitly or implicitly reference income and its distribution, per the operational definition. For example, an article may discuss research findings indicating that poorer populations visit the doctor less frequently; this would be an explicit reference to the relationship between income and health. Similar to Commers, Visser, De Leeuw (2000:324), the exclusion criteria for article selection included: advertising; articles discussing the health, healing or sickness of social, political or economic conditions or non-humans (animals, plants and so on), the financing of medical or alternative care organization rather than the nature of, instances of, or extent of care itself; and obituaries. Additionally, letters-to-the-editor were excluded. In a preliminary examination of the newspaper content, it was determined that since the sampling occurred every other day, the context of subsequent day's letter-to-the-editor was lost.

Definitions

The operationalization and conceptualization of the key concepts under examination were shaped and reshaped during the initial stages of the process.

      <u>A health story</u>. Health is defined broadly as suggested by the World Health Organization (2007:par 1) where it is "…a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". If I were to have based my definition on the WHO definition of health almost any article on health would have fit the criteria. The PHAC (2002a) acknowledges the challenges with the WHO's definition of health in terms of health outcome measurements; and therefore within the context of the population health approach, the PHAC defines health as a resource. This allows for the measure of health in relation to social, economic and physical factors. Similarly, the Government of Ontario's Ministry of Health Promotion (2007) mission is to improve the health of Ontarians from a population health perspective. The population health approach definition of health provides a narrower, yet still broad enough classification of health. The challenge was to identify within the newspaper articles, a clear relationship between income and health as a resource. Accordingly, in this study health news stories were defined as those articles that explicitly referenced themes and activities that were consciously directed toward "…healing, health or restoration of personal, mental or physical integrity…" (Commers, Visser, and De Leewu 2000:324).

      <u>Income and its distribution</u>. Income and its distribution are broad terms that encompass such measures as individual income, income inequality, non-income but related measures (social class, occupation and education level), wealth, individual and community poverty (absolute and relative) (Raphael et al, 2005:219, Raphael et al. 2003:13). Initially, concepts or terms included

or were related to, but not limited to, income, wages, poverty, middle class, disadvantaged, blue or white collar, professional, unemployed, welfare, poor, wealthy, rich.

Through a pre-test of 10 articles, 5 from *The Globe and Mail* and 5 from *The National Post*, I determined that the income and its distribution operational definition required refinement. Non-income but related measures such as social class, occupation, employment status and education level were excluded from the operational definition. This was based on Hayes et al.'s (2007:1847) taxonomic framework developed to categorize the relative frequency of health topic coverage. Their framework was informed by *Toward a Healthy Future*, a federal document developed in order to encourage discussion and policy addressing health inequalities. Income was a distinct sub-category in their taxonomic framework (Hayes et al. 2007:1843). It must be acknowledged that income is a limiting measure because it does not encompass other socio-economic contributions including education and occupation, as well as wealth, modes of the redistribution of wealth, the cost of healthy living and the efforts it takes to meet basic needs, sense of control/powerlessness, debt, credit and reserve, quality of housing and childcare (Raphael et al. 2003:14). However, different aspects of socioeconomic status allow for insights into the understanding of social inequalities as they relate to health (Krieger, Williams, and Moss 1997:343). For example, education and occupation capture individual based dimensions of socioeconomic status while income is a reflection of a stand of living and of life chances (Duncan 2002:1152);18:341–378. 15).

Trustworthiness

Reflexivity and methodological transparency were the key approaches I used in establishing trustworthiness throughout the research process; and in doing so I addressed the qualitative research criteria: credibility, transferability, dependability and confirmability

(Bryman and Teeven 2005:150). The reflexive collection and analysis of the data discussed throughout my study and the theoretical support of, or opposition to, previous research allowed for increased credibility of my findings. I was mindful that the credibility of the qualitative methodological and interpretive process can evolve and change throughout the life of the study.

Transferability, or generalizability, of my findings to other media was not the goal of my research. As noted by Bryman and Teeven (2005:150) qualitative findings are specific to context; therefore it must be emphasized that my findings are contextualized in relation to the selected medium and the selected time period. The newspapers analyzed in my study were two major Canadian daily newspapers aimed at mass readership and my findings would not be transferable to, for example, local or community newspapers, where media and public agendas may be different. It was also necessary that I consider the existence of external forces, specific to print media and exerted on the journalistic process, that may impact the production of the message. Furthermore, the actual effects of these media messages were not necessarily reflective of the potential or intended effects of news coverage. I distinguished the intended message from what I was not measuring, that is, what the audience is actually perceiving. The collection of data from a variety of sources and methods, known as triangulation, could address this validity issue (Maxwell 2005:93). For example using audience reception surveys would assist in determining if the intended message was in fact the one that was received (Collins et al. 2006:100). Another approach to triangulation would assess the quality of the news information. This would involve each article being reviewed by an expert (Westwood and Westwood 1999:61); however, this process presents its own challenges in terms of subjective judgement (Oxman et al. 1993:993). Both of these approaches were beyond the scope of this thesis. Finally, an examination of the two newspapers does not represent all media available in Canada,

and with the increase in new media such as the Internet, the saliency of the message may be diluted even further.

Dependability addresses the reliability of my research findings and should be evaluated against methodological transparency. Unlike quantitative methodologies, the qualitative process allows for flexibility in the evolution of the methodology over the course of the research (Maxwell 2005:80). In the beginning, my methodological process was pre-structured (Maxwell 2005:81) and the sampling, searching and retrieval process is clearly outlined in this chapter; however, I did allow myself the flexibility to revisit the methodology throughout the duration of the study and make changes resulting from emerging issues (Maxwell 2005:81). The incorporation of these elements throughout the thesis provides transparency (Roy, Faulkner, and Finley 2007:28). In order to be transparent, I provided a detailed or thick description of my methodological approach and any changes therein (Bryman and Teeven 2005:150) and I did so through the process of reflexivity.

Another issue facing the dependability of my findings was coder-reliability. In content analysis there are often a number of coders involved in the data collection process and inter-coder reliability is an important concern. Since I was the sole person coding the data for this study, inter-coder reliability becomes less measurable and possibly less of a concern than I originally thought. When many coders are involved in the subjective judgement of observations, an artificial construct must be negotiated in order to achieve consistency. In this particular study, with a single coder no negotiation of constructs was required rather consistency is supported through reflexive and transparent analysis. If concerns regarding the dependability of my findings arise, the material under study is concrete and archived in various locations (libraries, electronic databases) and as a result coding could take place a number of times to ensure

consistency (Rubin and Babbie 2005:481); albeit with some room for bias. It must be

highlighted that using a hand searching method in content analysis can present issues around

false negatives, in other words missing articles in the search that meet the inclusion criteria (Roy,

Faulkner, and Finley 2007:18) therefore thorough and deliberate data collection was required.

Readers' subjective interpretation of media content is shaped by their social, cultural and

historical conditions (Roy 2004:91). As such, my analysis of the relationship of health and

income represented in *The Globe and Mail* and *The National Post* was influenced by my role as

biracial, middle-class married mother of two juggling a profession and a graduate degree. I was

socialized to interpret health from a biomedical framework as a result of having a physician for a

father and nurse for a mother. My recognition of the impact of the social determinants on health

has been an evolution over time, and it has been as a graduate student that I have gained the

ability to deconstruct, and subsequently, to reconstruct my interpretations of health, as well as

other social issues in the complexities of reality. This work is part of the process through which

I am resolving the conflict between my socialized views on health and my new found

perspective.

A content analysis requires a systematic, objective and theoretically-based approach and

as such the sampling process occurred in four distinct steps (Appendix B). As a first step during

the sampling process I identified all articles that contained health-related themes. This exercise

involved the scanning of headlines and photographs of each newspaper edition for content that

met the inclusion criteria (Roy, Faulkner, and Finley 2007:13), which in this particular study are

health news stories. The resulting sample set was 670 health articles. *The Globe and Mai*l

contributed 456 articles and *The National Post* contributed 214 articles to the sampling frame.

This process included a preliminary skimming of each article (Roy, Faulkner, and Finley 2007:18). If the article met the definition of health story and did not meet an exclusion criterion, it was marked for further review at a subsequent time. Advertisement supplements (an additional section of the newspaper) from pharmaceutical companies and/or health agencies (i.e. Canadian Cancer Society) were also excluded. Although, these supplements were health related and contained many health articles, they were considered to be a form of paid advertisement. Articles that clearly did not meet the inclusion criteria were excluded, however if I was uncertain whether an article met the criteria, I included it in the first sample set.

The inclusion or exclusion of articles about violence as a health issue was difficult for me to decide upon. In the early 1980s and 1990s, violence prevention was positioned as a public health issue rather than solely a social issue (Mercy et al. 2002:7; WHO 2002:1). In 2002 the World Health Organization released the World Report on Violence and Health. This report framed violence in a public health perspective and developed a typology of violence. This analytic framework categorized violence in three broad categories directed by who commits the violent act: self-directed violence; interpersonal violence; and collective violence (WHO 2002:4). I was guided by this typology in my decision to omit articles about violence and health. The WHO report highlighted that "[v]iolence is an extremely diffuse and complex phenomenon" (2002:4), and as such the inclusion of all violence articles was beyond the scope of this thesis. For example, collective violence can be represented in a number of forms such as armed conflicts within or between states, genocide, repression and other human rights abuses, terrorism, and organized violent crime (WHO 2002:5). Additionally, the discussion of interpersonal violence, such as family and intimate partner violence and community violence, was not represented in my sample. The coverage of both these topics were important issues at the time of

this study, as the wars in Iraq and Afghanistan continued and the increasing street violence in Toronto received considerable attention in the press. However, I argue that the majority of coverage was more reflective of social and political conditions and therefore did not meet my operationalized definition of health articles. Furthermore, in the media and health-related research reviewed in this thesis, none included violence as a health-related topic. Articles addressing self-directed violence were included in sample because I contextualized these in a mental health framework.

The subsequent review retrieved articles referencing income and its distribution, explicitly or implicitly. The second phase also involved printing off the copies of the articles from the Proquest database *Canadian Dailies*. The Proquest copy was compared to the original newspaper copy for text accuracy. This step was required because the Proquest copy is the copy from which I worked and therefore needed to reflect accurately the original content found in the newspaper. Other than the occasional typo and incorrect pagination, the content was consistent. Using word processing software, I copied and pasted the Proquest online document into a word processing document, assigned it a distinct identification number, saved and printed a copy. This step provided with me with space to write on the documents and the ability to increase font size for ease of reading. This second reading also allowed for the elimination, upon further evaluation, of articles which I had initially been uncertain about meeting my inclusion criteria. This was a more in-depth reading specifically seeking out articles that appeared to mention income and its distribution in some way. This reading resulted in a total of 167 articles; 121 from *The Globe and Mail* and 46 from *The National Post*. Upon the refinement of my definition of health and income and its distribution, a third reading was completed from the Proquest copy.

This review resulted in more articles being excluded and resulting in a total of 116 articles; 93 from *The Globe and Mail* and 23 from *The National Post.*

It must be noted that at this point in time, while all of the articles had been read with increasing depth; some of the articles that on the surface appeared to fit the inclusion criteria were still present. The final read involved colour coding themes based on broad topics which reflected my research questions. I felt that this process would clearly indicate if the articles met the inclusion criteria and at this point many articles were excluded from the analysis. The final number of articles presented for analysis was 52; 39 from *The Globe and Mail* and 13 from *The National Post*. The gathered information was entered into an Excel spreadsheet allowing for the organization and categorization of the data.

As noted previously, a directed content analysis develops preliminary code categories based on established theories, but allows for emergent codes to be added during the analysis. My coding variables which established potential media effects (informer, agenda setting, framing, persuading) were modified from the content analyses of Collins et al. (2006:96), Commers et al. (2000:324), and Westwood and Westwood (1999:55). Maxwell (2005:97) suggests that the preliminary code categories should be considered organizational categories or topics rather than the more quantitative coding nomenclature, because the goal is not to solely generate counts of items. It is essential that, if present, emergent themes be identified within the texts.

Since I was using preliminary codes based on existing theories, I increased the validity of my findings by identifying discrepant themes. As suggested by Maxwell (2005:112) the identification and analysis of discrepant data is an important part of testing validity in qualitative research. Four preliminary organizational categories were developed. First, simple publication details included the article identification numbers, the headline, the day of publication, the

section of newspaper in which the article was published and the page number. This information is purely descriptive in nature and allows for the organization of data. Second, article information was categorized regarding story prominence. Story prominence addressed the first research goal of establishing whether Canadian media is telling the audience that a relationship between health and income is on the media's agenda, and therefore the public's agenda as represented by significant coverage and prominence of coverage. In addition to the number of related articles identified in the simple publication details, prominence was established by examining three variables: story placement, word count and artwork. The third organizational category was story characteristic which addressed details such as the geographic breadth of the article, article genre and authorship. These variables helped to contextualize an article's prominence by identifying the geographic relevance to the relationships as well as the intensity of coverage (soft versus hard news) and whether media ownership felt the issues were significant enough to dedicate resources to coverage.

The final organizational category was context characteristics. Article information was gathered for story topic, story theme, where income was first mentioned in the article, the agent of responsibility for the relationship between income and health (micro, meso, macro), who establishes the income/health relationship in the article (authority) and whether the article explains how income can impact health or vice versa. These content characteristics addressed my second and third research goals by establishing within the sampled articles who was to blame for the relationship between health and income and who was identified as showing that such a relationship exists. In terms of the agent of responsibility for the relationship, initially the articles were identified as being micro, meso, or macro or some combination of these categories. I initially found it difficult to identify which particular category suited the agent of responsibility

for each article because it became apparent that many articles were a combination of coding categories. As such, I drew from Regina Lawrence's (2004:57) analysis of obesity in media, where she identified that blame around social issues is located along a continuum anchored by individualized blame at one end and systemic blame at the other end. Individualized frames limit blame to particular individuals while systemic blame broadens the focus to government, business and other social forces (Lawrence 2004:57). Viewing the agent of responsibility in terms of a continuum allowed me to acknowledge that discreet categories such as micro, meso and macro were too narrow. The articles were then categorized as either individualized, systemic, a combination of the two frames, or none mentioned.

Within the sample of articles it was difficult to identify the mechanism or pathways by which the relationship between health and income is explained with any consistency or confidence. This perhaps can be attributed to the limited space available in news print media to develop this type of discussion as the majority of articles included in my study were less than 700 words. Furthermore, Raphael et al. (2003:31) indicate that researchers in their own studies about the income and health relationship typically fail to identify explanatory pathways or mechanisms. Therefore, it was perhaps naïve on my part in the development of my research questions to assume that media would be able to report on these mechanisms when researchers find it easier to conceptualize these pathways than to operationalize them.

The actors or sources were identified as those individuals or groups who established a relationship between health and income within the sample articles. They were categorized as article author, organization or government agency, health care professional, lay person or researcher. Media Monitors, a media intelligence company, research suggests that an expert is more likely to be credible than a non-expert (Macnamara 2006:10); and specifically Commers,

Visser, and De Leeuw (2000:325) found that experts were more likely to link social determinants to health in media. As such, I recoded the actors into more general groups – experts (organizations, government agencies, health care professionals, and researchers) versus non-experts (article author or lay person).

    In the following chapter I present my interpretation of the themes discovered through my analysis. To highlight these themes, I present excerpts from the sample articles.

Chapter 4 – Representations of the health-income[1] relationship

During the research process it became evident that the most practical approach was to categorize the main health article theme in terms of the health discourses found in media; that is, the biomedical, the lifestyle and the social determinant of health models (Commers, Visser, and De Leeuw 2000:322; Clarke 1991:292). In Raphael's (2007:205) review of the literature, he found that "[t]he poverty and poor health relationship is one of the most robust associations known to health and social sciences..." and that researchers have found for Canadians almost every health indicator could be predicted by income (Raphael 2007:208). The robustness of this relationship implies a significant scientific relationship in which traditional biomedicine is bound. The determined income and poor health associations are established from health indicators measured at the individual or population level. This reductionist approach aims to identify variables that predict relationships, but does not attempt to understand the pathways or structures of the genesis of this relationship (Raphael, 2007: 146). What I find particularly noteworthy is that within media, biomedical factors receive significant coverage despite limited association to health outcomes, or an often nonexistent relationship, but the vigorous relationship between income and health remains low on the public's agenda.

It was clear through the data collection process that income as a social determinant of health did not receive significant coverage in *The Globe and Mail* and *The National Post*. Within this sample, only two articles explicitly discussed the relationship between health and income. This is not surprising since other researchers have found that the social determinants of

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[1] In this section the term *health-income* is used to identify all articles that referenced some aspect of the income and health relationship in a health context. Furthermore, the term *income* is used to represent income and its distribution as defined in Chapter 1.

health, as a health discourse are minimally represented in popular media (Clarke 1991:294; Hayes et al. 2007:1842; Higgins et al. 2006:347; Westwood and Westwood 1999:53). Therefore, in order for me to examine the relationship between health and income, implicitly, it was important to identify the context in which income was presented in the health articles sampled. An understanding of this latent content requires contextualizing the core themes of the health-income articles. This analysis allowed for understanding how media frame the relationship between health and income. This section describes publication details of the health-income articles as a reflection of story prominence. Next, the representation of the health-income relationship is outlined within the biomedical, lifestyle and social determinant of health frameworks; and from within these boundaries I discuss who is responsible for this relationship and who is telling us that this relationship exists. Descriptive publication details can be found in Appendices C through F.

Health and income: on the public's agenda?

During the sampling process 670 health articles were reviewed. The total number of articles that discussed the health-income relationship to some degree was 52. *The Globe and Mail* contributed 39 articles and *The National Post* contributed 13 articles to the sample (the distribution of articles by day is summarized in Appendix C). During the 13 week sampling frame, *The Globe and Mail* published three times more health-income related articles than *The National Post*. The general trend for both newspapers was a concentration of health-income-articles in the Thursday, Friday and Saturday editions. Health-income article location was coded into health, business, news, national news, editorial, international news, local news and other news. The types of health-income articles that fit the criteria, overall, were found in sections

identified as health, news and national news. Over half of those in *The Globe and Mail* (56%) were dispersed in the health and the national sections; while general news sections produced most of the articles in *The National Post* (46%).

My first research goal was to determine the extent to which the two national newspapers are telling the audience that a relationship between health and income exists. This technique has been established by researchers through media agenda setting where the frequency of coverage and the prominence of coverage of these stories are evaluated. According to Caburnay et al. (2003:710), the high saliency of an issue is determined by about the amount of coverage an issue receives in media. My research did not examine the health articles discussing income and its distribution relative to the number of articles in each edition of the newspaper or relative to the number of articles addressing the social determinant of health in particular. I examined the number of health-income articles relative to the total number of health articles in the sample. Fifty-two health-income articles (8.3%) were identified in a sampling frame of 640 health articles. This illustrates that the majority of health articles in this time period did not address the health-income relationship. This observation of low coverage, and therefore low prominence, runs parallel to other investigators' findings, where the social determinants in general were considered low priority issues (Clarke 1991:294; Hayes et al. 2007:1842; Higgins et al. 2006:347; Westwood and Westwood 1999:53).

Further to the exploration of prominence, I examined the placement of health-income articles within each newspaper section. These sections were coded into three possible locations: the front page of the newspaper, the first page of a section (other than the front page), and any other location. Few health/income articles were found on the front page of either newspaper surveyed. The majority of health-income articles (27 out of 52) were found on the first page of

newspaper sections (other than the front page); and all health-income articles in the health section of the newspaper were found on the first page of the health section (13)[2]. This story placement speaks to the view of health as separate from the society. Concentrating health-income articles in the health section removes the responsibility of health from society and places it as a separate entity independent of influences other than the individual. Placing the majority of health-income articles in a distinct health section of the newspaper removes them from the broader context of social influences (Appendix D, Table 9).

Caburnay et al. (2003:710) suggest that integral to the discussion of story prominence is story length and accompanying artwork because they are indicative of media's agenda setting capacity. That is, longer articles and/or artwork signify a more salient issue. I established article length in terms of word count, where health-income articles were coded as < 299 words, 300-699 words, 700-999 words, and > 1000 words. The majority of health-income articles were between 300 and 700 words in length. The trend in both newspapers studied was a majority (42%) of health/income articles between 300 and 700 words; followed by articles greater than 1000 words. (Appendix D, Table 10). The artwork associated with health-income articles was coded in terms of colour (black and white versus colour) and type of artwork (photograph versus non-photograph). Both news publications had similar artwork trends where the majority of health-income articles did not have any associated artwork (50%), followed by articles with black and white photos. Both newspapers include colour photographs in their publications and I surmise

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[2] On April 23, 2007 *The Globe and Mail* launched a new format design. As a result, the health section moved from the front section of the newspaper where there was a distinctly identified health section, to a newly created section called Globe Life. This did not impact data collection because the section coding structure remained the same.

that colour photographs indicate a significant story that newspaper media would like to draw the reader's attention to. There were 7 health-income articles in the total sample associated with colour photographs. The saliency of these particular articles was supported by the length of each story with most over 700 words. I did not analyse the content of the artwork.

To further establish the centrality of health-income articles published in *The Globe and Mail* and *The National Post* during this time period, I evaluated story characteristics such as article genre, geographic breadth of the article and authorship. Article genre or story type is also considered to signify how media sets the agenda for the reader (Caburnay et al. 2003:710). I categorized article genre based on the Media Awareness Network's typology (2008). Each health-income article was first categorized as either news or opinion piece. News items were then subsequently categorized based on word count and time reference. Hard news was identified as articles that were +/- 600 words where the time reference of the news event was within one to two days of the publication date. Additionally, hard news health-income articles had to answer the journalistic 5 W's (What happened? Where? When? To/by whom? Why?); and to this end hard news heath-income articles were characteristically brief and simple. Soft news was generally the same length as hard news, but differed in that there was no time reference to a particular event (Media Awareness Network 2008). Soft news profiled people, programs or organizations where no particular event triggered coverage of the story. News stories could also be categorized as feature news. These were articles of substantial length (> 1500 words) with the goal to explore an issue in depth and were less time sensitive. Any health-income story that was not considered news was identified as an opinion piece. I categorized this genre of story further into editorial or comment pieces. Both styles expressed opinions but were distinguished by their

location in the newspaper. Comment pieces were articles that were not found on the editorial pages of the newspapers.

As expected, the majority of health-income articles were categorized as news; 42 out of the 52 articles reviewed. Over half of the health-income articles were identified as soft news. The lack of editorial coverage and the lack of hard news coverage illustrates that as agenda setters newspapers in Canada do not consider the issues around health and income as one of high significance. From a news genre perspective, perhaps the soft news approach suited stories that examined the social contexts of health since the interrelationships of the social determinants of health are complex and cannot be fully explored in the hard news journalistic framework of the 5 W's.

Dateline and byline were indicative of the availability of resources for the newspaper, enabling them to cover newsworthy topics. Dateline establishes geographic location of coverage and byline identifies authorship. In particular, authorship highlights commitments of the newspaper to the story. I coded the authorship of all health-income articles into contributions from newspaper staff, news agencies, non-staff contribution and no author identified. (Appendix E, Table 15). The trend for both newspapers was the same; the majority of health-income articles were contributed by staff writers (62%) followed by contributions from news agencies. Furthermore, the majority of articles identified a dateline (75%). What both these observations illustrates is that there is a substantial reliance on the use of news agencies as news becomes more centralized; however journalists associated with a specific newspaper are still in an agenda setting position and newspapers do have the resources available if a story is considered significant enough to cover. As such journalists must be utilized effectively to communicate

messages about the relationships between health and income, or other social determinants of health.

In terms of geographic breadth, the majority of health-income articles were of an international focus (42%), closely followed by articles with a national focus (35%). Perhaps the health-income relationships presented with an international focus, primarily in developing countries, is a reflection of public discourse. Mark Tausig and colleagues outline that in developing countries such as Nepal material conditions are at the root of the majority of illnesses (Tausig, Subedi and Subedi 2007:150); while in developed countries the iterative nature of the relationship between the social determinants of health and health inequality is complex. It could be argued that the absence of coverage of these issues within a Canadian context is a reflection of a neo-liberal ideology.

How health and income are represented in Canadian media

Through the examination of the primary article themes, I was able to contextualize how media frames the relationship between income and health. This study did not focus only on articles that discussed the income and health relationship per se, but was extended to health articles that mentioned or presented income within a health discourse. Although an article may

Table 1: Health-income article themes by health discourse

Framework	Number of articles
Social determinants	26
Biomedical	19
Lifestyle	7

have contained multiple topics, only the primary topic was selected for evaluating where the health-income relationship was located. The themes were categorized in terms of contemporary approaches to health: the social determinant model, the biomedical model, and the lifestyle model (Table 1).

The health-income relationship within social determinant of health themed articles

There were a total of 26 health-income articles with an overarching social determinants of health theme. These articles were coded into themes based on the socio-political typology of health determinants commonly discussed among scholars and policy makers (Hayes et al. 2007:1847; PHAC 2002b; Raphael 2006:653). Table 2 outlines the social determinants of health themes in which a health-income relationship was identified. The majority of the articles focused on access to health care issues; with less concentration on food security, Aboriginal status, healthy child development, physical environment and social capital.

Access to health care services

The health care debate in Canada is a prime example of how income can impact health and the role of political will in this relationship. An accurate picture of Canada's *universally accessible* health care system is that there is currently a 70%/30% mix of public and private expenditures on health care (Shaw 2003:427). The focus on increasing the privately-funded portion is sparking much debate about the emergence, or realization of, a two-tiered health care system in Canada. Increasingly, there is acknowledgement that within the publicly funded sphere of health services, which under the 1984 Canada Health Act must be delivered in a framework of accessibility, universality, comprehensiveness, publically administered and portability, there are increasing barriers to health care access. In a report from Health Canada (2001:18) health care access was framed in terms of service availability; financial barriers; non-financial barriers to presentation of need; and barriers to equitable treatment.

Financial barriers to health care access can be further categorized into explicit financial barriers to insured health services or explicit financial barriers to uninsured services or other

financial costs associated with access (Health Canada 2001:18). Some argue that the financial

barriers to publicly-funded health care in Canada have been removed through the implementation

Table 2: Health-income articles framed in the social determinants of health model

Article themes	Number ofArticles
Access to health care services	14
Food security	4
Aboriginal status	2
Early years (healthy child development)	2
Physical environmental	2
Social capital	2

of the 1984 Canada Health Act and that the real concern lies in the financial access gradient

observed in non-insured services (Health Canada 2001:19); in the extensive waiting lists for

insured services; and in the perceived option for those with the financial resources to seek

treatment elsewhere. In Raphael's (2007:194) review of the literature, he highlights that we need

to focus on the ability of those living in poverty to access uninsured services, and I extend further

this argument to those who do not fall in the top quintile for income. Costs associated with

access to uninsured health care services are the second most common reason for Canadians

experiencing difficulties in obtaining care for unmet health care needs (Sanmartin et al. 2006:9).

For example, two of *The Globe and Mail* articles discussing behavioural treatments for autistic

children, an uninsured service after age six, highlighted that the out-of-pocket expenses impact

the social and the familial economies as well as the physical well being of families.

> The study showed that direct medical costs were high in the first five years of life, at about $35,000 annually. That is when most behavioural therapies are offered. The indirect costs to parents, in large part due to lost income, are also quite high in the childhood and adolescent years, averaging $43,000. (Picard 2007, April 3:A13).

> "It really puts the burden back on the families to keep this alive when we're already so burned out on a personal level, and I find that scary and upsetting,"...She said the treatment is a huge financial burden for her family. "We have a healthy credit line," she said (Campbell 2007, April 13:A4).

Another financial barrier to accessing health care in Canada is the cost associated with prescription drugs. The 2002 Romanow Report cites the federal government's 1997 National Forum on Health, that suggests prescription drugs will play an equally, and increasingly, important role in the Canadian health care system when compared to the role of medical and hospital services (Commission of the Future of Health Care in Canada 2002:190). The costs of uninsured drugs play a significant role in the health-income relationship; however this discussion occurs in a non-Canadian context within my sample of articles. For example, in the United States, eligibility of transplant drug coverage runs out after a period of time, and the cost to the individual is too high, this in turns impacts the cost to society with shortened lives.

> "…the transplant failure rate is often related to the inability to pay for immune suppressing drugs, which are required for the remainder of the patient's life to prevent rejection of the transplant…These drugs 'are incredibly expensive, sometimes more than $13,000 a year,'… Many patients, especially young adults, cannot afford to pay for these drugs. Moreover, only about 30% of young adults have health insurance…Even for families with insurance, the co-payments can be a huge financial burden,'….coverage ends once a patient reaches a lifetime maximum amount stipulated by their policies" (Schnitzler 2007, March 8:A24).

By neglecting to discuss the financial barriers associated with drug treatment access within a Canadian context, media coverage hides the reality that 22% of drug expenditures come out of Canadians' own pockets (Commission of the Future of Health Care in Canada 2002:195). While publicly-funded coverage is available for seniors and those on social assistance, it is likely those without employee medical benefits who experience a substantial burden.

Sanmartin et al. (2006:9) identified that the primary barrier to care for Canadians was long wait times. The health-income relationship was acknowledged in articles centred on the access to health care debate. The articles spanned the debate, on one hand from the perspective that universal health care is an essential fabric of the Canadian identity to those articles which emphasized the dissatisfaction with the delivery of publicly-funded health care services. For

example, the two articles discussing wait times for particular medical treatments argued that despite the wealth of the country and the nation's ideological framework, Canadians should be awarded timely health care services. The article conveyed that it was the wealthy who ultimately had a choice and the poor who did not. For example, one article discussed the waiting lists for cancer treatments, where a Canadian immigrant paid out of pocket for treatment in his country of origin because the waiting list in Canada's publicly funded health system was too long.

> "I felt very bad," Mr. Djukic, 51, said in an interview from his home in London, Ont. "I couldn't believe that in a rich country, you had to wait so long" (Priest 2007, January 31:A1).

Even among the wealthy there is a gradient of health care access for those who can pay for timely treatment. In an article discussing the organization of surgical trips to India and the luxurious accommodations awaiting Canadian patients and families, the access gradient was clear where wealthy Canadians can go to the United States for treatment and the relatively less wealthy can pay for treatment in India. Again, the lower income population is invisible in terms of options for choice. In actuality they do not have a choice; they remain on the waiting lists.

> "Wealthy Canadians can go to the Mayo or Cleveland clinics for immediate help, but the rest of the population depends on an increasingly overtaxed system. At any given time there are 800,000 Canadians awaiting surgery" (Francis 2007, May 5:FP2).

It is important to note that two articles within the social determinant of health-themed article category spoke directly to an income and access to health care association. *The National Post* and *The Globe and Mail* both covered the release of research findings identifying income as a determinant of health care access and utilization. The reported research strengthens the understanding that within the framework of Canada's publicly funded health care system there is an access gradient; however what was left out of the research coverage was a discussion of the

pathways for access or non-access. Perhaps this omission is because the pathways remain

unclear (Raphael 2007:192).

Food security

Of those health-income articles within a social determinant of health theme, food security

was on the public agenda, but to a lesser extent than health care access. Food security is a broad

concept which examines various elements such as the safety, quality and sustainability of the

food supply. The health-income relationship was developed within this theme from an

international perspective in 3 of 4 articles. Articles on agricultural practices of developing

countries either examined the biofuel debate or African famines and responsibilities for

health/income relationship were targeted towards governments. These discussions are framed

within the power relationships found within-country inequalities and between-country

inequalities.

> "…a combination of drought and disastrous economic policies that have
> destroyed the agricultural base of the country…[and a]…tiny minority of the
> people have become very rich overnight, while the majority are languishing in
> poverty…" (Goodspeed 2007, June 8:A16).

> "Fill your tank with ethanol and you might contribute to famine in Africa."
> (Reguly 2007, July 20:B6).

> "The likely result of a boom in cassava-based ethanol production is that an
> increasing number of poor people will struggle even more to feed
> themselves…The world's poorest people already spend 50% to 80% of their total
> household income on food…Some of them will tumble over the edge of
> subsistence into outright starvation, and many more will die from a multitude of
> hunger- related diseases." (Runge and Senauer 2007, April 25:FP19).

One article did discuss food security from a Canadian perspective by highlighting the

government's role, particularly in Aboriginal communities, in providing policies and practices to

counter rising obesity rates in Canadian children. "There is so much poverty among First Nation

and Inuit people that many cannot afford nutritious food, especially in remote northern

communities…[and] children in poor families [are] being fed Kraft Dinner instead of going to bed hungry" (O'Neill 2007, March 28:A22). The article did highlight that contributors to the governmental report recognized the complexity between poverty and health, but solutions were framed in terms of creating a sustainable and safe supply of quality food by banning trans fats and using a mandatory, simplified, standardized food labelling system. These policies give the appearance of governmental participation in the solutions. In reality the primary focus is one of regulating choice rather than addressing the determinants of child poverty; those of which parallel the social determinants of health.

The remaining four social determinant themes presented in the sample received limited coverage, 2 articles each. The articles were themed around Aboriginal status, physical environment, early life and social capital; and all presented some discussion around the health and income relationship.

Aboriginal health

Aboriginal health was a theme in which particular attention was paid to the socio-political conditions by addressing the impact of social disparities on health. The two articles centred on the National Day of Action, a support rally calling for an end to First Nations poverty. Both articles located responsibility for social issues within the governmental policy framework; however the call to action in the two articles was quite different -- one for consensus and one for confrontation. Despite the incongruence, the arguments for both viewpoints are supported by similar observations; that is there is interconnectedness between the social determinants of health and health outcomes, particularly in terms poverty.

> We want the basics: a good education, quality health care, a shot at a job to support ourselves and our families. (Fontaine 2007, June 22:A17).

I'm absolutely sick and tired of having our kids committing suicide, or drinking polluted water. I'm sick and tired of the overcrowding, the poverty, the sadness." (Alphonso 2007, June 20:A4).

While both articles highlighted the role of government in this health-income relationship, the pathways to the desired governmental recognition were quite different. One article advocated a collaborative spirit to action and sought support from society as a whole, by appealing to Canadian values.

Canadians wouldn't stand for it if they knew. It's this country's dirty little secret. Poverty among Canada's first nations peoples rivals Third World conditions…We want to issue a call to all Canadians to support us. Governments may not listen to us: We have no power, no money, and few votes - nothing they need. But they will listen if the rest of the country stands with us... Take a stand. Governments are betting you don't care about us. I'm betting you do. (Fontaine 2007, June 22:A17).

The other article focused on resolutions at the level of the Aboriginal community where a Mohawk activist and his "...tight-knit band of supporters..." (Alphonso 2007, June 20:A4) actively protested and participated in criminal activity in order to move their agenda forward.

Healthy child development

The Public Health Agency of Canada (2004) identifies child health as the foundation for adult health. This life-course perspective examines the accumulated effects of social and economic conditions throughout the lifespan (Raphael 2007:248). This discourse was framed in two of the healthy child development-themed articles; one specifically addressing the impact of environmental conditions on children and the other was an international comparison of various social factors, including poverty, on child health. The responsibility for the relationship between health and income within the child development discourse was directed towards governmental policy initiatives. In the article calling for comprehensive regulations regarding the lead content of drinking water and its impact on child health, the majority of the recommendations were

focused on governmental action, however, the foremost recommendation focused on behaviour modification.

> Helping low-income families with young children, and pregnant women living in older neighbourhoods, pay for water filters (Smith 2007, June 8:A11).

According to the Canadian Institute of Child Health [CICH](1997:2), lead exposure in children is particularly concerning because youth absorb 50 – 90% of this environmental toxin. The exposure is damaging to the brain and nervous system of both the fetus and the young child and impacts intelligence levels, neuro-behavioural function and hearing (CIHI, 1997:31); these latent effects have lifelong health consequences (Raphael 2007:249). Smith's (2007, June 8:A11) article recognizes an aspect of the social context of this issue but neglects to contextualize the relationship. Assisting low-income families to pay for filters fails to locate the health-income relationship within a context of inadequate housing; where low-income housing tends to be older and poorly maintained (CIHI 1997:2). This particular risk discourse may be viewed as external to the individual and as such the recommended individualized solution would be in conflict. As noted by Lupton (1993:443), "[t]he discourse of risk ostensibly gives people the choice, but the rhetoric in which the choice is couched leaves no room for maneuver." The reality is that for the low-income family there is no *right* choice; they either use limited resources to purchase subsidized filters or to purchase other necessities of life.

The second health child development article discussed the indicators of child health and Canada's international ranking. The article was a call for "...Canada to adopt a child health charter and to appoint an independent child and youth commissioner." (Picard 2007, April 27:A4). The discussion of Canada's poor ranking was positioned to have long lasting effects.

> "We are producing a generation of children that is unhealthy, unhappy, have poor relationships, engage in risky behaviours and have low expectations...that bodes

poorly for them as adults, and the price will be paid in the health-care system"
(Picard 2007, April 27:A4).

Canada's ranking of child health indicators was listed in the article and it was interesting

that biomedical measurements were listed first (infant mortality, child mortality, youth suicide

and obesity) and child poverty and child well-being indicators were positioned last on the list.

There was no discussion of how poverty can be the force that drives these other indicators.

Rather, placing them in this order suggests a relative importance that has limited foundation.

Physical environment

In this sample, the health income relationship was discussed in the context of the physical

environment. In the two articles, the responsibility for the issues was directed at the

governmental level, more than likely because the conditions were considered external risks. It

was reported that existing inter-country policies with, and intra-country policies within,

developing countries impact health at the population level. For example, one article highlights

that Canadian policy supporting the export of asbestos to developing countries contributes to the

90,000 to 100,000 people around the world who die annually from asbestos-related conditions,

such as lung cancer, asbestosis, mesothelioma and gastrointestinal cancer (Mittelstaedt 2007,

July 12:A1). In the second article, it is emphasized that China and other "developing" nations

have thus far been excluded from international efforts to reduce greenhouse gas emissions such

as the Kyoto protocol..." and as a result 350, 000 to 400 000 Chinese die prematurely from

outdoor air pollution each year (Spencer 2007, July 4:A1). Both articles focus on the impact of

these relationships on health in less wealthy nations, but there is no discussion of the contribution

of these environmental policies on the population health of wealthy countries.

<u>Social capital</u>

The final social determinants of health theme presented the health-income relationship in terms of social capital. Social capital is a broad term which describes the social relationships within a group or community and the resulting consequences. It is proposed that through these connections there is occasion for improved levels of health and wellbeing (McMurray 2007:97). It has been argued that social capital is a mediating variable in the health-income relationship (Hawe and Shiell 2000:875). The two articles reviewed in this study present the income-health relationship in terms of vertical and horizontal social capital. For example, coverage about a family with conjoined twins highlighted that it was primarily horizontal social capital (family) that assisted them during the continuing medical crisis. Vertical social capital was less prominent with limited support from the church congregation and was framed in the context of different levels of income distribution.

> Vernon is now a haven for skiers in winter and campers, hikers and golfers in summer.....Luxury condos are sprouting along the shores of Okanagan and Kalamalka Lakes. On the main street, cyclists and women pushing pricey strollers congregate for latte and organic muffins at the Bean Scene coffee house. Shiny SUVs with Alberta plates pack mall parking lots.....The Simms family isn't part of this Vernon society (Armstrong 2007, April 25:A9).

In essence, the family could not draw from vertical social capital resources because they did not fit into the society of the rich and as such they were "...a clan so dependent and closely knit that, in a sense, the whole family seems conjoined" (Armstrong 2007, April 25:A9).

The second social capital article covered the research findings about health, wealth and social relationships. This short article discussed horizontal capital as it related to health and income, but did not identify how these relationships manifest themselves.

> Increasing face time with friends and relatives to "most days" feels like getting a $179,000 raise, while talking to neighbours more often is worth the equivalent of

about $79,000 extra per year. "Money buys happiness, but not a lot of it"
(Canwest News Service 2007, June 18:A3).

The health-income relationship within biomedical themed articles.

In this sample of 52 articles discussing some aspect of the health-income relationship, 19

articles were located with a biomedical theme. I categorized the biomedical themes into either

coverage of physical health or mental health and addictions issues. The result was a relatively

equal distribution (Table 3).

Table 3: Health-income articles framed in the biomedical model

Article themes	Number ofArticles
Physical health	10
Mental health and addictions	9

Physical health

The biomedical perspective locates health in the individual material body and as noted

previously is the predominant health discourse. Therefore it was interesting to observe that the

health-income relationship was primarily framed with an acknowledgement that disease

aetiology is impacted by contextual factors such as the political and economic structures. If we

consider media coverage as an extension of public opinion, this observation highlights Raphael's

suggestion (2007:36) that Canadians do recognize the structural arguments of the health and

income relationship. However, in this sample this recognition was mostly evident in stories with

an international focus. For example, in one of the AIDS in Africa series penned by Stephanie

Nolan of *The Globe and Mail* she discusses a friend who contracted AIDS. His life of poverty is

juxtaposed against disease transmission and aetiology.

> But in a country such as South Africa, and so many other African nations where
> there is a generalized epidemic, every fender bender, every broken glass at a
> crowded party, every child with a scraped knee in a sandbox full of friends takes
> on a new and terrible dimension….HIV in Africa is almost always discussed, and

researched, in terms of sexual transmission of the disease, and it is true that these cases make up the vast majority of infections, but it also true that unsafe blood supplies, reuse of unsterilized medical equipment, sharing of razors for traditional scarring or circumcision or prison tattoos, car accidents and violent crime all spread the disease, and there is little solid data on how much these kinds of transmission are accelerating the epidemic (Nolen 2007, April 21:F1).

While physical health issues such as AIDS, syphilis and tuberculosis and physical injuries may have been discussed in the context of the material and social, a behavioural or lifestyle piece was always present. In other words, it may be argued that income and its distribution contributes to health outcomes, but causes or solutions are presented at the individual level.

> Here's a bit of health news that falls into the category of men behaving badly… [human bites] are fairly common in the so-called developed world where there is readily available alcohol and illicit drugs (Taylor 2007, June 22:L1).

> That community has grown dramatically in recent years and has attracted workers from all over the world to jobs that pay well at its massive oil-sands projects…People have a lot more expendable income….there is more exchange of sex for a variety of things…(Harding 2007 March 10:A10).

Instead of highlighting the negative impact of low incomes or living at the lower end of the income spectrum, these articles focus on the negative impact of health from a perspective of higher incomes. In the Taylor (2007, June 22:L1) newspaper article the implication of living in a particular economic and social environment (developed country) affords the population drugs and alcohol, but it is the act of "behaving badly" at the individual level that is the route to the health outcome. A broad reference such as "developed country" says nothing about the complex contextual factors within developed countries that contribute to individual and population based alcohol and drug use rates and the associated health outcomes. In Harding's news article (2007 March 10:A10) it is suggested that the up-swing in the Albertan economy resulted in more disposable income for workers coming from different parts of the world, thus leading to

increased sexuality activity. While Harding attributes economic prosperity to increased sexually

transmitted disease rates, a certain morality becomes attached when discussing these

observations in terms of workers from other countries in absence of factors around social

cohesion, social capital and power imbalances within and without that population.

An analysis of health articles would be incomplete if the topic of obesity was ignored

because obesity is increasingly being framed in the media as an epidemic (Boero 2006:41). One

article in this study discussed obesity by highlighting the high rates of obesity among the "poor

and disenfranchised" and while framed as being a social condition it is described as "contagious"

(Picard 2007, July 26:L6). As such, obesity is positioned as a disease we as a society need to be

cured from, or protected against. Further to this observation, an article on the genetics of obesity

positions a multifactorial explanation of the impact on genetic susceptibility, specifically lifestyle

and behaviours. The article categorizes levels of income in a descriptive comparison of high-

income countries versus low- and middle-income countries and in doing so suggests a moral

hierarchy in terms of will power where the increase in worldwide obesity is "…attribute[d] to

multitudes of people eating too much of the wrong foods and getting too little exercise (Dunham

2007, April 13:A15). What is omitted in this discussion is who in these countries of varying

prosperity becomes obese and why. Additionally, by positioning obesity as contagious or

genetic, with cure as the primary focus, the dialogue fails to truly recognize a social and material

contribution and the resulting health inequalities.

Mental health/addictions

Mental health issues are viewed as a set of psychiatric disorders or health events

associated with psychiatric disorders (Muntaner, Eaton, and Diala 2000:90). For example mood,

anxiety and substance and dependency disorders fall under this categorization as do suicide and

self-harm. Robert Wilton (2003:140) contends that the current position of mental health issues is situated in the biomedical framework without consideration of social dimensions. However, in Caron, Latimer, and Tousignant's (2007:S35) review of the literature it is established that in a lower income population there are links between psychiatric disorders and socio-economic variables.

The causal directionality of this relationship between mental illness and income remains unclear. The social causation hypothesis and the social selection hypothesis help to frame this relationship but neither framework can be viewed as mutually exclusive (Zimmerman and Katon, 2005:1199). In Zimmerman and Katon's article (2005:1199) on depression, they identify that low economic status causes depression (social causation hypothesis) and/or that depression causes low economic status (social selection hypothesis). From a social causation perspective those who are economically disadvantaged would be exposed to more stress thereby exacerbating an existing condition or contributing to a new one, and those stresses are compounded by the inability to addresses these issues due to limited economic resources. From a social selection perspective, mental illness would impact an individual's ability to be productive, to hold down a job, or to achieve educational requirements.

For example in rebutting social causation explanations both *The Globe and Mail* and *The National Post* reported on research findings on the impact of marital dissolution on depression (Anonymous 2007, May 25:A16; Hampson 2007, April 27:L1). It was highlighted that the loss of income experienced through divorce did not impact levels of depression in men. Rather it was the breakup of the marriage that was the actual cause of depression. Through this unifactoral and rather simplistic reporting of the research findings, the message is conveyed that a biomedical model is the most suitable for understanding depression in divorced men. That is, depression in

men post-divorce is explained by psychology alone. It is reported that the study controlled for such things as income and social supports, and upon reviewing the original study the emphasis was to determine "...if marital dissolution is associated with depression, independent of other life changes and factors…" (Rotermann 2007:35). Reporting articles of this nature again frames health in terms of a primary causal link and removes the role of the social factors and circumstances that influence or impact mental illness aetiology. On the other hand, depression was also represented as being caused by circumstance. In a news report about suicide rates in the Canadian North, it was suggested that "[y]ou need to be rich to get away from your problems," (Harding 2007, July 16:A6).

Articles around addiction also represented a health-income relationship. In Western societies addiction is viewed as a disease and it is through the social construction of addiction that we see the weaknesses of a purely biomedical framework for health. In his discussion of the social construction of alcohol dependence over time, Carl May (2001:392) illustrates that the attempts to medicalize addiction have failed to resolve the issue. Competing discourses around addiction locate the disease aetiology at the genetic, psychological or physiological level, however alcohol addiction, as is the case for other addictions, does not have a cure except through self-discipline of the addict (May 2001:392). Medicine has had difficulty elucidating pathways to the disease, however, treatment options, based in a biomedical model, revolve around individual agency and constant self-governance (May 2001:392). To illustrate this perspective, the health-income relationship was framed regardless of high or low income, in terms of self control. "[G]ambling away (Jones 2007, April 27:A5), "recreational activity" (Philp 2007, March 24:F1), and "curbing the problem" (Wente 2007, June 26:A17) were all

terms used to represent addiction in terms of a lack of control at the individual behavioural level rather than the recognition of social conditions impacting addiction outcomes.

The health-income relationship within lifestyle themed articles

The lifestyle approach to health is fundamental to health promotion theory and practice. Despite vagueness around the conceptualization and operationalization of lifestyle, it is the "link" or "target" between individual health risk factors and the maintenance of the populations' health through health promotion and preventative medicine, in the absence of a sociocultural context (Backett and Davison 1995:631). The lifestyle articles in this sample were focused either on specific individual health behaviours such as poor sleep habits, safe sex practices and stress reduction; or there was a focus on prevention or intervention strategy that spoke to health risk of a specific population, for example HPV vaccine for young women, AIDS in South Africa and polio eradication in Afghanistan (Table 4).

Table 4: Health-income articles framed in the lifestyle model

Article themes	Number ofArticles
Health behaviour	4
Prevention or intervention strategy	3

In most of the lifestyle articles, health behaviour and intervention articles framed income as a tool to describe the risk takers, however it is presented in the absence of context. Interestingly, there was one article that discussed risky sexual activity and AIDS where circumstance was contextualized; however the focus of the article was international. This illustrates media awareness that perhaps disease outcomes and the political, social and environmental factors are interrelated but only in developing countries, such as South Africa and

Afghanistan. The predominant lifestyle discourse around health in developed countries such as

Canada does not appear to allow context to be considered.

The agent of responsibility - blame and burden

In Regina Lawrence's (2004:57) analysis of changes in obesity framing within media, it

is contended that debates around social issues are often framed around who is to blame.

Lawrence suggests that the framing of issues is categorized along a continuum where there is

individualized blame or burden at one pole and systemic blame or burden at the opposite pole;

placing these frames along a continuum highlights that elements of both an individualized and a

systemic perspective frame can co-exist (Lawrence 2004:57). As outlined previously, I recoded

Table 5: Agent of responsibility - individualized, sytematic or both.

Agent of Responsibility	Article Theme			Total
	Social Determinant of Health	Biomedical	Lifestyle	
Systemic	19	10	1	30
Individualized	4	3	4	11
Combination	3	4	1	8
None mentioned	0	2	1	3

the micro, meso and macro agent of responsibility frames into individualized (micro) or systemic

(meso and macro) frames (Table 5). Overall, the majority of health-income articles focused on a

systemic responsibility or a combination of systemic and individualized responsibility for

income-health relationships. The limited discussion around the agents of responsibility in the

income and health relationship revolved around the family, the community, the elite, social and

familial economies, media, marriage, and the failure of political structures. These agents and the

income-health relationship were positioned as a "collective problem" (Picard 2007, July 26:L6),

"cost to society" (Schnitzler 2007, March 8:A24) and "badge of honour of a civilized country" (Picard 2007, April 27:A4).

It is encouraging that 30 of the 52 articles that discussed some aspect of the health-income relationship approached the debate from a systematic perspective and perhaps this signifies, as Raphael (2007:325) suggests, a shift in the receptiveness of Canadians to the structural influences on health. However, it is necessary to consider my observations in context. My sampling frame was 670 health articles where only 52 articles presented some aspect of the health-income relationship, and furthermore only 30 articles presented a systemic agent of change. Lawrence (2004:69) identifies that similar to the anti-tobacco debate, obesity is slowly being reframed in the media towards environmental causation, but a tension still exists between the individualized frame and the systemic frame. For example, the absolution of individual responsibility for weight defies "cultural norms and common sense" (Lawrence 2004:71). These tensions are also apparent when discussing the social determinants of health where the prevailing societal perspectives around poverty and around health create a similar challenge to the reframing the debate about the impact of income specifically and the social determinants, generally, on health.

The experts – "who says so"?

Opinion makers in health news media, according to Westwood and Westwood (1999:55), are persons to whom comments or opinions can be attributed in terms of the assessment of the credibility of information. In other words, opinion makers, actors or authorities link article themes to health. In my sample of articles, journalists were the primary actors who drew links between income and health in biomedical, lifestyle and social determinant of health themed articles (Appendix F, Table 16). This is similar to the findings of Westwood and Westwood

(1991:60) which noted that journalists were more often the opinion maker in the public health themed articles than medical themed articles; experts did however make a substantial contribution as opinion makers (approximately 40%) in their study. As noted previously, these authors did not clearly identify who were considered experts, but in Commers, Visser, and De Leeuw (2000:325) it was the established authorities (professionals, scientific evidence, governments and non-profit organizations) who were more likely to link social determinant themes to health.

Table 6: Experts vs Non-experts - establishing the health-income relationship

	Experts	Non-experts
Total	**25**	**27**
SDOH themed articles	13	13
Biomedical themed articles	11	8
Lifestyle themed articles	1	6

*SDOH – social determinant of health

Unlike the observations of Commers, Visser, and De Leeuw (2006:325), it was the non-experts who identified the relationship between health and income more frequently in my sample. I must acknowledge the defining an "expert" presents its own challenges due to the tensions around power imbalance in contemporary knowledge production. An in-depth discussion around this discourse is beyond the scope of this thesis, and as such I defined experts as those who have the power to effect change at the policy and research levels. Interestingly, health care professionals and researchers, those who potentially have the resources to significantly impact paradigm shifts around health and thereby influence the public's agenda do not contribute much to the discussion of links between income and health in this print media sample (Table 6).

Summary

In their capacity as agenda setters, Canadian newspapers in this analysis assert that the health-income relationship is of low saliency. This is manifest through low frequency of coverage, article positioning throughout the newspaper and the characteristics of news article structure. When the health-income relationship was acknowledged by Canadian media, it was primarily located within a social determinants of health framework; and the majority of those articles were themed around the access to health care debate. The agenda setting message is one that income and its distribution is a determinant of, or perhaps a barrier to, access to health care, which ultimately impacts health and well-being. By doing so, the media undermine the significant contribution of, and interplay between, the other social determinants of health. Food security, Aboriginal status, early years (healthy child development), physical environmental and social capital are on the public's agenda, albeit to a lesser degree; while many of the other social determinants received no coverage at all. The emphasis on representations of a health care access-income relationship is not surprising because as observed by Hayes and colleagues, health news in Canadian newspapers is overwhelmingly about health care (Hayes et al. 2007:1850). Media representations framed the responsibility and burden of the complex health-income relationship from a systemic perspective where governments, social institutions and communities were key in the recognition and potentially the resolution of health and social inequalities. It was journalists themselves who intimated that a relationship between health and income exists and it raises the question about the absence of other voices, in particular the voices of health researchers and health care professionals. In the final chapter of this thesis I will outline possible explanations as to why Canadian media frames the health-income relationship primarily in the context of the access to health care debate and the resulting challenges and

implications for health policymakers, health researchers, health communicators and the health

consumer in championing the social determinants of health agenda.

Chapter 5 – *Top of mind*: the relative newsworthiness of access to health care coverage

The media play a role in the construction and framing of health, and other researchers have clearly identified that the social determinants of health in disease aetiology are not well represented in popular media. The goal of this study was to examine what media said about the relationship between income and health and whose voices were heard in this dialogue. My first research goal explored whether, in its agenda setting capacity, Canadian media positioned the health-income relationships as one of social relevance. My findings illustrate that in this capacity, *The Globe and Mail* and *The National Post* did not present the relationship between health, income and income distribution as a salient determinant of health. This was manifest through low frequency of coverage, article positioning and news article structure. When the relationship was acknowledged, it was identified in either a biomedical, lifestyle or social determinant of health framework. It was not surprising that the social determinants of health framework was the primary location for the discussion of health and income because the acknowledgement of income is central in the discussion of the social determinants of health. While it is encouraging to find this as the location for dialogue it is important to recognize that within this paradigm responsibilities for health fall to governments and organizations, and as such the political will for change must be present. My second research goal attempted to examine where the burden and responsibility indeed fell. The majority of the articles placed responsibility at the systemic level through the emphasis of the role of government in addressing the health income relationship. While the focus on social responsibilities rather than on individual responsibilities was encouraging, the overall discussion of the relationship between health and income was subsumed primarily under the access to health care debate and discussions of poverty or low income as barriers to access. My final research goal was to

appreciate within a media context who is telling society that a relationship between health and income does or does not exist. The observation that it was media themselves who attempted to acknowledge a relationship between health and income, although primarily located in a discussion of health care access, not only highlights issues around journalistic institutional and professional factors impacting media production, but highlights tensions around current views of health. Both of these constraints challenge policymakers, health researchers, health professions and the lay public efforts to move away from biomedical notions of health. The conclusion of my thesis explores Canada's obsession with health care and examines the role that health leaders must take to advance the social determinants of health agenda. This discussion is framed in terms of the interplay between social discourses on health, political structures and ideologies, and definitions of access to health care.

The general observation that health care service, delivery and management is a central theme in the Canadian health news is supported by Hayes and colleagues (2007:1850) who studied the distribution of health stories in 13 Canadian daily newspapers. However, they found that 6% of the health stories were from a socio-economic environment perspective and less than 0.2% focused on an health-income relationship. It should be noted that their operationalization of a health story was more restrictive than mine (Hayes et al. 2007:1845) and that they used an electronic search method rather than a hand search, both of which have limitations in their own right (Roy, Faulkner, and Finley 2007:7). Within a sub-study they examined stories framed around social influences on health without an explicit reference to health, and found an overlap with the larger sample of 13 articles that spoke to a health-care income relationship.

Based on interviews with Canadian health journalists, Gasher and colleagues posit that the reason there is little news coverage of socio-economic factors impacting health is four-fold. The first three reasons can be explained by the journalistic organizational and professional forces that shape the production of news. First, within a Canadian media context the health beat is structured around the people and the institutions of the health care sector, and as such the resulting coverage is more about health care and illness/healing than about the production of health (Gasher et al. 2007:570). Second, the complex nature of population health research that focuses on multiple upstream determinants does not fit the cause and effect storytelling format of conventional news (Gasher et al. 2007:570). Third, lack of knowledge about the social determinants of health and relevant research was a common theme expressed by Canadian health reporters (Gasher et al. 2007:570).

As I suggested in my introduction, the discursive language of media is influenced by the cultural and ideological views of a society. Gasher et al.'s final rationale for the limited media coverage of the social determinants of health proposes that mainstream Canadian social values are threatened by an approach to health which questions individual responsibility and the value of technology, but focuses on structural influences (2007:571). Rather than viewing low income or poverty as causing poor health, or exploring whether limited access to health care causes poor health, low income can be viewed as a barrier to health care access. This is achieved by framing the relationship between income and health care access in terms of a structural and material interplay in which health is impacted by the unequal distribution of opportunity and resources (Frohlich, Ross, and Richmound 2006:133). In other words, poverty or lack of income is seen as a barrier to health care access. Canada has a publicly and privately funded health system within which there are barriers to access and what is observed is a gradient to access. Explanations for

this gradient are unclear but it appears to be a complex relationship between various factors such as income, cost of services, wait times, cultural differences, language barriers, geographical distance and the availability of resources (Canadian Institute of Health Information, 2007:23). However, this complexity is ignored by Canadian media. The health-income relationship framed in the access to health care debate suggests that the ability to pay for a service or treatment is a factor, while the interplay between the ability to pay and other factors is ignored. In other words, the focus is on what gets you to the health care door, rather than what stops you from going through that door.

To understand why Canadian media position the primary relationship between income and health as one that relates to health care access, one needs to understand the current and historical environment regarding health care access in Canada in a broader context. The Canada Health Act (CHA) is federal legislation entitling all Canadians to health care services based on need rather than wealth and is grounded in five principles: public administration, comprehensiveness, universality, portability and accessibility. It is these tenets that intimately shaped the national medicare program and it is an ideological yardstick by which many Canadians, and the nation as a whole, self-identifies (Raphael 2007:188). On the surface it appears to most Canadians that there is one unified federal health care system, however in reality Canada has ten provincial and three territorial health systems that are mandated to comply with the CHA. In other words, the federal government institutes national standards specifically for insured health services, and the provinces and territories have the constitutional responsibility to administer and delivery said services (Health Canada 2002).

The adoption of a social determinants of health approach is hampered by the ways the provincial and territorial governments on one hand, and the federal government on other hand,

implement policy and programs related to health care services and access. Access to health care issues is shaped by the interplay between social discourses on health, structures of legislation and regulations, political ideology and definitions of access to health care. Like most Western countries, in Canada biomedicine is the predominant frame for understanding health. This discourse frames health in terms of disease aetiology, diagnoses and treatments and the physician-patient relationship; and places the ultimate responsibility for health at the level of the individual. Additionally, in contemporary societies the biomedical model is the foundation for the delivery and organization of health care (Taylor and Field 2003:26). Consequently, public policy and scientific research have been guided by the premise that advances in medical care and research have historically been the primary contributor to decreasing infectious disease mortality rates and increasing life expectancies. It has been argued by many that the contribution from medical and scientific advancements is limited and a myth of medical progress has been created over the 150 year epidemiological transition from infectious disease to chronic disease (Freund, McGuire and Podhurst 2003:20-21). Considering health and its outcomes in a social and material vacuum and focusing on a positivistic understanding of disease processes and the modifications of human behaviours, leads to policy development that fails to contextualize health in relation to the micro, meso and macro levels of society.

Despite longstanding debates around health care reform, fiscal restraint and the noted efforts of federal and provincial governments to view health through a social determinants lens, there continue to be health disparities, including disparities in health care access, among Canadians (Williamson 2001:182). These disparities are influenced by the structure of legislation such as the CHA. For example, health care access is identified in terms of the insured health care services and the other minimally covered extended health care services. In other

words, the CHA specifically addresses medical health services. The mandate of the CHA is to "...protect, promote and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers" (Health Canada 2005). However, it is framed only in terms of medical outcomes, and in turn strengthens the position that health is unifactorial.

In Rosenau's (1994) comparison of political structures and processes impacting health policy in Canada and the United States, a number of political features in Canada can be related to the resistance to a social determinants of health paradigm. The presence of a strong party system, "...tightly interwoven..." political structures and processes, and lack of points of access to decisions-makers by interest groups were all influential in the building of Medicare and continue to protect the system when it is under attack (Rosenau 1994:296). Integral to this discussion is that the health policy process, as with any policy process, is primarily based in the value positions of the political party in power. Because of Canada's position as a liberal political economy, as a society we are inclined to a neo-liberal ideology, where there is emphasis on the individual rather than on the collective; aligning nicely with the biomedical discourse on health. By shifting perspectives, governments would be required to identify health as a social issue and thereby would not be permitted to ignore other social inequities. By acknowledging social inequities, governments would concede that the market is not the most efficient allocator of resources. As a result, the business community, the most important interest group in Canadian politics (Rosenau 1994:303), would lose its influence on public policy.

Exacerbating this debate is the conceptualization and operationalization of health services and health care access. If these definitions are limited to medically necessary services and medically necessarily access, while they fit the current discourses of health within the CHA and

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policy rhetoric, they ignore the complexities in the relationships between the social determinants of health and the political, social, and material factors impacting, health in general, and access specifically. Wilson and Rosenberg (2004:138) argue that the conceptualization of access to health care services can be very diverse, thereby making it difficult for legislation such as the CHA to meet the tenet of reasonable access. Researchers have operationalized access to health care services in terms of needs identification; service delivery; health service structure, geographic and temporal distance to services, actual utilization of services, satisfaction with services; and supply and demand of services (Wilson and Rosenberg 2004:138); but access is most often framed in terms of treatment and preventative focused services offered by health care professionals (Williamson et al. 2006:108).

In the context of an industrialized country, poverty is assessed in terms of the impact of material and social deprivation on the ability of citizens to participate in society's customary activities (Raphael 2007:13). While this thesis did not address poverty per se, within the discussion of the health-income relationship in the context of health care access themed articles it was clear that income acted as a barrier to access. If income and its distribution are framed in a relative perspective, then social resources become an equally important aspect of living.

As noted previously, the relationship between income in general, and poverty specifically, is robust (Raphael 2007:208). The poorest Canadian neighbourhoods have higher rates of infant mortality, poorer child health, lower adult self-reported health scores, and higher rates of chronic and infectious conditions (Frohlich, Ross, and Richmound 2006:134; Raphael 2006:212). Furthermore, marginalized groups who most often live in poverty (Aboriginal people, recent immigrants and visible minorities, the disabled, and women) all experience more health disparities when compared to non-marginalized groups (Phipps 2003:11; Raphael,

2007:217). Despite this robustness, the directionality of the relationship between poverty and health is unclear. The question remains - does poverty cause poor health or does poor health cause poverty? By simplifying the relationship to one of empirical causality, one neglects the significant impact of policy outcomes on the relationship. As noted by Raphael "[p]ublic policy both creates poverty and also provides a means of ameliorating its most egregious aspects" (Raphael 2007:20).

The current discourses around poverty as a reflection of low income in a Canadian context parallel the predominant views of health, thus supporting the prevalent economic, political, and social concerns (Reid and Tom 2006:403). The Moral Underclass discourse (MUD) frames poverty in terms of motivation and morality (Raphael 2007:14); that is it highlights "...individuals' missed chances for self-sufficiency and self-respect..." (Reid and Tom 2006:403). Consequently, public policy is focused on individual behaviours rather than on societal structures. Current public policies aimed at poverty reduction are framed around minimal governmental assistance and the punitive elements are aimed at motivating the individual to return to paid work. This policy approach threatens health and quality of life because the social, political and economic context of poverty is ignored. Policy determines the quality of the social determinants of health because these determinants depend heavily on the welfare state (Raphael and Bryant 2006:237).

The health-income health relationship is compounded further by the biomedical discourse on health with its emphasis on an individual's lack of social responsibility, again in the absence of the broader social context. By viewing poverty, health, and the health-income relationship through a lens of individual responsibility, a tension results when attempting to elucidate the broad pathways and mechanisms which frame the poverty and health relationship in terms of

material and social deprivation. While an individual approach to discussing income and health may be useful in the identification of issues around the relationship, it cannot be used effectively in the discussion of health-income pathways outlined in Chapter Two.

With an understanding of the structure of health care delivery in Canada and its ideological underpinnings in combination with an understanding of how the poverty gets "under the skin" (Raphael 2007:203), one can begin to frame how income is a barrier to health care access. Health Canada (2001:19) categorizes barriers to health care access into four groups: availability of services; financial barriers; non-financial barriers to presentation of need; and equitable quality of care. Low income is related to all of Health Canada's identified barriers. In terms of availability of services, wait times, for example, were perceived to be a significant barrier to health care for both low and high income neighbourhoods (Wellstood, Wilson, and Eyles 2006:126); however, poverty precludes those on waiting lists from paying out-of-pocket for insured treatments. In reference to financial barriers to health care access, Wellstood, Wilson, and Eyles (2006:122) highlight research showing that in publicly-funded health care systems income is not a determinant of health care access. These studies address health care access in terms of insured medical services and therefore fail to address the other financial barriers suggested by Health Canada: explicit financial barriers to insured health services, explicit financial barriers to uninsured services, and other financial costs associated with access (2001:18). In this sense, levels of income impact the ability to assume indirect costs of medical services. For example, childcare costs, the ability to take time away from work and transportation costs were cited as barriers to health care access, in particular for lower income groups (Wellstood, Wilson, and Eyles 2006:127).

Marginalized groups, most often living in poverty, experience non-financial barriers to access such as culture and language. For example, the race-poverty-health relationship has been extensively examined in the Aboriginal context in Canada (Adelson 2005:S58). Additionally, in Raphael's (2007:253) review it is non-white groups and recent immigrants who experience higher rates of poverty. An examination of these concentrated pockets of poverty throughout Canada reveals poorer health outcomes. Not only do disadvantaged groups experience a disproportionate level of poverty and poor health outcomes, they also experience inequitable care barriers through, for example, marginalizing health care practices. Marginalized groups, may experience poor health care encounters due to the power differentials from cultural, and perhaps historical, constructs resulting in relational disengagement between health providers and recipients (Browne 2007:2175).

Canada has a long standing international reputation for recognizing the impact of the social determinants of health; however there continue to be health disparities among different populations and the gap between the rich and the poor continues to widen. If policy rhetoric regarding the population approach to health is to be considered seriously, there must be the political will to contextualize outside of the traditional boundaries of health and to operationalize health care access in terms of the barriers to access. That is, if barriers reduce the likelihood of being assessed and receiving accurate diagnosis, "...then provision of treatment on an equitable basis once a need is identified is insufficient..." (Health Canada 2001:17). Further to policy rhetoric, there has been limited attention focusing on access to a broader range of non-medical health care services and programs that view health through a social determinant of health lens. Food and clothing banks, collective kitchens, shelters, child and family support services, settlement/cultural services, libraries, religious and spiritual services and psychosocial programs

are examples of broader service issues which were deemed, in addition to medical health care services, to be an essential component of health in a study of low income Canadians (Williamson et al. 2006:112).

Because access to health care service as a definable entity is open to multiple interpretations it is therefore inevitable that perceptions of accessibility will be framed by current health discourses (Wilson and Rosenberg 2004:145). For example, if we give a voice only to those who are on surgical wait lists for non-life threatening knee replacements, we ignore the health issues of recent immigrants who are unemployed and without available food, shelter or transportation and who may not have the social and material resources available to access the health care system despite the CHA tenet of accessibility. According to Wilson and Rosenburg (2004:139), Health Canada has begun to contextualize health care access outside of the boundaries of the CHA, through the acknowledgement of the two types of reasonable access. Economic access addresses the indirect and direct costs of health care services with or without financial charge; and physical access addresses geographic parameters of availability. While a step in the right direction, this recognition still frames access within the context of medical health care services; and therein lies the problem. By contextualizing poverty as a health issue generally, or as a determinant of health care specifically, a societal perspective which acknowledges that poverty exists is required.

By highlighting these tensions, it is apparent that the media have aligned themselves with the predominant societal views on health, on income and its distribution, and on the relationship. This was observed in the relatively significant coverage of the health-income relationship within the access to health debate, and as such emphasizes that "...implicit in the obsession with issues

of health care is the notion that this aspect of the welfare state is singularly important to maintaining and improving human health..." (Hayes et al. 2007:1850).

Implications

Reasonable wages, stronger income support programs, a universally accessible early childhood education and childcare system, affordable housing and improved education and training opportunities are strategies aimed at addressing social and health inequalities in Canada (Maund et al. 2007:3; Raphael 2007:307). The notion that health is impacted by social, political and economic factors is often met with political apathy, but health is inextricable from politics. Health is political (1) because much like any other commodity some groups have more than others; (2) because the social determinants of health are impacted by political action or inaction; and (3) because health is a basic human right; and as such health is directly impacted by power imbalances within society (Bambra, Fox, and Scott-Samuel 2005:187). The challenge for those championing the recognition of health as a social issue is first and foremost the identification of the impact of income and other social determinants on health. These strategies require significant political will and public investment but the wheels of bureaucracy turn slowly. From a health and public health perspective, treatment, prevention, screening and risk management have been the primary focus of the strategies to improve health. In Williamson's (2001:178) examination of federal and provincial/territorial health ministries and regions, only one-third had initiatives addressing poverty, and of those initiatives the majority focused on poverty consequences. This downstream focus was limited to the individual level thus these initiatives failed to address poverty awareness, poverty prevention, skill and education enhancement and failed to challenge social and economic conditions (Williamson 2001:178). These findings are not surprising considering the dominant discourses around the health-income relationship.

Health researchers and health care professionals are positioned such that they can have significant influence on public policy and public perceptions around what shapes material and social conditions (Raphael 2007:19); and therefore what impacts health. Furthermore, Canadian health journalists depend considerably on health care workers and published research for story ideas (Gasher et al. 2007:19). However, my findings illustrate that when it comes to articles identifying the relationship between health and income these particular experts are underrepresented. Whether this underrepresentation is a reflection of media production factors or social discourses of health, or some combination of the two, is unclear. What is clear is that the health sector must participate in strategies that aim to reduce social and health inequalities at the individual, community and national level by challenging both the material, social and the discursive frames in which inequality is located. Health stakeholders should not accept the current policy rhetoric that the health sector's mandate is grounded in a population health approach. If health is to be considered a social issue within this framework, then it is imperative that health leaders establish themselves at the forefront of the *intersectorial* collaboration to policy development that focuses on upstream causes of health outcomes and the interrelated factors affecting life course health. This requires not only conceptualization of health as a social issue but also its operationalization. From a health research perspective, there is a primary focus on the empirical measures associated with the health-income relationship, thus highlighting the challenge of finding supportive evidence of measures that reduce socioeconomic health inequalities. This requires a constructionist approach to the broad understanding of the mechanisms and pathways that exist in the iterative relationship between health and low income. As Raphael notes, researchers must increasingly focus on low income and its related issues because in the Canadian context

> "...there is a dearth of research on the definition, measurement, and experience of poverty, its impact on health and quality of life, and public policy options that would reduce the incidence and effects of the poverty experience on health and quality of life." (Raphael 2007:397).

I argue that the concentration of health-income articles focusing on access to health care is a societal reflection of broader issues. It can be viewed as a representation of political and social desire to maintain the status quo in terms of how both health and income inequalities are defined. Policymakers neither can nor will frame low income as a barrier to health care access in Canada because of the restrictive definitions of health found in legislation such as the CHA, and because among health policy researchers unifactorial perspectives around health and around poverty persist. As such, there is minimal focus on addressing the social determinants of health to improve health for all. Barriers to health care access are an expression of the social and health inequities that continue to widen the gap between the rich and the poor in Canadian society.

An understanding of media messaging around issues such as the barriers to health care access in Canada is one tool to assist in the contextualization of the impact of income on health; in the positioning of health as a social issue; and in the elucidation of the interplay between all the social determinants of health. Unfortunately, national newspapers do not provide a forum that is particularly conducive to the elaboration of complex relationships found within and among the social determinants of health. Stories framed around the social determinants are thought to align nicely with policy discussions rather than hard news (Gasher et al. 2007:568). Michael Gasher and colleagues suggest a number of explanations around journalistic barriers to reporting on the social determinants of health including that journalists are not familiar with social determinants of health research (Gasher et al. 2007:568). If research is considered a public good, then society must not only demand investigation into the health-income relationship but must also demand the effective translation of this knowledge. As noted by Mechanic

(1995:1214), the public is amenable to other approaches to health and a health literate public can demand action from policymakers.

In turn, the role of the health researcher and health professional is to communicate the many forms of knowledge highlighting the iterative relationship between the social determinants and health. Currently, Canadian media as represented by *The Globe and Mail* and *The National Post* does little to advance levels of critical health literacy on the social determinants of health (Hayes et al. 2007:1849). An understanding of media representations of the social determinants of health highlights one of the many contexts in which communication around these issues can be improved. To increase the social and political significance of the income, income inequality and health relationship, media can be instrumental in the knowledge translation process to policymakers, health researchers, health professionals, and the lay public; because as Glendon points out '…the way we name things and discuss them shapes our feelings, judgements, choices, and actions, including political action…' (Cited in Robertson 1998:164).

Articles Cited

Alphonso, C. 2007. I'm sick and tired of the poverty, the sadness. *The Globe and Mail*, June 20: A4.

Anonymous. 2007. Married men Live Longer. *The National Post*, May 25: A16.

Armstrong, J. 2007. A tight-knit clan unites in tough times. *The Globe and Mail*, April 25: A9

Campbell, M. 2007. Supreme Court rejects families' autism appeal. *The Globe and Mail*, April 13: A4.

Canwest News Service. 2007. Health, friends worth more to your happiness than your salary. *The National Post*, June 18: A3.

Dunham, W. 2007. Scientists pinpoint obesity gene, but stress it's not the only culprit. *The Globe and Mail*, April 13: A15.

Fontaine, P. 2007. We have to expose the dirty little secret. *The Globe and Mail*, June 22:A17.

Francis, D. 2007. See the Taj Mahal, have some surgery. *The National Post*, May 5: FP2.

Goodspeed, P. 2007. Starvation warning issued for Zimbabwe. *The National Post*, June 8: A16.

Harding, K. 2007. Rise in Alberta syphilis cases shows a down side of boom. *The Globe and Mail*, March 10: A10.

Harding, K. 2007. Nunavut reeling from soaring suicide rate. *The Globe and Mail*, July 16: A6.

Hampson, S. 2007. Breakups may hit men harder. The Globe and Mail, April 27: L1.

Jones, A. 2007. Canadians spent $14.5-billion gambling in 2006, study finds. *The Globe and Mail*, April 27: A5

Mittelstaedt, M. 2007.   Cancer Society calls on Ottawa to change tack and ban. *The Globe and Mail,* July 12: A1.

Nolen, S. 2007. AIDS in Africa. *The Globe and Mail*, April 12: F1.

O'Neill, J. 2007. Obesity shrinking life expectancy. *The National Post*, March 28: A22.

Picard, A. 2007. Autism a lifelong burden, study shows. *The Globe and Mail*, April 3: A13.

Picard, A. 2007. Advocate urges more respect, legal protection for children. *The Globe and Mail,* April 27: A4.

Picard, A. 2007. The obesity epidemic: We're all in this together. *The Globe and Mail,* July 26: L6.

Philp, M. 2007. Alcoholics accelerated. *The Globe and Mail*, March 24:

Priest, L. 2007. Long wait forces cancer patient to buy operation in land he fled. *The Globe and Mail*, January 31: A1.

Reguly, E. 2007. What good is green if the poor go hungry? *The Globe and Mail*, July 20: B6.

Runge, R. and Senauer, L. 2007. Ethanol craze may starve the poor. *The National Post*, April 25: FP19.

Schnitzler, M. 2007. Failure of transplanted organs in U.S. increases with time. *The National Post*, March 8: A24.

Smith, J. 2007. Annual lead tests become law. *The Globe and Mail*, June 8: A11.

Spencer, R. 2007. Pollution kills 750,000 Chinese a year. *The National Post*. July 4: A1.

Taylor , P. 2007. Biting drunks. *The Globe and Mail*, June 2007: L1.

Wente, M. 2007. Not the groovy '60s: Today's cannabis is harder and meaner. *The Globe and Mail*, June 26: A17.

Appendices

Appendix A - Sampling dates for constructed 13 weeks (January 27, 2007 to July 26th 2007)

Saturday	January 27, 2007	Sunday	April 29, 2007
Monday	January 29, 2007	Tuesday	May 01, 2007
Wednesday	January 31, 2007	Thursday	May 03, 2007
Friday	February 02, 2007	Saturday	May 05, 2007
Sunday	February 04, 2007	Monday	May 07, 2007
Tuesday	February 06, 2007	Wednesday	May 09, 2007
Thursday	February 08, 2007	Friday	May 11, 2007
Saturday	February 10, 2007	Sunday	May 13, 2007
Monday	February 12, 2007	Tuesday	May 15, 2007
Wednesday	February 14, 2007	Thursday	May 17, 2007
Friday	February 16, 2007	Saturday	May 19, 2007
Sunday	February 18, 2007	Monday	May 21, 2007
Tuesday	February 20, 2007	Wednesday	May 23, 2007
Thursday	February 22, 2007	Friday	May 25, 2007
Saturday	February 24, 2007	Sunday	May 27, 2007
Monday	February 26, 2007	Tuesday	May 29, 2007
Wednesday	February 28, 2007	Thursday	May 31, 2007
Friday	March 02, 2007	Saturday	June 02, 2007
Sunday	March 04, 2007	Monday	June 04, 2007
Tuesday	March 06, 2007	Wednesday	June 06, 2007
Thursday	March 08, 2007	Friday	June 08, 2007
Saturday	March 10, 2007	Sunday	June 10, 2007
Monday	March 12, 2007	Tuesday	June 12, 2007
Wednesday	March 14, 2007	Thursday	June 14, 2007
Friday	March 16, 2007	Saturday	June 16, 2007
Sunday	March 18, 2007	Monday	June 18, 2007
Tuesday	March 20, 2007	Wednesday	June 20, 2007
Thursday	March 22, 2007	Friday	June 22, 2007
Saturday	March 24, 2007	Sunday	June 24, 2007
Monday	March 26, 2007	Tuesday	June 26, 2007
Wednesday	March 28, 2007	Thursday	June 28, 2007
Friday	March 30, 2007	Saturday	June 30, 2007
Sunday	April 01, 2007	Monday	July 02, 2007
Tuesday	April 03, 2007	Wednesday	July 04, 2007
Thursday	April 05, 2007	Friday	July 06, 2007
Saturday	April 07, 2007	Sunday	July 08, 2007
Monday	April 09, 2007	Tuesday	July 10, 2007
Wednesday	April 11, 2007	Thursday	July 12, 2007
Friday	April 13, 2007	Saturday	July 14, 2007
Sunday	April 15, 2007	Monday	July 16, 2007
Tuesday	April 17, 2007	Wednesday	July 18, 2007
Thursday	April 19, 2007	Friday	July 20, 2007
Saturday	April 21, 2007	Sunday	July 22, 2007
Monday	April 23, 2007	Tuesday	July 24, 2007
Wednesday	April 25, 2007	Thursday	July 26, 2007
Friday	April 27, 2007		

Appendix B: Number of articles in sampling frame and final article count

WEEK	Day[*]	Date	The Globe and Mail (GM)				The National Post (NP)			
			health articles	Step 1	Step 2	FINAL	health articles	Step 1	Step 2	FINAL
1	S	27-Jan-07	3	2	2	0	9	4	1	1
	M	29-Jan-07	4	1	1	0	2	0	0	0
	W	31-Jan-07	5	1	1	1	6	1	0	0
	F	2-Feb-07	10	0	0	0	1	0	0	0
	T	6-Feb-07	5	0	0	0	6	0	0	0
	Th	8-Feb-07	5	3	3	0	5	0	0	0
2	S	10-Feb-07	2	0	0	0	2	0	0	0
	M	12-Feb-07	2	0	0	0	1	0	0	0
	W	14-Feb-07	2	0	0	0	2	0	0	0
	F	16-Feb-07	17	2	2	1	3	0	0	0
	T	20-Feb-07	5	1	1	0	2	0	0	0
	Th	22-Feb-07	10	6	6	2	6	1	1	1
3	S	24-Feb-07	4	2	2	0	2	0	0	0
	M	26-Feb-07	1	0	0	0	1	0	0	0
	W	28-Feb-07	5	0	0	0	3	0	0	0
	F	2-Mar-07	6	1	1	0	3	0	0	0
	T	6-Mar-07	5	0	0	0	5	0	0	0
	Th	8-Mar-07	7	1	0	0	4	1	1	1
4	S	10-Mar-07	4	2	2	1	1	0	0	0
	M	12-Mar-12	4	0	0	0	0	0	0	0
	W	14-Mar-07	3	0	0	0	2	0	0	0
	F	16-Mar-07	5	1	1	0	3	0	0	0
	T	20-Mar-07	4	0	0	0	5	1	1	1
	Th	22-Mar-07	4	2	2	1	5	0	0	0
5	S	24-Mar-07	7	3	3	1	5	1	1	0
	M	26-Mar-07	3	2	2	2	1	0	0	0
	W	28-Mar-07	3	0	0	0	7	1	1	1
	F	30-Mar-07	10	1	1	0	3	1	0	0
	T	3-Apr-07	6	4	4	3	2	1	1	0
	Th	5-Apr-07	3	1	1	0	0	0	0	0
6	S	7-Apr-07	4	3	3	1	4	0	0	0
	M	9-Apr-07	1	1	1	0	1	1	1	0
	W	11-Apr-07	9	2	2	0	6	2	2	0
	F	13-Apr-07	11	2	2	2	2	1	0	0
	T	17-Apr-07	9	2	2	0	5	2	0	0

WEEK	Day*	Date	The Globe and Mail (GM)				The National Post (NP)			
			health articles	Step 1	Step 2	FINAL	health articles	Step 1	Step 2	FINAL
	Th	19-Apr-07	7	3	3	0	3	1	1	0
7	S	21-Apr-07	2	2	2	1	3	2	1	0
	M	23-Apr-07	4	2	2	1	3	2	1	0
	W	25-Apr-07	10	5	1	1	4	1	1	1
	F	27-Apr-07	12	3	3	2	2	1	0	0
	T	1-May-07	5	2	0	0	2	1	0	0
	Th	3-May-07	4	2	2	1	3	2	0	0
8	S	5-May-07	2	1	1	0	2	1	1	1
	M	7-May-07	1	0	0	0	0	0	0	0
	W	9-May-07	5	0	0	0	3	0	0	0
	F	11-May-07	6	1	0	0	0	0	0	0
	T	15-May-07	6	2	0	0	1	1	0	0
	Th	17-May-07	7	4	3	0	2	0	0	0
9	S	19-May-07	7	5	2	1	0	0	0	0
	M	21-May-07	5	2	2	0	no edition			
	W	23-May-07	5	1	1	1	8	2	1	1
	F	25-May-07	7	0	0	0	3	2	1	1
	T	29-May-07	6	2	2	2	3	1	0	0
	Th	31-May-07	7	2	2		2	0	0	0
10	S	2-Jun-07	8	4	1	1	2	0	0	0
	M	4-Jun-07	3	0	0	0	1	0	0	0
	W	6-Jun-07	8	0	0	0	3	1	1	0
	F	8-Jun-07	14	3	1	1	2	1	1	1
	T	12-Jun-07	9	2	1	1	4	1	1	1
	Th	14-Jun-07	5	1	0	0	5	0	0	0
11	S	16-Jun-07	3	1	1	0	0	0	0	0
	M	18-Jun-07	6	0	0	0	5	2	1	0
	W	20-Jun-07	9	2	1	1	1	0	0	0
	F	22-Jun-07	15	3	2	2	0	0	0	0
	T	26-Jun-07	10	3	2	1	1	1	0	0
	Th	28-Jun-07	9	5	2	1	7	0	0	0
12	S	30-Jun-07	1	1	1	1	3	1	0	0
	M	2-Jul-07	3	0	0	0	no edition			
	W	4-Jul-07	7	1	1	0	3	1	1	1
	F	6-Jul-07	8	1	0	0	1	1	0	0

WEEK	Day*	Date	The Globe and Mail (GM)				The National Post (NP)			
			health articles	Step 1	Step 2	FINAL	health articles	Step 1	Step 2	FINAL
	T	10-Jul-07	6	0	0	0	2	1	0	0
	Th	12-Jul-07	3	1	1	1	3	0	0	0
	S	14-Jul-07	5	1	1	0	1	0	0	0
	M	16-Jul-07	3	2	2	1	1	0	0	0
1	W	18-Jul-07	6	2	2	1	2	0	0	0
3	F	20-Jul-07	10	2	2	1	1	0	0	0
	T	24-Jul-07	4	0	0	0	5	0	0	0
	Th	26-Jul-07	5	1	1	1	2	1	1	1
		Total	456	121	93	39	214	46	23	13

Total # of in sampling frame	670
Total # of articles in sample	52
Total # of articles in sample (GM)	39
Total # of articles in sample (NP)	13
Total # of GM newspapers	78
Total # of NP newspapers	76
Total # of newspapers	154

* Day: M = Monday; T = Tuesday; W = Wednesday; Th = Thursday; F = Friday; S = Saturday

Appendix C: Simple Publication Data

Table 7: Relevant articles, count by day.

Day	*The Globe and Mail*	*The National Post*	Total
Saturday	7	2	**9**
Monday	4	1	**5**
Tuesday	7	1	**8**
Wednesday	5	4	**9**
Thursday	7	3	**10**
Friday	9	2	**11**
Total	**39**	**13**	**52**

Table 8: Article count by news section

Section	*The Globe and Mail*	*The National Post*	Total
Health	11	2	**13**
Business	2	2	**4**
National	11	0	**11**
Editorial	5	2	7
Other*	3	0	3
General s	5	6	11
International	1	1	2
Local	1	0	1
total	**39**	**13**	**52**

*Other (describe the sections that these three sections came from)

Appendix D: Story Prominence

Table 9: Placement of health-income articles in the newspaper

Story Placement	*The Globe and Mail*	*The National Post*	Total
Front Page	3	2	5
1st Page of Section	21	6	27
Other	15	5	20
Total	39	13	

Table 10: Word count of health-income articles

Newspaper	< 299 Words	300 – 699 Words	700 - 999 Words	> 1000 Words	Total
The Globe and Mail	7	15	7	10	39
The National Post	2	7	2	2	13
Total	9	22	9	12	52

Table 11: Artwork type of health income articles.

Newspaper	No artwork	Black & White drawing	Black & White photograph	Colour photograph	Colour drawing	Total
The Globe and Mail	19	3	11	5	1	39
The National Post	7	0	4	2	0	13
Total	17	3	15	7	1	

Appendix E: Story Characteristics

Table 12: Story Genre

Newspaper	News			Opinion		Total
	Soft Story	Hard Story	Feature Story	Editorial	Comment	
The Globe and Mail	16	9	7	6	1	39
The National Post	7	2	1	3	0	13
Total	23	11	8	9	1	52

Hard news: +/- 600 words, time references within the previous day or two; journalistic 5 W's; brief and simple.
Soft news: +/_600 words; no time referent; profiles of people, programs or organizations.
Feature: +/-1500 words; in-depth exploration of an issue; less time sensitive topic.
Editorial   Expressed opinion found in the editorial section of the newspaper.
Comment   Expressed opinion not found in an area other than the editorial section of the newspaper.

Table 13: Breadth of Geography coverage in health-income articles

	International	National	provincial/ territorial	Local	United States	Total
The Globe and Mail	15	14	6	3	1	39
The National Post	7	4	0	0	2	13
total	22	18	6	3	3	52

Table 14: Dateline of health income articles

	Dateline present	No Dateline present	total
The Globe and Mail	26	13	39
The National Post	6	7	13
total	32	20	52

Table 15: Health-income article bylines

Newspaper	Staff	News agency	None	Non-staff	total
The Globe and Mail	29	6	3	1	39
The National Post	4	4	4	1	13
total	33	10	7	2	51

Non-staff: special contribution to the newspaper, not from a news agency.

Appendix F: Context Characteristics

Table 16: Experts and the health-income relationship discussion

	SDOH themed articles	Biomedical themed articles	Lifestyle themed articles	
Article author	11	7	4	22
Organization or government agency	8	4	0	12
Researcher	4	4	1	9
Lay person	2	1	2	5
Health care professional	1	3	0	4

*SDOH – social determinant of health

References

Adelson, N. 2005. The embodiment of inequity: health disparities in Aboriginal Canada. *Canadian Journal of Public Health*, 96 (Supplement 2): S45-S61.

Bambra, C., Fox, D., and Scott-Samuel, A. 2005. Toward a politics of health. *Health Promotion International,* 20: 187-93).

Boero, N. 2007. All the news that's fat to print: the American "obesity epidemic" and the media. *Qualitative Sociology,* 30: 41-60

Brakett, K. and Davison, C. 1995. Lifecourse and lifestyle: the social and cultural location of health behaviours. *Social Science and Medicine,* 40: 629-38.

Browne, A. 2007. Clinical encounters between nurses and First Nations women in a Western Canadian Hospital. *Social Science & Medicine*, 64: 2165-176.

Bullock, H.E., Wyche, K.F., & Williams, W.R. 2001. Media images of the poor. *Journal of Social Issues,* 57: 229-43.

Byrman, A. and Teevan, J.J. 2005. *Social research methods (Canadian edition).* Don Mills: Oxford University Press.

Caburnay, C. A., Kreuter, M. W., Luke, D. A., Logan, R. A., Jacobson, H. A., Reddy, V. C., Vempaty, A. R., and Zayed, H. R. 2003. The news on health behaviour: coverage of diet, activity, and tobacco in local newspapers. *Health Education & Behavior*, 30: 709-22.

Canadian Institute for Child Health. 1997. Environmental Hazards: Protecting Children. Retrieved on October 11, 2007 from http://www.cich.ca/PDFFiles/EnvFactSheetsENG.pdf

Canadian Institute of Health Information. 2004a. *Improving the Health of Canadians*.

    Retrieved on February 4, 2007 from

    http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_39_E&cw_topic=39&cw

    _rel=AR_322_E#download

Canadian Institute for Health Information. 2004b. *"You say 'to-may-to(e)' and I say 'to-mah-*

    to(e)'": bridging the communications gap between researchers and policy-makers.

    Retrieved April 15, 2007 from http://dsp-psd.pwgsc.gc.ca/Collection/H118-24-2004E.pdf

Canadian Institute for Health Information. 2007. *Health Care in Canada 2007.* Retrieved on

    September 22, 2007, from http://secure.cihi.ca/cihiweb/products/hcic2007_e.pdf

Canadian Newspaper Association. 2006a. *Canadian Daily Newspaper Ownership*.

    Retrieved October 2, 2006 from http://www.cna-

    acj.ca/Client/CNA/cna.nsf/object/Ownership06/$file/Ownership%20of%20Canad

    ian%20Daily%20Newspapers%20June%202006.pdf

Canadian Newspaper Association. 2006b. *Canadian Circulation Data*.

    Retrieved May 3, 2007 from http://www.cna-

    acj.ca/client/cna/ult.nsf/ccrecords?OpenView&Start=1&count=10

Canadian Press. 2006, September 22. New procedure spares girl open-heart surgery.

    The Globe and Mail. Retrieved November, 25, 2006, from

    http://www.theglobeandmail.com/

Caron, J., Latimer, E., and Tousignant, M. 2007. Predictors of psychological distress in low-

    income populations in Montreal. *Canadian Journal of Public Health, 98*, (Supplement

    1): S35-S44.

Clark, P.C., Feldberg, G. D., and Rochon, P. A. 2002. Representations of women's health

in general medical versus women's health specialty journals: a content analysis. *BMC Women's Health*, 2:5. Retrieved on January 24, 2007 from http:/www.biomedicalcentral.com/1472-6874/2/5.

Clarke, J. N. 1991. Media portrayal of disease from the medical, political economy, and life-style perspective. *Qualitative Health Research,* 1: 287-308.

Clarke, J.N., Arnold, S., Everst, M., and Whitfield, K. 2007. The paradoxical reliance on allopathic medicine and positivist science among skeptical audiences. *Social Science & Medicine,* 64: 164-73.

Collins, P.A., Abelson, J., Pyman, H., and Lavis, J. N. 2006. Are we expecting too much from the print media? An analysis of newspaper coverage of the 2002 Canadian healthcare reform debate. *Social Science & Medicine,* 63: 89-102.

Commers, M.J. Visser, G., and De Leeuw, E. 2000. Representations of preconditions for and determinants of health in the Dutch press. *Health Promotion International,* 15: 321-32.

Commission of the Future of Health Care in Canada. 2002. *Building on values: the future of health care in Canada.* Ottawa: The Commission (The Romanow Commission).

Cutler, D. and Miller, G. 2005. The role of public health improvements in health advances: The twentieth-century United States. *Demography,* 42, 1-22

Duncan, G.J., Daly, M.C., McDonough, P., and Williams, D.R. 2002. Optimal Indicators of Socioeconomic Status for Health Research. *American Journal of Public Health,* 92: 1151–157.

Einsiedel, E.F. 1992. Framing science and technology in the Canadian press. *Public Understanding of Science,* 1: 89-101.

Finer, D., Tomson, G., and Björkman, N. 1997. Ally, advocate, analyst, agenda-setter?

>Positions and perceptions of Swedish medical journalists. *Patient Education and*

>*Counseling,* 30: 71-81.

Fox, D.M. 2006. The determinants of policy for population health. *Health Economics, Policy*

>*and Law*, 1: 395-407.

Freeman, H.P. 2004. Poverty, culture, and social injustices: determinants of cancer

>disparities. *CA: A Cancer Journal for Clinicians*, 24: 72-7.

Freund, P.E., McGuire, M., and Podhurst, L.S. (eds). 2003. Who becomes sick, injured or dies?

>In *Health, Illness and the Social Body: A Critical Sociology. 4th Ed.* Upper Saddle

>River: Prentice-Hall.

Frohlich, K.L., Ross, N. and Richmound, C. 2006. Health disparities in Canada today: some

>evidence and a theoretical framework. *Health Policy,* 79: 132-43.

Gasher, M., Hayes, M., Ross, I., and Dunn., J. 2007. Spreading the news: social determinants

>of health reportage in Canadian daily newspapers. *Canadian Journal of Communication,*

>32: 557-74.

Glouberman, S. and Millar, J. 2003. Evolution of the determinants of health, health policy, and

>health information systems in Canada. *American Journal of Public Health,* 93: 388-92

Government of Ontario. 2007. *Minstry of Health Promotion. Our mission, our principles, and*

>*our approach.* Retrieved on April 25, 2007 from

>http://www.mhp.gov.on.ca/english/strategicframework/mission.asp

Hansen, A. 1994. Journalistic practices and science reporting in the British press.

>*Public Understanding of Science*, 3: 111-34.

Hawe, P. and Shiell, A. 2000. Social capital and health promotion: a review. *Social Science*

and Medicine, 51: 871-85.

Hayes, M., Ross, I. E., Gasher, M., Gutstein, D., Dunn, J. R. and Hackett, R. A. 2007. Telling
    stories: news media, health literacy and public policy in Canada. *Social Science &*
    Medicine, 64: 1842-852.

Health Canada. 1994. *Towards a Common Understanding: Clarifying the Core Concepts of*
    Population Health. A Discussion Paper Cat. No. H39-391/1996E ISBN 0-662-25122-9.
    Retrieved on November 10, 2006 from http://www.phac-aspc.gc.ca/ph-
    sp/phdd/docs/common/index.html.

Health Canada. 2001. *Certain Circumstances: issues in equity and responsiveness in access to*
    health care in Canada. Retrieved on September 14, 2007 from http://hc-sc.gc.ca/hcs-
    sss/alt_formats/hpb-dgps/pdf/pubs/2001-certain-equit-acces/2001-certain-equit-
    acces_e.pdf

Health Canada. 2002. *Canada health act: overview.* Retrieved on November 11, 2007 from
    http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/2002/2002_care-soinsbk4_e.html

Health Canada. 2005. Canada health act: overview. Retrieved on November 23, 2007 from
    http://www.hc-sc.gc.ca/hcs-sss/medi-assur/overview-apercu/index_e.html

Hertzman, C. 1999. The biological embedding of early experience and its effects on health in
    adulthood. *Annals of the New York Academy of Sciences,* 896: 85-95.

Higgins, J. W., Naylor, P. J., Berry, T., O'Conner, B., and McLean, D. 2006. The
    health buck stops where? Thematic framing of health discourse to understand the
    context of CVD prevention. *Journal of Health Communication,* 11: 343-58.

Hodgetts, D., Bolam, B., and Stephans, C. 2005. Mediation and the construction of
    contemporary understandings of health and lifestyle. *Journal of Health Psychology,* 10:

123-36.

Hsieh, H., and Shannon, S. E. 2005. Three approaches to qualitative content analysis.

    Qualitative Health Research, 15: 1277-288.

Janzen, B. L., Green, K., and Muhajarine, N. 2006. The health of single fathers:

    demographic, economic and social correlates. *Canadian Journal of Public Health*

    97: 440-44.

Johnson, C.K. and Marchione, M. 2006, November 13. Carnivorous women at greatest

    risk of breast cancer. *The Globe and Mail*. Retrieved November, 25, 2006, from

    http://www.theglobeandmail.com/

Krieger, N., Williams, D.R., and Moss, N. 1997. Measuring social class in US public health

    research: concepts, methodologies, and guidelines. *Annual Review of Public Health,* 18*:*

    341-78.

Larsson, A., Oxman, A.D., Carling, C., and Herrin, J. 2003. Medical messages in the

    media – barriers and solutions to improving medical journalism. *Health*

    Expectations, 6: 323-31.

Lawrence, R. G. 2004. Framing obesity: the evolution of news discourse on a public health

    issue. *The Harvard International Journal of Press/Politics,* 9: 56-75.

Lemstra, M., Neudorf, C., and Opondo, J. 2006. Health disparity by neighbourhood

    income. *Canadian Journal of Public Health,* 97: 435-49.

Lynch, J., Smith, G. D., Harper, S., Hillemeier, M., Ross, N., Kaplan, G. A., and Wolfson,

    M. 2004. Is income inequality a determinant of population health? Part 1. A

    systematic review. *The Milbank Quarterly,* 82: 5-99.

Lyons, A. C. 2000. Examining media representations: benefits for health psychology.

Journal of Health Psychology, 5: 349-58.

Lupton, D. 1993. Risk as moral danger: the social and political functions of risk discourse in

public health. *International Journal of Health Services,* 23: 425-35.

Lupton, D. 1995. *The imperative of health*. London: Sage Publications.

Macnamara, J. 2006. *Media content analysis: uses, benefits and best practices*. Sydney:

Media Monitor. Retrieved on January 6, 2008 from

http://www.mediamonitors.com.au/documents/Media%20Content%20Analysis%20Resea

rch%20Paper.pdf

Maund, J., Blackstock, S., deGroot –Maggetti, G., Farrell, S., and Ablett, E. 2007 *A poverty*

reduction strategy for Ontario. Ontario Campaign 2000 discussion paper. Campaign

2000. Retrieved on November 26, 2007 from

http://www.campaign2000.ca/on/pdf/OntarioPovertyReductionStrategy.pdf

Maxwell, J. A. 2005. *Qualitative research design: An interactive approach*. (2nd ed).

Thousand Oaks: Sage Publications.

McMurray, A. 2007. *Community health and wellness: A socio-ecological approach*.

(3rd ed). Marrickville: Elsevier.

Mechanic, D. 1995. Sociological dimensions of illness and behavior. *Social Science and*

Medicine, 41: 1207-216.

Media Awareness Network. 2008. *Writing a news story*. Retrieved on July 27, 2007 from

http://www.media-awareness.ca/english/resources/special_initiatives/toolkit_resources/

tipsheets/writing_news_stors.cfm.

Mercy, J.A., Rosenberg, M.L., Powell, K.F., Broone, C.V., and Roper, W.L. 1993. Public

health policy for preventing violence. *Health Affairs,* 12: 7-26.

Moss, N. 2000. Socioeconomic disparities in health in the US: an agenda for action.

    Social Science & Medicine, 51, 1627-638.

Muennig, P., Franks, P., Jia, H., Lubetkin, E., and Gold, M. R. 2005. The income-

    associated burden of disease in the United States. *Social Science & Medicine,* 61,

    2018–26.

Muntaner, C., Eaton, W.W. and Diala, C.C. 2000. Social inequalities in mental health: a review

    of concepts and underlying assumptions. *Health,* 4: 89-113.

Oxman, A.D., Guyatt, G.H., Cook, D.J., Jaeschke, R., Heddle, N. and Keller, J. 1993. An

    index of scientific quality for health reports in the lay press. *Journal of Clinical*

    Epidemiology, 46: 987–1001.

Paalman, M. 1997. How to do (or not to do)…media analysis for policy making.

    Health Policy and Planning, 12: 86-91.

Phipps, S. 2003. *The impact of poverty on health*. Retrieved on February, 12, 2007

    from http://dsp-psd.communication.gc.ca/Collection/H118-11-2003-1E.pdf

Public Health Agency of Canada. 2002a. *Implementing the population health approach*.

    Retrieved April 22, 2007 from http://www.phac-aspc.gc.ca/ph-

    sp/phdd/implement/index.html

Public Health Agency of Canada. 2002b. *What is the population health approach*. Retrieved

    April 24, 2007 from http://www.phac-aspc.gc.ca/ph-sp/phdd/approach/index.html#What

Public Health Agency of Canda. 2004. *What determines health?* Retrieved October 11, 2007

    from http://www.phac-aspc.gc.ca/ph-

    sp/phdd/determinants/determinants.html#healthychild

Raphael, D. 2003. Addressing the social determinants of health in Canada: bridging the gap

between research findings and public policy. *Policy Options*, March: 35-40.

Raphael, D. 2006. Social determinants of health: present status, unanswered questions, and future directions. *International Journal of Health Services,* 36: 651-77.

Raphael, D. 2007. *Poverty and policy in Canada: Implications for health and quality of life.* Toronto: Canadian Scholars' Press Inc.

Raphael, D., and Bryant, T. 2006. Maintaining population health in a period of welfare state decline: political economy as the missing dimension in health promotion theory and practice. *Promotion & Education*, 13: 236-42.

Raphael, D., Byrant, T., and Curry-Stevens, A. 2004. Toronto charter outlines future health policy directions for Canada and elsewhere. *Health Promotion International,* 19: 269-73.

Raphael, D., Coleman, R., Labonte, R., MacDonald, J., Torgeson, R., and Hayward, K. 2003. Researching income and income distribution as a determinant of health in Canada: gaps between theoretical knowledge, research practice, and policy implementation. York University. Retrieved February 4, 2007 from http://quartz.atkinson.yorku.ca/QuickPlace/draphael/Main.nsf/h_Library/8B76BC E8BEC72C6085256D09004E9361/?OpenDocument

Raphael, D., Labonte, R., Colman, R., Hayward, K., Torgerson, R., and Macdonald, J. 2006. Income and health in Canada. *Canadian Journal of Public Health,* 97: S16-S23.

Raphael, D., Macdonald, J., Colman, R., Labonte, R., Hayward, K., and Torgerson, R. 2005. Researching income and income distribution as determinants of health in Canada: gaps between theoretical knowledge, research, practice, and policy

implementations. *Health Policy,* 72*:* 217-32.

Reid, C. and Tom, A. 2006. Poor women's discourses of legitimacy, poverty and health.
    Gender & Society, 20: 402-21.

Renaud, L., Bouchard, C., Caron-Bouchard, M., Dube, L., Maisonneuve, D., and Mongeau, L.
    2006.   A model of mechanisms underlying the influence of media on health behaviour
    norms. *Canadian Journal of Public Health,* 97: 149-52.

Robertson, A. 1998. Shifting discourses on health in Canada: from health promotion
    to population health. *Health Promotion International,* 13: 155-66.

Rosenau, P. V. 1994. Impact of political structures and informal political process on health
    policy: comparison of the United States and Canada. *Policy Studies Review,* 13: 293-
    314.

Ross, N. A. 2004. *What Have We Learned Studying Income Inequality and Population Health?*
    Retrieved December, 30, 2006 from
    http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_1172_E&cw_topic=1172.

Rotermann, M. 2007. Marital breakdown and subsequent depression. *Health Reports,* 18: 33-
    44.

Roy, S. C. 2004. *Fifty-two easy steps to great health: representations of health in English-
    Canadian women's magazines*. Unpublished Doctoral Dissertation, University of
    Toronto. Retrieved September 26, 2006 from
    http://acunningplan.typepad.com/andsheknitstoo/files/phd_dissertation_as_pdf.pdf.

Roy, S. C., Faulkner, G., and Finlay, S. 2007. Hard or soft searching? Electronic database
    versus hand searching in media research [28 paragraphs]. *Forum Qualitative
    Sozialforschung / Forum: Qualitative Social Research,* 8: Art. 20. Retrieved on April

30, 2007 from http://www.qualitative-research.net/fqs-texte/3-07/07-3-20-e.htm.

Rubin, A. and Babbie, E. 2005. *Research methods for social work. (5th Ed).* Belmont:

Brooks/Cole – Thomson Learning.

Saari, M., Gibson, G., and Osler, A. 1998. Endangered species: science writers in the

Canadian press. *Public Understanding of Science,* 7: 61-81.

Sanmartin,C., Berthelot, J., Ng, E., Murphy,K. et al. 2006. Comparing health and health care

use in Canada and the United States. *Health Affairs,* 25: 1133-142.

Seale, C. 2003. Health and the media: an overview. *Sociology of Health and Illness,* 25*:* 513-

531.

Shaw, C. 2003. *Public Health and Preventative Medicine in Canada (5th Ed.).* TorontoON:

Elsevier Canada.

Shoemaker, P.J, Eichholz, M., Kim, E., and Wrigley, B. 2001. Individual and routine

forces in gatekeeping. *Journalism and Mass Communication Quarterly,* 78: 233-46.

Siegrist, J. and Marmot, M. 2004. Health inequalities and the psychosocial environment

– two scientific challenges. *Social Science & Medicine,* 58: 1463–473.

Soroka, S.N. 2002. Issue attributes and agenda-setting, by media, the public, and policymakers

in Canada. *The International Journal of Public Opinion Research*, 14: 264-85.

Statistics Canada. 2005. *Income inequality and low income in Canada: an international*

perspective. Statistics Canada Catalogue no. 11F0019MIE — No. 240. Retrieved

December 30, 2006 from

http://www.statcan.ca/english/research/11F0019MIE/11F0019MIE2005240.pdf

Statistics Canada. 2006. Revisiting wealth inequalities. *Perspectives on Labour and*

Income, 7: *5-16* . Retrieved February 12, 2007 from

http://www.statcan.ca/english/freepub/75-001-XIE/75-001- XIE2006112.pdf

Taylor, S. and Field, D. 2003. *The Sociology of Health and Illness, 4th Edition*. Oxford: Blackwell Publishing.

Wellstood, K., Wilson, K., and Eyles, J. 2006. 'Reasonable access" to primary care: accessing the role of individual and system characteristics. *Health & Place,* 12: 121-30.

Westwood, B. and Westwood, G. 1999. Assessment of newspaper reporting of public health and the medical model: a methodological case study. *Health Promotion International*, 14: 53-64.

Wethington, E. 2005. An overview of the life course perspective: implications for health and nutrition. *Journal of Nutrition Education and Behavior,* 37: 115-20.

Williamson, D. L. 2001. The role of the health sector in addressing poverty. *Canadian Journal of Public Health,* 92: 178-83.

Williamson, D. L., Stewart, M. J., Hayward, K., Letourneau, N., Makwarimba, E. Masuda, J., Raine, K., Reutter, L., Rootman, I., and Wilson, D. 2006. Low-income Canadians' Experiences with health-related services: implications for health care reform. *Health Policy,* 76: 106-21.˜

Wilson, K. and Rosenberg, M. W. 2004. Accessibilty and the Canadian health care system: squaring perceptions and realities. *Health Policy,* 67: 137-48.

Wilton, R.D. 2003. Poverty and mental health: a qualitative study of residential care facilities. *Community Mental Health Journal,* 39: 139-56.

Winsten, J.A. 1985. Science and the media: the boundaries of truth. *Health Affairs,* Spring: 5-23.

World Health Organization [WHO]. 2002. *World report on violence and health:*

summary. Retrieved August 25, 2007 from

http://www.who.int/violence_injury_prevention/violence/world_report/en/summary_en

.pdf

World Health Organization [WHO]. 2006a. *Levelling up (part 2): a discussion paper on*

European strategies for tackling social inequities in health. Retrieved February 9,

2007 from http://www.who.int/social_determinants/resources/en/index.html

World Health Organization [WHO]. 2006b. *Actions on the social determinants of health:*

learning from previous experiences. Retrieved April 20, 2007 from

http://www.who.int/social_determinants/resources/action_sd.pdf

World Health Organization [WHO]. 2007. *Frequently asked questions*. Retrieved on April

24, 2007 from http://www.who.int/suggestions/faq/en/index.html

Zarcadoolas, C., Pleasant, A., and Greer, D.S. 2005. Understanding health literacy: an

expanded model. *Health Promotion International,* 20: 195-203.

Zimmerman, F. J, and Katon, W. 2005. Socioeconomic status, depression disparities and

financial strain: what lies behind the income-depression relationship? *Health*

Economics, 14: 1197-215.