

HEALTH LITERACY: CONCEPT, MEASUREMENT AND PRACTICE

Three Symposia at the International Union for Health Promotion and Education Global Conference

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FOREWORD

When the two of us along with Don Nutbeam submitted an abstract to the Scientific Committee for the 18th IUHPE Global Conference on Health Promotion and Health Education in Melbourne, we fully expected that it would be accepted. Needless to say, we were surprised when it was categorically rejected. Thus, when we proposed a series of three symposia for this 19th Global Conference three years later, we were again surprised, but delighted, that all three were accepted. In retrospect, perhaps we should not have been as surprised this time to have all three accepted, as the concept of health literacy in health promotion has developed greatly during the intervening three years, partly as a result of the enthusiasm and hard work of many of the presenters in the three symposia which are described in this report. We hope that this report will help to further the momentum and collaboration required to further develop the concept, measurement and practice of health literacy in health promotion so that even more sessions will be held at the next IUHPE Global Conference in Hong Kong in 2010. We look forward to seeing you there and learning about what you have accomplished in the next three years.

We would like to thank Gen Creighton for taking careful notes and preparing the first draft of this report and Deborah Begoray for acting as recorder in our networking session. We would also like to thank all of the presenters and participants in the symposia who helped to make it a lively, stimulating, enriching and engaging series. Finally, we would like to thank the Canadian Council on Learning Health and Learning Centre coordinated by the University of Victoria for financial support for the symposia.

Irving Rootman

Diane Levin- Zamir

August, 2007

HEALTH LITERACY: LEARNINGS TO LEAD US FORWARD

In June 2007, at the International Union for Health Promotion and Education Conference in Vancouver British Columbia, the Canadian Council on Learning Health and Learning Knowledge Centre sponsored three symposia that brought together international experts on health literacy. These symposia explored in great depth the concept of contemporary health literacy, issues concerned with measuring health literacy and health literacy as it is applied to practice. The following is an overview of what transpired at this dialogue. It attempts to capture the key points made by the presenters as well as some of the richness of the discussion that took place among attendees, many of whom were 'health-literacy experts' in their own right. In addition, it briefly summarizes a networking session on health literacy held during the course of the Conference.

Symposium 1 – Through the Looking Glass: The Art and Science of Health Literacy

In this first symposium, Rima Rudd and Don Nutbeam, moderated by Irv Rootman, wrestled with a conceptual framework for health literacy. Both presenters articulated the need to approach health literacy in a way that goes beyond a medical model. Health literacy needs to be seen as a pathway not only to improving the health of individuals but also to transforming the structures that perpetuate marginalization.

Don Nutbeam

Dr. Nutbeam began by saying that there is, currently, an understanding within the medical community of the connection between literacy and health. There are observable effects of low literacy on a compromised ability to manage chronic diseases, engage in preventive health practices, and access health-care systems.

The US Institute of Medicine Committee on Health Literacy accepted a definition that describes health literacy as: *"The degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions"*. To be considered health literate, therefore, the individual must have both skills and an ability to function within the health-care system. Nutbeam made the point that the use of the word 'capacity' builds on the positive notion that health literacy is supple and can be improved with intervention. He argued, however, that this definition focuses too much on the capabilities of the individual and does not pay sufficient attention to the social context.

Nutbeam proposed a more critical approach to health literacy that reaches beyond an ability to read pamphlets and make doctors' appointments. Critical health literacy draws on Frioren notions of using

adult education, not only as a way to function in the dominant society, but to become aware of the ways in which the system perpetuates marginalization. Within this form of education the stated needs of the learner are centralized. This is in contrast to more traditional model of education that relies on the imposition of a curriculum based on what the health system or the educator considers to be knowledge deficits. Critical health literacy is a competency that includes individual empowerment to take control over one's personal health and care, and community empowerment to advocate for health systems that are more just and accessible to all.

"We should be looking with new and critical eyes at what we are measuring when we develop instruments for evaluating whether or not an individual is 'health literate'." We have developed measures to determine an individual's level of functional health literacy but not their critical health literacy.

Nutbeam argued that one could approach the task of developing broader measures for health literacy by studying how health literacy can be improved outside of health-care settings. These other settings might include schools, adult education centres and E-learning.

Rima Rudd

Dr. Rudd was in agreement with Nutbeam's concern for the lack of attention paid to *context* within traditional notions of health literacy. There is an acknowledgement of the interaction between the capacity of an individual and the requirements of the health-care sector but there has been too much blame placed on the individual for being insufficiently health literate and not enough energy spent holding the system accountable for its demands on people.

She emphasized that it is of primary importance to consider the ways that the system is responsible for creating an environment that enables people to be successful. This requires attention to the ways in which the health-care system is not adequately sensitive or responsive to issues of race, class and culture. It also mandates a reflection on the ways in which, not only literacy skills, but income and social status impact on the individual's ability to access health environments.

There is a profound link between health outcomes and education. Rudd pointed out that the current K to 12 education system within the United States does not prepare people to deal with the demands of the health-care system. The specialized language within the culture of medicine, which health-care practitioners are so deeply immersed in, is not accessible to the average person who has not attended medical school. She gave the example of a prescription that gives the instruction to 'take four pills per day by mouth'. Without the knowledge of titration there would be no basis for an individual to understand that pills should be taken at spaced out intervals.

Rudd demonstrated, through a deconstruction of various health activities, the number of sophisticated literacy and numeracy skills involved in taking on health-related tasks. She recommended that the health-care sector recalibrate health communication strategies to delineate tasks, articulate assumptions and match tools with tasks. Health-care environments need to be adjusted to develop user-centered processes, restructure their settings and change policies to ones that have greater accessibility.

Health-care practitioners should be asking the question: “Am I clear?” Rather than “Do you understand?” thus articulating responsibility of the system to transform itself. The emphasis must be shifted from portraits of adults with low literacy skills to a closer examination of the interplay of social factors.

Hans Saan

Ilona Kickbusch was originally scheduled to present, however, due to another engagement she was unable to do so. In her place, Hans Saan, who has collaborated with Dr. Kickbusch on health literacy, agreed to comment briefly on the topic of the symposium.

He underscored the fact that health literacy is an equity issue. We should not forget the political dimension of rectifying the injustice in the unequal division of resources. If we do not focus on bridging the gap between rich and poor, those who have access to resources and those who do not, we risk widening it.

There has been much progress made gaining status for the cause of health literacy. While health-care professionals have been desperate to help people understand, it has been slow to come to the top of the political agenda. For a long time health literacy and research regarding health literacy were ignored- reports were dismissed and requests for funding were ignored. The good news is that health literacy is now at the top of health promotion’s agenda, both in Switzerland and in other parts of Europe. The possibilities for renewal and change are great!

Discussion

If the job of educating around the issue of health literacy should be the responsibility of multiple social service sectors, what should be the role of public health?

Nutbeam spoke about his experience of forming collaboration between public health and adult learning centres. The medical community worked with adult education to modify tools so they could be health oriented, using authentic health-literacy texts to teach literacy and numeracy.

Is the art and the science of health literacy going in different directions?

Rudd and Nutbeam answered that, while they emphasized different ideas in their presentations today, both are in agreement with placing a priority on learner-centred, critical education and social justice as key issues for the health-literacy debate.

We talk about literacy as a determinant of health but not determinants of literacy- how does a high school student graduate from high school without functional literacy?

Rudd noted that students who have not successfully learned to read in grade four may never catch up. Unless we pay attention to access to good education and good schools there will be disparities in literacy as well as opportunities and income. After the 2000 election there were jokes about those who couldn't figure out the ballot, presumably because of a lack of intelligence. The design of the ballot, however, completely violated the rules for construction and use of a chart. The world would be a different place today if those ballots were designed differently.

Nutbeam maintained that one of the primary educational goals is inclusion in schooling. Some countries are achieving participation but the quality is so poor that outcomes for students are limited.

Rudd reiterated that literacy is fundamentally about rights. People in power oppose literacy because people in power do not want disenfranchised people to rise up against the system.

Symposium 2 – What are we measuring and how do we measure it?

The second symposium, moderated by Jim Frankish, focused on the theme of measurement in the field of health literacy. Presenters Jim Frankish, Diane Levin Zamir, Scott Murray and Rima Rudd spoke about the variety of issues encountered when attempting to find a valid and reliable framework for evaluating the health literacy of an individual. While there are new and emerging forms of measurement, the presenters agreed that current methods are limited and more research is needed to increase their effectiveness.

Jim Frankish

Dr. Frankish began by making the point that it is important to be able to measure health literacy in order to understand the degree to which it is malleable. Measuring health literacy helps us to know if it is a problem, where the problem is located and what to do about it. The existing measures of health literacy are currently inadequate.

He argued that a key step in creating a measurement tool is carefully considering the definition of health literacy; making decisions about what goes into a definition and what stays out. “What do we believe to be the ingredients of health literacy?”

The British Columbia Health-Literacy team which includes members from four Universities in British Columbia proposed the following definition: *Health Literacy is the ability to access, understand, appraise and communicate information to engage with the demands of health contexts to promote health across the life course.* They made the decision to exclude “acting” on information as a component of the definition, reflecting the idea that a person can be health literate and still not take appropriate action.

Frankish gave two examples of projects that researchers from the BC team have been involved in that serve to elucidate the way that health literacy can be measured in the lives of people who, traditionally, have had low levels of health literacy. A project with seniors asked the questions: what health information are seniors looking for, where do they find it and what difficulties do they have in understanding it? A project with marginalized youth attempted to discern the degree to which young people have access to health-care systems and information. Data from both studies pointed to the connection between a generally good Canadian system of education and subsequent high levels of health literacy. It also revealed the degree to which the **contexts** (poverty, racism, ageism, etc), that seniors and marginalized youth find themselves in plays a role in ability to accomplish tasks and access services.

Scott Murray

Scott Murray indicated that a measure of Health Literacy was developed using data from the International Adult Literacy and Skills Survey. Preliminary Canadian data using this measure were reported in the Canadian Council on Learning's report on the State of Learning in Canada released in January 2007 and more in-depth analyses are currently being conducted. He noted that while educational attainment was an important predictor, it is not the only factor that should be included in an evaluation of health literacy. Studies also show that health literacy varies considerably among different population sub-groups, demonstrating that 'real world differences' in economic and social locations are important determinants.

The interests of the economy are an important driver of health literacy. It is in the best interests of a nation's economic growth to have workers that are health literate—both because of hours lost do to illness or injury and because of the reduced draw on workers compensation. It is also relevant in the sense that, as the cognitive skill demands of the economy change, so too will appropriate measures of health literacy. It is vital, then that we include an economic component in deciding how health literacy is to be evaluated.

Diane Levin Zamir

Diane Levin Zamir presented research on measuring media-related health literacy, recognizing that mass media has a powerful influence on creating norms and standards regarding health behaviour. Because health messages in the mass media are often hidden and health compromising, she argued that it is important to understand how messages and health information are interpreted, using health-literacy theoretical frameworks.

Her study with Israeli youth, measured the association between media-related health literacy, sources of health information, health empowerment and health behaviour, using a combination of qualitative and quantitative methodologies. The study was conducted in two stages. During the first stage, qualitative research methods were used as youth participated in focus and were then asked to keep diaries to observe instances of health messaging in the popular media over a period of time. The results of this stage were used to develop the research tool for measuring media-related health literacy, consisting of a four-part scale, and based on the Nutbeam model: identification, awareness, critical and action/interaction. She observed that, while the youth enjoyed participating and fully engaged in the research, they were fairly uncritical consumers of the non-salient health messaging, arguing sometimes that, 'it's only entertainment'. The second stage included quantitative research methods and was conducted among 1340 adolescents. The results of the multi-variate data analysis show that mediated and non-mediated health information sources may be a determinant of media-related health literacy, which can be a predictor for health empowerment

and health behaviour. Media-related health literacy as a measure is associated with various social indicators, particularly gender and years of parents' education.

Rima Rudd

Dr. Rudd noted the well established links between socio-economic status and health outcomes. However, she notes a current interest in de-constructing socio-economic status so that researchers can look at the independent links between income and health and between education and health. Literacy, at the very foundation of education, may emerge as a social determinant of health.

She stated that measurement of health literacy is important for research and for policy. At the same time, she strongly discourages casual use of measures of patients' literacy skills in medical encounters. Such activities can be burdensome for staff and demeaning to patients. Findings to date indicate that recommendations for action: clear speech and writing, avoidance of jargon and esoteric vocabulary, and opportunities for questions -- serve everyone well, regardless of literacy skills.

Rudd also contended that current assessment tools such as the TOFHLA and REALM approximate reading skills and do not actually measure health literacy. The IOM report notes that health literacy includes using texts [prose and documents], reading, writing, presenting/speaking to others, comprehending speech, and calculating. Health literacy, like all literacy, is an interaction. Reading, for example is based on the reader's skills as well as on the writer's ability to write well and thus communicate. Assessments must consider skills and texts, the abilities of individuals as well as the demands of health systems. The national and international assessments of adult literacy skills focus on adults' ability to use texts to accomplish tasks and include calibrations of text difficulty. Rudd focused on findings from the most current US and Canadian assessments of adult literacy skills and the recent reports of health-literacy findings in the US [the 2004 Rudd, Kirsch and Yamamoto E TS report as well as on the USDOE report on Health Literacy from the NAAL findings in 2006].

Discussion

The following were comments that were made during the discussion:

The Institute for Social Medicine at the University of Zürich, Switzerland has conducted the first national health-literacy survey in Europe. It was widely reported in the Swiss media and has led to a number of policy initiatives in the Swiss parliament regarding health literacy. It is one of the key objectives of the Federal Office of Public Health and of the Swiss National Public Health Association. An initiative is under way to create a Swiss Alliance for Health Literacy. The Swiss survey has provided the basis for a submission to the European Commission that will result in many more European countries doing health-literacy surveys.

In Australia health literacy has been evaluated through measures of direct skills sets related to health. Do quantitative measures adequately measure health literacy like qualitative approaches do?

There are a number of challenges still to be met. We need to look at how health literacy is connected to power and empowerment. Critical health literacy must be centralized in the definition of health literacy. We need more data about the causes of the causes- not only the status of health literacy but also how this status comes to be.

There are different ways to view context and context counts a great deal in the measurement of health literacy. People receive health information in both overt and covert ways. There are both active and engaging approaches as well as passive approaches to health promotion. When we measure health literacy do we make distinctions between these approaches or are we focusing on just one?

The topic of information that children were downloading the most (other than homework) was health information.

Culture and language issues are important to consider when developing measures of health literacy. We tried to adapt reading tests and TOFHLA to French but this proved to be impossible because of interpretative and cultural considerations.

If we want to make literacy and health literacy a determinant of health we need to pay more attention to cultural context.

Greece is struggling with making health literacy culturally and linguistically relevant. Could there be a task group to examine the ways in which health literacy and culture intersect?

From Policy to Practice and Beyond

In the third symposium, moderated by Diane Levin Zamir, presenters Rima Rudd, Linda Shohet, Iraj Poureslami, and Barbara Kondilis addressed some of the challenges that come up when attempting to put health-literacy policies into practice. With the emergence of health literacy as a central and significant concept in the field of health promotion, concrete issues of culture, engaging in applied research; implications of globalization network building and the ethics of intervention become particularly salient.

Rima Rudd

Dr. Rudd spoke of instances in which research about health literacy was transformed into practice. She reiterated her concern that research and practice in health literacy must have a dual focus. Health literacy is a shared function of individuals' skills and social/health system demands. The burden of becoming health literate does not solely weigh on the shoulders of those requiring services of the health system.

Rudd stressed the importance of doing research both inside and outside of the clinical setting. Adult Learning Centres present a unique opportunity for learning about how adults might improve their health literacy as learners come with a willingness to acknowledge that they do not have strong literacy skills and a desire to engage in the process of education.

Rudd and her team worked with adult learners and educators to identify some of the barriers and facilitators to the health system. An analysis of focus group data revealed a need for the delineation of health tasks, an articulation of assumptions and matching the 'tools with the task'. With attention paid to these three needs, the team developed an in-depth training process for adult educators to help them increase the health literacy of their students. In addition, they created materials to be used in these settings. There was no attempt to make adult educators into health educators with a focus on health content. Instead, the team developed an approach that enables teachers to focus on literacy skills needed for a wide variety of health tasks. Rudd encouraged those interested to look at the materials: Health Literacy Study Circles found at www.ncsall.net and on www.hsph.harvard.edu/healthliteracy. These professional development materials focus on three critical health concerns: access to care, managing chronic diseases, and engaging in disease prevention and early screening activities.

Rudd's team also looked at the ways in which patients physically navigate health environments through a series of 'walking' interviews. Through this research the team was able to identify various barriers

that people, particularly those with low literacy, have in accessing services and information. When addressing the literacy demands and health-literacy assumptions in health environments. Research suggests that health systems develop user-centered processes, restructure the environment to increase accessibility and cultivate policies that create health environments that are inclusive of a range of literacy abilities.

Linda Shohet

Dr. Shohet suggested that research and practice in health literacy require a look at the complexities of literacy itself. Interdisciplinary work between literacy and health is opening up new understandings of both. She noted, for example, that health literacy's over-focus on words and readability precluded a broader look at the structural issues of grammar. Literacy's contribution to health is an understanding that one doesn't necessarily have to read a particular word to comprehend the meaning and, conversely, an ability to decode a sentence isn't a guarantee that a person has an understanding of its meaning.

Designing health-literacy interventions cross-culturally has exposed the ways in which the very terms 'literacy' and 'health literacy' are potentially problematic. Shohet stated that, in the French language, to be illiterate is synonymous with very low intelligence. In contrast, the definition of health literacy is intended to convey the competencies, skills, motivation and empowerment of the individual as well as the accessibility, competency and preferences of the health system. It has been challenging for teams working in the health literacy to develop terms to convey to health professionals that health literacy is not a vehicle for the stigmatization of the individual.

Also addressing the issue of culture and health literacy were Iraj Poureslami from the Institute for Health Promotion Research in British Columbia and Barbara Kondilis who is currently working with the Hellenic American University in Greece. Research in both British Columbia and in Greece demonstrated the benefits of creating culturally competent research and practice when attempting to study the concept of health literacy and create interventions.

Iraj Poureslami

Dr. Poureslami pointed out that, historically, cross-cultural health communication has used traditional methods of dissemination such as print media and personal exchanges with little reliance on the mass media. This has resulted in limited transmission of information to ethno-cultural communities due to

barriers in language, culture and literacy. Research suggests that the impact of inadequate communication strategies has been poor health literacy and health outcomes. An evaluation of the BC Health Guide and the BC Nurseline, for example, suggested that unless health information is provided in their home language, a large proportion of the members of the ethno-cultural communities do not fully understand it. Culture, which influences ideas and perceptions about health, adds another layer of complexity.

To address this challenge, Dr. Poureslami and his research team produced and aired participatory, culturally-sensitive health-literacy videos that targeted the Farsi-speaking community in Vancouver. The production was exceptionally well received within the community, demonstrating that, while developing specifically targeted forms of media requires more time and money, understanding and centralizing culture can facilitate effective educational interventions.

Barbara Kondilis

Barbara Kondilis presented research done in Greece. The first part of the research attempted to map health-literacy research that had been done in the European Union. She concurred with Drs. Poureslami and Shohet that the concept is difficult to translate both cross-linguistically and cross-culturally. Ms. Kondilis also reflected on the fact that the vast majority of research done on health literacy has been conducted outside of the EU (the production of health literacy articles is less than one third of those produced in the United States). There is an even smaller body of research that has been done in Greece and, consequently, there is little understanding of the ways in which the Greek culture, health and education systems uniquely intersect with an ability to understand and communicate health information. The second part of the research presented focused on the sources of health information for an adult population sample in Athens, Greece and a child population in both Athens and on the island of Crete. The preliminary data of the adult population indicates that adults with higher level of education are more likely to understand how to use the public health system in Greece, and more likely to access health information from the internet (About 17%-20% of total adult population in Greece uses the internet). The largely outpatient sample of adults indicate they are positive in the adequacy of communication with their doctor but less adequate about the communication and support they receive from the support staff.

Rather than begin the study of health literacy in the Greek population using the more complex definitions that other countries are currently using, Kondilis described a more simple definition from the Center for Health Care Strategies, Inc. (2000) that encompass three elements of health literacy: the ability to read, understand and act on health information. Using this as a starting point, academics, policy-makers and health professionals have begun a program of research looking at current levels of health literacy of the population of Greece.

As other presenters previously noted, Kondilis emphasized that an important component of translating policy into practice is communicating the difference between the concept of *health literacy* and *literacy*. Health Literacy, she stated, is reading and understanding in the context of health care. It requires the skills to access, understand and apply information in health communication. She also pointed out that the communities must be involved in the health-literacy “process” including mapping out a community’s assets (see Morgan & Ziglio, IUHPE Promotion & Education Supplement 2 2007); having physicians, nurses and other staff demonstrate “low literacy” approaches; testing messages for readability and comprehension; adding health content to material developed in schools or adult education classes; and working with both advocacy groups and organizations in providing tools to patients preparing to “access” health care (doctor visits, taking medications, etc.).

Ilona Kickbusch

Dr. Kickbusch defined health literacy as *“the capacity to make sound health decisions in the context of everyday life – at home, in the community, at the workplace, in the health-care system, the marketplace and the political arena”*. She argued strongly that health literacy and a health literate population is central to a 21st century “health society”. In a “health society” issues of society and that health literacy is a key component in solving these problems. She identified ‘health’ issues such as: a high life expectancy and ageing populations, an expansive health and medical care system, a rapidly growing private health market, health as a dominant theme in social and political discourse, health as a major personal goal in life and health as a right of citizenship are in close relationship to issues of equity in the ability to access the system. According to her, “health literacy speaks to the very heart of what we believe about citizenship and justice”.

Kickbusch identified five interactive domains of health literacy. These domains express, to a certain degree, the ways in which health literacy touches all the parts of our lives from family life to work life to leisure.

The first domain encompasses basic health knowledge and the ability to apply it. She talked about how the massive amounts of health information, from both academic and popular sources, as well as the constantly changing social realities have the potential to both facilitate and inhibit health literacy. Many suffer from ‘information overload’.

The second domain focuses on competencies to make health and safety decisions at the workplace. This includes the ability to participate in workplace health promotion and to act on workplace

rights in relation to health and safety. How well does the work place serve to promote access and understanding of health information?

The third domain looks at an individual's competence in navigating the health system and acting as partner to professionals. This involves the ability to seek second opinions or negotiate courses of treatment rather than simply being subjected to them. This form of health literacy is challenged by an increasing number of health-care options and the complexity of the system. The International Adult Literacy Survey (IALS), for example, showed that, in 14 of the 23 countries tested, more than 15 % of adults reached only the lowest level of competence. In all countries in the study between 25% und 75 % of adults remain at level 3 (out of 5) and below. These relatively low levels of literacy can have a serious impact on a population's ability to access health information. Because low levels of literacy are consistent with high levels of poverty, it is those who are most economically marginalized that have most difficulty accessing information and service. When individuals have low levels of general literacy this domain's competences become even more difficult to attain.

The forth domain focused on consumer competencies to make health decisions in the selection and use of goods and services and to act on consumer rights. Again, the massive proliferation of advertising, marketing and various forms of promotion of products make it difficult to decipher which *choices* are most conducive to health. This media marketing, some estimate up to five hours per day, aggressively targets youth.

The fifth and last domain concentrated on voting behavior and advocacy for health issues, knowledge of rights, and membership in patient and community organizations for . Citizenship, Kickbusch, reiterated, is at the centre of health literacy. The ability for individuals to be active and empowered in their health is a key notion of social justice. This is the responsibility of the people but culpability also rests with the system, Kickbusch, noted that, in her research, 50% of respondents said that they wanted to participate in their health care but that the doctor would not let them. Community health organizations, patient support and discussion groups as well as health advocacy increase competency in this area. Dr. Kickbusch also spoke about the Swiss Health-Literacy Survey.

The Survey of 1200 residents of Switzerland was conducted from early April through mid-May by a commercial survey company. 130 questions were administered in a 30 minute interview. The survey measured seven dimensions, 30 competencies and 60 indicators. The competencies included observable behaviors, tasks and self-assessment related to health literacy and generic core skills. A European survey based on this work is to begin in January 2008. For more information on the Swiss Survey, go to:

www.futurepatient.ch; www.gesundheitskompetenz.ch; www.competencesante.ch; and www.competenzesalute.ch.

Discussion

In a brief summary of key messages from each presentation, Doris Gillis made the following comments:

We can't address health literacy without also understanding the particular culture that we are working in and the social and economic systems that contextualize it.

Finding a common definition of health literacy may be a 'show stopper' but we must not get bogged down or very little will get accomplished.

Often, when we talk about health we discuss 'hard to reach' clients whereas perhaps we should refer to providers as 'hard to reach'.

We've got to find out how to put culture inside of health literacy—when we do this we will discover more about the essence of health literacy.

There are multiple entry points into discussing health literacy. How do we capture this richness? How do we share lessons learned and determine if these lessons are transferable?

Health Literacy is emerging as a key determinant of health—not just a sideshow.

In addition, another participant commented that:

Don Nutbeam's conceptualization of Frierian education is important and relevant when we speak of health literacy. It makes the connection between literacy and power. Without empowerment you can be stripped of your dignity and you can be stripped of your health.

Networking Session

During the course of the IUHPE Conference a one-hour networking session on health literacy led by Irving Rootman and Diane Levin- Zamir was held. The twenty-six participants introduced themselves and their specific interests in health literacy (see Appendix A for list of names, interests and e-mail addresses). A brief discussion followed during which the following suggestions were made:

- Establish “communities of interest”
- Develop models, proposals and working papers for presentation at IUHPE World Conference, Hong Kong, 2010
- Use e-mail/ internet as main modes of communication
- Create wiki for expediting communication among group members

Irving. Rootman agreed to post the presentations and a report on the symposia on a website and to circulate the list of participants to those who attended the meeting. In addition, Diane Levin- Zamir informed participants about the existing health-literacy discussion group for those who would like to join (healthliteracy-bounces@nifl.gov). The symposia closed with thanks to the presenters, organizers and participants

Appendix A

Participants in the Health Literacy International Collaboration Networking Meeting June 13, 2007, Vancouver

Name	Country	Areas of Interest/involvement	e-mail address
Thomas Abel	Switzerland	Medical curriculum inclusion of health literacy, theory development, cultural capital, measurement of critical health literacy	abel@ispm.unibe.ch
Chantale Audet	Canada	Guide to baby care and pregnancy – readability and assessment of guide	chantale.audet@inspq.qc.ca
Bojana Beric	USA	Preparing future health education, participation and empowerment in classroom/measurement	bberic@monmouth.edu
Deborah Begoray	Canada	Inter-disciplinary, education and curriculum,	dbegoray@uvic.ca
Francine Cheater	United Kingdom	MMR controversy/diabetes/disadv. Women, critical health literacy and measurement, empowerment	f.m.cheater@leeds.ac.uk
Lorie Donelle	Canada	Health numeracy, risk information and subsequent choices, internet information access, chat rooms engagement	ldonelle@uwo.ca
Jim Frankish	Canada	Marginalized, street youth/homeless, co-learning with students in health promotion	frankish@interchange.ubc.ca
Doris Gillis	Canada	Rural health literacy and health links, maternal/child health, national collaborating centre	dgillis@stfx.ca
Cath Jackson	United Kingdom	MMR controversy/diabetes/disadv. Women, critical health literacy and measurement, empowerment	c.j.jackson@leeds.ac.uk
Margot Kaszap	Canada	Elderly	Margot.kaszup@fsc.ulaval.ca
Ilona Kickbush	Switzerland	Literacy advocacy, economic relevance, participation of society, decision making in everyday life, Swiss survey, Swiss health-literacy alliance, political and public interest, European commission adoption of health literacy, economic costs of health literacy	kickbusch@bluewin.ch
Barbara Kondilis	Greece	Mental health, social work, sources of health information	bkondili@hau.gr
Diane Levin-Zamir	Israel	Integration of health literacy in health service organization, adolescent health literacy, media related health literacy, health literacy measurement, effects of	diamos@zahav.net.il

		globalization, health literacy in cultures in transition, policy considerations	
Rose Marie Martinez	United States (Institute of Medicine)	Member if "Take action" roundtable	rmartinez@nas.edu
Scott Murray	Canada	Politics/policy, measurement of demand/supply, money for remediation as motivation, productivity, GDP growth	Scott.murray@dataangel.ca
Don Nutbeam	Australia	Measurement of interventions and assess effects, population growth, life course, context specific	dnutbeam@usyd.edu.au
Richard Osborne	Australia	Measurement, survey of health utilization, wellness models, self care, participation	richardo@unimelb.edu.au
Andrew Pleasant	United States	Theory development and measurement	pleasant@aesop.rutgers.edu
Iraj Poureslami	Canada	Measurement of health literacy using web-based scenarios, cultural differences and effects on health-literacy components, parent health literacy and effects on children's health literacy	pouresla@interchange.ubc.ca
Irv Rootman	Canada	Expert panel on health literacy, Health and Learning Knowledge Center, UVIC Canadian mandate, making research available to all	irootman@uvic.ca
Rima Rudd	United States	Adult education and study circles, chronic disease. Integration of skills into classes, measurement of "demand" health literacy in hospitals, methods for reducing demand	rrudd@hsph.harvard.edu
Linda Shohet	Canada	Developing tools, chronic care, Children's hospital, books for children "Reach out and read", staff development, health-literacy terminology	lshohet@dawsoncollege.qc.ca
Sandy Vamos	Canada	Student and teacher of health-literacy curriculum	svamos@sfv.ca
Jane Wills	United Kingdom	Development of tools for critical thinking	willsj@lsbu.ac.uk
Martin Witt	New Zealand	Priority groups - gaps, health literacy within health-promotion attitudes	martin@canty.cancernz.org.nz

Appendix B: Abstracts for Symposia

11079-S - Health Literacy: Development of the Concept in Health Promotion

The evolution of the concept of health literacy and implications for contemporary health promotion

Author(s):

Presenter:

- Don Nutbeam
- Don Nutbeam

Health literacy is a composite term to describe a range of outcomes from health education and health-communication activities. It is defined as "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health". Improved health literacy is an outcome of effective health education.

This presentation examines the evolution of the concept of health literacy from a relatively narrow focus on the relationship between literacy and health communication, to a more complex concept involving different "types" of health literacy that include functional health literacy, interactive health literacy, and critical health literacy. Through this analysis, improving health literacy is understood to mean more than transmitting information, and developing skills to be able to read pamphlets and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, it is argued that improved health literacy is critical to empowerment. The implications for the content and methods of contemporary health education will be considered in this context.

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Deconstructing Health Activities to Illuminate Pathways from Literacy to Health Outcomes

Author(s):

Presenter:

- Rima Rudd
- Rima Rudd

Health researchers need to develop testable hypotheses related to an association between literacy skills and health, thereby illuminating the pathways from literacy to health outcomes. This presentation is based on a hypothesis that health outcomes are linked, in part, to patients' abilities to carry through with multiple tasks that require very sophisticated literacy skills. The presenter will offer a deconstruction of a health activity to illustrate the multiple literacy related task embedded in the activity. The discussion focuses on health activities, tasks, materials and on the faulty assumptions made by those in the health sector regarding average skills. Health researchers have not yet fully explored and delineated health-related activities and tasks nor have they uncovered the assumptions and demands of health systems. Such an understanding will enable both researchers and practitioners to more fully assess the match between health system assumptions and demands and adults' skills. Only then can those in the health sector eliminate literacy-related barriers to health promoting action and to care and services.

Health Literacy: towards an active health citizenship

Author(s):

Presenter:

- Ilona Kickbusch
- Ilona Kickbusch

Reflexivity is a defining characteristic of modern societies - this means that social practices need to be continually re-examined and revised in light of new information. In relation to health, social reflexivity takes on a new, interesting meaning: What is healthy today is unhealthy tomorrow; treatments and medications are continually being improved and expanded, the organization of the health system is changing regularly and the rights of access are being constantly redefined. As health expands, the role of the individual in the

everyday health tasks. Adults' literacy proficiencies are examined in multiple health contexts, using health materials at home, in the workplace, in communities, in health-care settings, and as they engage in tasks related to benefits, insurance and to health systems. Findings indicate that the distribution of health literacy is not independent of general literacy skills at a population or subpopulation level. Furthermore, literacy and health status are related. In addition, adults who have not completed high school or obtained a high school equivalency certificate and/or have immigrated to the United States or Canada, have lower health-literacy skills than others. Adults with limited health-literacy proficiencies are likely to report living in poverty with no income from savings, dividends, or retirement. Health-literacy measurement issues will be discussed.

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Measuring Health Literacy in Switzerland

Author(s): Presenter:

- Jen Wang
- Jen Wang

We attempted to identify core competencies for health relevant to citizens living in an industrialized country, drawing on both theoretical and empirical work done in patient-centered concepts such as health literacy and self-management on the one hand and adult life skills on the other. These core competencies were operationalized and tested in representative general population samples in three linguistic regions in Switzerland. The presentation will present pros and cons of a broad skills-based approach, going beyond a focus on poor reading ability and health.

14081-S - Health Literacy: From Practice to Policy and Beyond

Health-Literacy Skills: Research to Practice

Author(s): Presenter:

- Rima Rudd
- Rima Rudd

Inspired by the underlying structure of the NALS, NAAL, and international measures of adult literacy, Rudd and colleagues at the Harvard School of Public Health and the National Center for the Study of Adult Learning and Literacy examined an array of activities associated with access to health care and services, management of chronic diseases, and participation in disease prevention activities and early screening - three critical groups of activities related to health disparities. They defined an array of health activities, delineated specific tasks for each of the activities, examined commonly used materials, and identified needed skills. The team then developed an in-depth training protocol for adult educators to help them increase health-literacy skills of their students in adult basic education (ABE), high school equivalency programs (GED), and programs for adults speaking other languages (ESOL). The underlying assumptions for this professional development work will be discussed as will the processes. The professional development program consists of a five sessions with classroom-based activities between each session. The materials have been rigorously peer-reviewed and piloted. They have been implemented in New York City, New York State, the State of Louisiana, and Boston Massachusetts. Findings from preliminary evaluation studies will be presented.

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Health Literacy in Practice - Challenges in Maintaining and Sustaining Progress

Author(s): Presenter:

- Linda Shoheit
- Linda Shoheit

This segment will look at health literacy as applied to practice, and ask how much actual practice exists, how it has been conceptualized and evaluated, and how it could be improved. Analysis of a strand of "best

practices" presented at a 2004 Canadian health-literacy conference showed that most were short-term projects, a majority of them focused on plain language, with limited evidence of rigorous design or outcome evaluation. There are, however, promising initiatives in many countries. The presentation will highlight a few diverse models, including one at a large Montreal urban hospital complex and another in Oxfordshire (UK). It will look at initiatives that focus on staff development and change in the health-care system and will address the challenges of moving beyond projects to policy and practice.

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Using Mass Communication to Promote Health Literacy among Ethnocultural Communities

Author(s):

Presenter:

- Iraj Poureslami
- Iraj Poureslami

In culturally-diverse countries such as Canada, health communication strategies should reflect both the uniqueness of ethno-cultural communities and the 21st century's social and technological realities. To-date efforts in cross-cultural health communication, however, have targeted health practices and outcomes using traditional communication channels such as print media and in-person exchanges, with limited use of mass media. Consequently, health information only partially reaches ethno-cultural communities due to language, cultural and literacy barriers, influencing individuals understanding of health information, communication with care-providers, and health prevention/promotion practices, and contributing to poor health literacy and outcomes. A 2004 study, in which participatory, culturally-sensitive health-literacy videos targeting the Greater Vancouver Area's Farsi-speaking community were produced and aired on local TV-stations, showed an effective means of promoting a local government health initiative. Subsequently, a local television show was developed for communication of health information to BC's Farsi-speaking community. This show has aired weekly since July 2006 with approximately 25,000 regular viewers. A new study has been developed to measure the effectiveness of Spanish-language health-communication videos on health literacy and related outcomes among BC's Latino community. It is anticipated that the findings from these projects can be used as models for producing effective, culturally-sensitive health-communication media.

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Health-Literacy Research in Greece and the European Union

Author(s):

Presenter:

- Barbara K. Kondilis
- Barbara K. Kondilis

Quantifying health-literacy research efforts is an important step in recognizing the work done throughout Europe. Our research study and analysis serves as a stepping-stone in the area of health literacy in Greece as well as in understanding inequalities regarding research productivity in the selected fields among the various European countries. The presentation focuses on two studies: (1) a bibliometric analysis of manuscripts published by authors from each country separately and from each group of countries for the period of 1991 to 2005; (2) Health-literacy information questionnaire given to a sub-set of adult patients and youth in Greece. Results show that the 25 European countries produce less than 1/3 health-literacy research when compared to the U.S. Inequalities in research published on the topic of health literacy that exist as well as future needs for research in all areas of health literacy in Europe will be discussed.

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Appendix C – Additional Presentations on Selected Health-Literacy Topics

What's culture got to do with it? Health literacy in ethno-cultural communities in Greater Vancouver

Authors: Iraj M. Poureslami, Marina Niks, Irving Rootman

In British Columbia, health authorities dedicate great efforts and resources to make health information available to immigrants who have English as a second language. Much of this effort is dedicated to translating print materials to several languages, with less consideration of cultural and traditional beliefs and practices. Consequently, health information only partially reaches newcomer communities due to language, cultural and literacy barriers, influencing their understanding of health information, communication with care-providers for their own and their family members' health concern, and health prevention/promotion practices, and contributing to poor health outcomes. In this presentation, we will argue that having information available in different languages is only one of many aspects that need to be considered when attempting to make information and services available to newcomers. Using data collected in projects with Farsi and Spanish speaking immigrants, presenters will argue that immigrants and refugees bring to their encounters with health-care providers a worldview of health and illness that is framed by cultural values and understandings. This worldview is not always consistent with the biomedical worldview held by physicians and other health-care providers. This generates a gap in the understandings about health and illness that patients and health-care providers have. Findings from these projects point to the need for strategies that focus on bridging the gap. Several initiatives such as cultural brokers and multicultural liaison positions have proven to be successful.

Relationships Between Health Education and Health Literacy: A Social Ecological Analysis

Authors: Deborah L. Begoray, Marjorie MacDonald, Joan Wharf-Higgins, Irving Rootman

We are using a social ecological framework to guide a program of research on health literacy in Grade 10 students in selected BC secondary schools implementing the Planning 10 curriculum. The team has defined health literacy as the extent to which young people are able to find, understand, evaluate, and communicate basic health information. The framework posits that individual behaviour is created through social interaction and is influenced at three general levels of the social environmental context: macro, meso and micro. Based on the framework and using data from student and teacher focus groups, environmental scans, student questionnaires, and student interviews, we describe the multilevel influences on health literacy among students. Elaborations to the framework based on the data analysis will be presented, and implications for policy and practice will be discussed.

Effectiveness of a Comic Book in Promoting Health Literacy Among Aboriginal Youth in British Columbia.

Authors: Margaret A. Broughton, Robin Anderson, Laura Hamilton, Diana Day, Sean Muir

Objective—This study first assesses the effectiveness of a comic book written and illustrated by Aboriginal youth in raising awareness and individual reflection about prevalent health issues among Aboriginal youth. Secondly, it examines the effectiveness of the comic book promoting action among youth to address personal issues by, for example, changing behaviour, seeking help from a service provider or seeking further information.

Methods—The comic books were distributed through youth workers in First Nations communities and urban organizations. Evaluation data will be collected via both an on-line survey or paper survey included with the comic book. Data will be analyzed using appropriate descriptive and analytical statistics. Results The evaluation data will be collected by January 2007. The presentation will discuss the lessons learned about health-promotion strategies for First Nations youth.

Implications—The research assesses comic books as a vehicle for raising health literacy among Aboriginal youth and community leaders. Local and provincial funders charged with health promotion among Aboriginal

youth will be guided in their program planning by this pilot project evaluation. The comic book will be evaluated as a tool for stimulating community capacity building through partnerships created to develop this vehicle for health literacy

Saying it for Themselves: Health Literacy and Youth on the Margins

Author(s): Genevieve Creighton, Jennifer A. Matthews

Health literature often frames the health of marginalized youth by using constructs external to experiences of youth themselves. This presentation will examine how youth access, understand, communicate and evaluate health information. It will report on a partnership between Vancouver Coastal Health, the University of BC and North Vancouver youths. One goal was to have youth as active partners. We will discuss the work of a youth advisory committee and share lessons learned in working with youth to gather and analyze data (through focus groups and key informants engaged in service delivery and policy development). Youth and adult participants indicated that North Vancouver has characteristics that act as barriers to health literacy: transportation, hours of service, and diverse youth cultures. Key informants identified systemic issues that may create fractures in service. We will conclude by discussing the importance of collaboration between agencies, policy makers and youth. While it was apparent services were available, formal communication strategies did not appear to be reaching the most marginalized youth. Our findings show that youth have their own networks for information sharing and ways of assessing information based on personal relationships. Our work suggests that improving services to young marginalized people will require a deeper understanding of the ways in which youth understand their health.

Health Literacy of Medical Patients in a German Public Hospital - Early Screening Pays Back

Author(s): Daniel Duvigneau , Arnd Hofmeister

Introduction—Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to and understand and use information in ways which promote and maintain good health. Health literacy is a vastly underinvestigated field not only in hospitals in Germany. Research from other countries highlight that the absence of adequate health literacy is both detrimental to the health of patients and costly to the national health system.

Methods—In this ongoing research project a 5-minute-bed-side-screening-test to measure patients' health literacy was used in the emergency room setting of a busy mayor public hospital. Results were recorded on admission papers of approximately 250 medical patients and compared to the admitting physician's impression. Furthermore, the understanding of their particular illnesses were measured in screened and un-screened patients on admission and on discharge (empowerment).Results: Preliminary results show that inadequate or even absent health literacy appears to be a common, though often unnoticed feature of patients admitted to medical wards. During their stay in hospital, the understanding of the underlying causes for the hospital admission and implications of the illnesses is unlikely to increase in unscreened patients with inadequate or absent health literacy. Screening for and documenting inadequate health literacy on admission helped to alert physicians of the deficits in these subgroups and increased the patients' empowerment on discharge.

Conclusion—Inadequate or even absent health literacy of admitted patients appears to be a yet undetected epidemic on medical wards in this German public hospital. Screening with an early detection device helped physicians to handle patients accordingly.

Development of InForm: An Integrated Provincial Strategy to Promote Health Literacy in Mental Health & Addiction in BC

Author(s): Shannon Griffin, Peter Coleridge, Irving Rootman, Jeanne Legare

This presentation will focus on progress to date in the development of InForm. In collaboration with the Regional Health Authorities, Provincial Ministries and the BC Partners for Mental Health and Addictions

Information, BC Mental Health Addiction Services, is leading the development of this project. Health Literacy in Mental Health & Addiction refers to knowledge and beliefs which assist in the recognition, management or prevention of mental health or substance use issues or disorders. Health literacy includes the ability to recognize specific issues/disorders; knowing how to seek mental health and addiction information; knowledge of risk factors and causes, self-management and professional help available; and attitudes that promote recognition and appropriate help seeking. InForm's overall objectives are to: develop a provincial strategy to improve public understanding (e.g. mental health promotion, prevention, early recognition, help seeking, self-management and recovery), and reduce the stigma related to mental health and substance use problems; increase linkage and use of other complementary and effective approaches, including health-promoting policies and targeted interventions (e.g. workplace, schools, families, multicultural communities). The strategy will be informed by best practice in knowledge generation and knowledge exchange & dissemination. The presentation will include discussion of a conceptual systems model to support the initiative, evidence and best practice review for public information development and dissemination, assessment of existing provincial capacity, and progress towards a strategic implementation plan. It also provides an opportunity for participants to inform the plan through discussion and dialogue.

Developing Health Literacy Through a Participatory Approach Among a Rural Immigrant Population

Author(s): Rachel B. Farahbakhsh , Al Lauzon

This study assesses the impact of developing a participatory health-literacy project among a group of rural immigrant women as an example of empowering communities and developing personal skills in the process of health promotion and transformational learning. The study examines the impact of the program in terms of the reconstruction of their perceptions and changes in their behavior. It analyzes the process that facilitated changes in the participant's perspectives and places those findings in the context of developing health-literacy projects that apply participatory approaches for low literacy populations across a variety of diverse communities. The study involved the participation of ten Mennonite women from Mexico presently living in rural Ontario over six month period who wrote, developed and presented material to their community on health issue of their choice. The next stage of the study is the training of these women to co-facilitate the use of such workbooks in their communities as they assist to develop higher levels of health literacy in their communities.

The Canadian Population Health Initiative - Addressing the Determinants of Health

Author(s): Elizabeth Gyorf-Dyke

Background—Understanding what makes people healthy is as important as understanding what makes them sick. In 1999, the Canadian Institute for Health Information launched the Canadian Population Health Initiative (CPHI) to expand the public's knowledge of population health. CPHI works closely with partners across the country to: generate new knowledge about the factors affecting the health of different groups of Canadians; analyze evidence about the effectiveness of policy initiatives and provide a range of policy options based on best evidence; and bring researchers, policy-makers and health practitioners together to move the most current population research findings into policy and practice. Aims This presentation will review the role and activities of CPHI over the past six years and present findings and future directions for population health.

Methods—CPHI uses a variety of methods to achieve the mission. These include reports on Improving the Health of Canadians, commissioned research, investigator-initiated research, bringing policy-makers and researchers together to move the agenda forward, among other initiatives.

Results— A summary of key reports and research findings on population health and the social determinants of health in Canada will be provided. Conclusions CPHI is a unique initiative that aims to: foster a better understanding of factors that affect the health of individuals and communities and to contribute to the development of policies which reduce inequities and improve the health and well-being of Canadians.

Les arts comme outils de promotion de la santé: l'exemple du cinéma au Burkina Faso

Author(s): Pierre Huygens, Abdoulaye Ouédraogo

Méthodologie — Pour évaluer les impacts et potentialités du cinéma mobile comme outil d'instauration de débat communautaire sur le VIH/SIDA, une étude socio-anthropologique a été réalisée suite à une initiative endogène utilisant cet art. Outre l'observation directe des projections/débats dans les quartiers populaires, les investigateurs ont, pendant un mois, réalisé une trentaine d'entretiens avec des informateurs clés et administré environ 600 questionnaires aux spectateurs directs ou indirects. Les données ont été traitées à l'aide d'Epi Info ou dépouillées manuellement.

Principaux résultats— La projection du film documentaire 'Doni-Doni b'an bela' réalisé à partir des résultats d'études socio-anthropologiques sur le VIH/SIDA a: 1. instauré un débat sur la responsabilité communautaire dans la lutte contre le VIH/SIDA; 2. augmenté d'environ 50% le taux de dépistage local; 3. été jugé adéquat par la quasi-totalité des spectateurs interrogés.

Principales leçons

1. Il est possible de produire des films à partir de recherches/intervention ou du système de santé pour plusieurs fins?
2. Les techniques du cinéma mobile, de la mobilisation communautaire par le cinéma sont facilement maîtrisables par les communautés; ces projections débats sont moins coûteuses, plus efficaces que certaines méthodes de communication ou de mobilisation ciblant le grand public, chaque communauté pourrait produire des films locaux.
3. Cette technique de sensibilisation est exportable. Plusieurs organisations militent pour sa vulgarisation.
4. Les différentes sciences peuvent et doivent individuellement ou collectivement aider les promoteurs de la santé à développer des techniques et messages adéquats.

Health Literacy and Health and Well-Being: Implications for Health Promotion

Author(s): Helena Iredell, Peter Howat

Recently there has been a greater awareness of health literacy, in particular the need to explore the link between literacy and health. Kickbusch and Nutbeam believe that health literacy may become a global challenge for the 21st Century. While health literacy has featured in governments' key strategies, they believe that responses to this issue have largely been put aside or too narrowly focused on mass media communication. Health literacy is regarded as an important social determinant of health. When the skills of the individuals and the literacy skill demands of the health context do not match, it can lead to confusion, loss of dignity, and poorer health outcomes. Limited health literacy is associated with less knowledge of chronic illness management, a decreased ability in decision-making about treatment, poorer glycaemic control, and lower health status. People with limited health literacy are more likely to experience social exclusion, and suffer from low self esteem. Friedland estimated that additional health-care expenditure attributable to limited literacy skills was US\$29 billion in 1996. Low health literacy may limit a person's ability to comprehend health information, to communicate with health-care providers, and obtain appropriate and timely health care. It may also prevent a person from being able to follow health-promoting advice, make behavioural changes (increase physical activity) and therefore his or her ability to manage health conditions that require these changes (diabetes, heart disease). The US Institute of Medicine believe that health literacy should be of interest to everyone involved in health promotion, disease prevention and early screening, health care, and policy-making. These issues and where future research and practice should focus will be presented.

Effective Planning of Health-Promoting Schools to Improve Health Literacy for Students

Author(s): YP Kan, A Lee

School is one of the key settings for health promotion. Evidence supports that the provision of comprehensive school health-education curriculum would enhance students' health literacy and empowers them to make positive health choices. The aim of this study is to explore the students' perspective on health-promoting schools. Self-administered questionnaires were sent to five secondary schools in different districts of Hong Kong. The questionnaire collected information on students' level of agreement on the 18 health indicators, ranking the importance of 10 health themes and their preference of health-promotion programs. 198 Secondary Four students participated in the study. The data showed that the highest level of agreement was found on indicators that closely related to students' daily life experience. These included 'establish safe and hygienic environment', 'establish healthy eating environment', 'promote school and district environmental protection activities'. As for the ten health themes, 'mental health', 'food and nutrition', 'family life & sex education' were ranked the highest. Students had suggested 46 types of health-promotion activities and most of the suggestions were interactive and proactive. The study concluded that a multi-component approach is the preferred for secondary school students. School-based needs assessment is needed to identify the needs and successful development of programme and strategies.

Littératie de la santé : un nouveau déterminant de la santé

Author(s): Margot Kaszap

Dans le domaine de la promotion de la santé, il est possible de trouver plusieurs exemples qui permettent de démontrer l'influence substantielle d'un nouveau concept sur la façon de concevoir et de réaliser le travail de recherche en promotion de la santé. Un concept récemment introduit dans le domaine de la promotion de la santé, auquel les Canadiens ont apporté et apportent encore une grande contribution, est celui de « littératie en santé ». Plus spécifiquement, nous discuterons de l'historique du concept de « littératie en santé » dans le champ de la promotion de la santé, de la contribution des Canadiens au développement de ce nouveau concept, des définitions relatives au concept de « littératie en santé », des débats entourant l'entrée du concept dans le domaine de la promotion de la santé de même que de l'avenir de ce concept.

BBC Persian's Sexual Health and Relationship Education: An Outreach Interactive Program for Farsi-Speaking Audience

Author(s): Sara Nasserzadeh

Background—BBC Persian started a weekly radio and online program on sexual health and relationship since August 2006 for Farsi-speaking audience listening to or accessing the website from all over the world. This presentation aims to describe the development of this program and to analyze its feedback. Methods - The program consists of a systematic overview of a topic plus responding to received questions. The audience's questions and feedback sent via e-mail, telephone and SMS will be analyzed thematically in this presentation. Results - More than 1200 e-mails were received in the first six months. They were mainly from males, but over time this pattern changed. The online pages were visited more than 380,000 times during the same period despite the filtering of BBC Persian's website inside Iran. Many phone calls were made from hard-to-reach destinations such as military camps in Afghanistan. Most questions were about masturbation, premature ejaculation, penis size, virginity, relationship problems, homosexuality and oral/anal sex.

Discussion—The analysis of the questions and the demography of their senders shows that there are significant room for improvement in sexual health literacy and access to reliable advice and information. These gaps can be bridged effectively by the use of a program written in a sensitive and culturally-appropriate language. Impartiality of the presenter and the use of evidence-based material are keys to the success of such programs.

Conclusion —A culturally and linguistically-adjusted radio and online program seems to be an acceptable way to reach out to hard-to-reach populations with limited access to reliable and accurate sex and relationship advice and information.

Utilising Web Environments to Promote Positive Youth Mental Health

Author(s): Jonathan Nicholas, Jane Burns

For many youth the internet is central to their lives however it is under-utilised in health promotion. In Australia, despite almost universal access to the internet there remains little consistent investment to alter health systems and use technology innovatively to achieve positive health outcomes. *Reach Out!* (www.reachout.com.au) is an Australian web-based mental-health service for young people aged 16-25. Launched in 1998, *Reach Out!* was a world first and has won numerous awards for the innovative use of web-technology, social marketing and youth involvement to promote mental health among young people. Since launch, *Reach Out!* has been accessed over 4 million times. In November 2006 alone it was accessed by over 170 000 users. *Reach Out!* utilises public-health prevention and promotion principles to achieve positive shifts in population health; important in a country like Australia where the population is spread over a large geographic area with limited access to community mental-health services. *Reach Out!* enables young people to access information and resources to take better control of their mental health and should they need it, find further help in the community. In 2006, a feasibility study to examine the viability of developing a US based *Reach Out!* Service was undertaken. This study provided a blueprint for developing domestic *Reach Out!* services internationally. In 2007 a US *Reach Out!* will be developed and with a consortium of Irish agencies, a feasibility study for *Reach Out!* Ireland undertaken. This paper will provide an overview of *Reach Out!* and provide evidence for how web-environments within health-promotion frameworks and support the aims of the Ottawa Charter. It will also argue for policy reform take account of changing technology environments.

Voices From the Margins: How Immigrants and Adults with Literacy Challenges Learn About Health

Author(s):

Marina Niks, Sue Folinsbee, H  l  ne

Gregoire, Allan Quigley

This presentation will share findings from five consultations conducted in Vancouver by the Adult Working Group of the Health and Learning Knowledge Centre of the Canadian Council on Learning. The purpose of the consultations was to find out how immigrants and adults with literacy challenges learn about health information and access health-care services and to explore the role that adult education practice and policy might play in increasing the ability of these communities to gain control over the factors that affect their health. In an attempt to ensure that the majority of participants were community members, attendance of researchers and service providers was capped at 30% of the available spaces. Each consultation was two to three hours long. The conversations were recorded, synthesized, and analyzed with a particular focus on the experiences, perspectives, and recommendations of participants. The Vancouver consultations are part of a larger plan to identify themes, gaps, and needs related to health and learning as experienced by immigrants and refugees and adults with literacy challenges. Similar consultations will be carried out in Toronto, Montreal, Truro and Regina. The consultations will point to research priorities concerning the learning needed to improve the health of vulnerable and marginalized adults, and will include a plan to generate, mobilize, disseminate, and translate research-based knowledge into policy and practice change. This will also ultimately result in greater understanding of the relationship between health and learning and in initiatives to improve the health status of vulnerable populations.

Health Literacy: Acceso a Información y Servicios de Salud para Inmigrantes Latinoamericanos en Vancouver

Author(s): Marina Niks, Dora Replanski, Andrea Sola, Victor Porter

Esta investigación tuvo como objetivo recabar información sobre la habilidad de acceder, entender, evaluar y comunicar información acerca de salud en la comunidad Latinoamericana del Gran Vancouver en British Columbia. En particular, el equipo de investigación estaba interesado en la identificación de los factores que facilitan y aquellos que dificultan el acceso a servicios de salud. La recolección de datos se llevó a cabo mediante grupos de discusión con inmigrantes y clamantes de refugio latinoamericanos y entrevistas con profesionales de la salud que trabajan con esta población. Las transcripciones fueron analizadas utilizando el programa N-Vivo para análisis de datos cualitativos. El proyecto se implementó mediante una colaboración entre dos universidades y tres organizaciones comunitarias que trabajan con inmigrantes recientes y clamantes de refugio en el Gran Vancouver. Dicha colaboración contribuyó a aumentar la capacidad de las diferentes organizaciones involucradas y la recolección y el análisis de datos se beneficiaron por la comprensión del contexto cultural de los participantes. Los resultados de la investigación confirman la importancia de la cultura como determinante de "health literacy". Los participantes describieron los desafíos que enfrentan al intentar acceder a información y servicios en inglés mientras están atravesando difíciles procesos de inmigración y asentamiento. Las diferencias en el valor asignado a la familia, la necesidad de establecer un vínculo personal con los médicos, el entendimiento de enfermedades y de los tratamientos, fueron ejemplos utilizados por los participantes para describir la disonancia que se genera cuando inmigrantes tratan de acceder a información y servicios de salud. Este proyecto ha generado información para desarrollar intervenciones de salud apropiadas para la comunidad latinoamericana. En esta presentación, miembros del equipo de investigación compartirán resultados y recomendaciones basadas en el análisis de datos

eHealth Literacy: Essential Skills for Internet-based Health Promotion

Author(s): Cameron D. Norman

The Internet has become an important setting for health promotion, with health topics now among the most searched-for news items on the World Wide Web (Google, 2006). Health promotion via the Internet is predicated on the assumption that people can adequately access, understand, evaluate and apply the information they glean from these sources to making decisions and taking appropriate action. Yet, even countries with high levels of Internet access such as the United States and Canada report having more than 40% of their population with sub-optimal basic literacy rates. As literacy skill levels rise, the perceived usefulness of computers, diversity and intensity of Internet use rise with it, even when factors such as age, income, and education levels are taken into account (Veenhof et al., 2005). Thus, we must consider how to address literacy in the context of computer-based health promotion. The concept of eHealth literacy has been developed to help understand what skills are necessary to optimally engage in health promotion online. eHealth literacy is comprised of six core skills, or literacies: (1) traditional literacy, (2) health literacy, (3) information literacy, (4) scientific literacy, (5) media literacy, and (6) computer literacy (Norman & Skinner, 2006). Results of a randomized controlled trial of an eHealth-literacy training program involving 1400 adolescents, a population-level survey of eHealth literacy skills in a Canadian province, and the psychometric evaluation of the eHealth Literacy Scale (eHEALS) for general use will all be discussed in relation to eHealth promotion including implications for future research and action.

Campagne médiatique « c'est quoi ton truc pour bien vivre? » : retombées chez les communautés Francophones du nord-est du Nouveau-Brunswick

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A l'automne 2005, le Réseau Communauté en Santé de Bathurst (RCS-B) obtient du financement du Fonds pour l'Adaptation des Soins de Santé Primaires (FASSP) de la Société Santé en Français du Canada (Santé Canada) afin de travailler à améliorer l'accès à de l'information portant sur la santé qui soit claire, pertinente et à point pour les francophones du Nord-est du Nouveau-Brunswick. L'hypothèse poursuivie par le RCS-B et ses partenaires est à l'effet que des gens qui comprennent bien l'information transmise seront plus à même de poser un choix éclairé face à leur santé individuelle puis à s'impliquer au sein de leur communauté. Dans un contexte où près de 68 % de la population francophone, âgée de 15 ans et plus, ne présente pas le niveau minimal requis d'alphabétisation pour fonctionner dans la société actuelle (EIACA, 2003; EIAA, 1994), il devient crucial d'aider les gens à comprendre l'information transmise afin de recouvrer un contrôle face à leur santé. Une campagne médiatique consistant en un échange de trucs pour bien vivre s'est déroulée de mai à août 2006. Suite à cette campagne médiatique, une évaluation a été menée auprès d'un échantillon de la population francophone du Nord-est du Nouveau-Brunswick. Cette présentation décrira les résultats obtenus d'abord en termes d'utilisation personnelle des trucs entendus, puis en termes de discussions engendrées avec son médecin, ses amis ou sa famille suite à l'écoute des trucs et finalement, en termes de capacité de ces trucs à améliorer sa santé personnelle et celle de sa famille.

Préparer le Terrain pour améliorer la santé des francophones en situation minoritaire au Canada: une étude provinciale des besoins et interventions possibles en soins de santé primaire.

Author(s): Veronic Ouellette, Michiko Frachet, Yves Trudel, Brian Conway

Une majorité des 64 000 francophones de la Colombie-Britannique (C.-B.) jugent important ou très important de recevoir des services de santé en français mais n'y a pas accès, incluant les services de promotion de la santé, les soins de santé primaires et les soins d'urgence. Pour améliorer l'accès aux soins de santé primaires, RésoSanté et l'Université de C.-B. ont conduit une recherche communautaire participative comprenant sondages et groupes de discussion auprès des francophones, étudiants en médecine et médecins de famille. L'analyse comprend des modèles de régression logistique et catégoriels contrôlant pour les variables sociodémographiques. Deux chercheurs qualitatifs ont systématiquement analysé la transcription des groupes de discussion par un processus récursif de codification et regroupement. Les facteurs associés aux difficultés d'accès aux soins sont des difficultés en anglais (RC_i10), vivre en C.-B. depuis moins d'un an (RC 6) et l'absence de personne de confiance pour traduire (RC_i2.8) (n_i406). Les répondants (40 %) reportent des conséquences négatives dues à ce manque d'accès: l'incompréhension du diagnostique, la prise erronée de médication et autres. La situation est pire pour les femmes, les pauvres, ceux souffrant d'une maladie chronique, les nouveaux immigrants, ceux qui parle peu l'anglais ou qui n'ont personne pour traduire. Il y a méconnaissance des outils existants facilitant l'accès aux soins. Les étudiants en médecine et résidents (taux de réponse 48 % et 68 %) jugent important de servir les minorités culturelles dans la langue de leur choix. Ils souhaitent des mesures pour améliorer leur formation pour mieux servir les minorités linguistiques. Le groupe de discussion avec les médecins en pratique illustrent les difficultés à offrir des services en français. Ils priorisent des stratégies d'éducation médical continue et de support à la pratique. Ces résultats ont été présentés à la population et aux décideurs clés de la faculté de médecine, des régies de santé et des politiciens dans un forum provincial. Plusieurs mesures sont en voie d'implémentation.

Addressing the Measurement Issue: A Conceptual Framework and Suggested Approach for a New Measure of Health Literacy

Author(s): Andrew Pleasant , Christina Zarcadoolas , David Greer

The rapidly evolving field of health-literacy research and practice faces an increasingly well-recognized measurement problem. Existing measures no longer reflect current definitions of health literacy that more precisely explicate this complex and multidimensional concept. In arriving at this new understanding of health literacy, researchers incorporated new and different knowledge such as interdisciplinary models of literacy, ecological approaches to health, and recognized health literacy is a public-health issue in addition to its role in clinical settings. As a result, there is a growing consensus that current measures of health literacy are limited in their scope and ability to produce usable information to inform and evaluate interventions. This article builds on a critique and synthesis of existing definitions, empirical understandings, and theories of health literacy to propose an inclusive and robust framework from which future research can proceed to build a valid and reliable measure of health literacy. That is the sort of task best conducted with the explicit support of research and practice umbrella organizations such as, to name just three examples, the World Health Organization, the National Institutes of Health in the U.S., and the National Health System in the U.K. We recommend one or several of these institutions support a consultative research process that invites active and broad participation in creating consensus on the definition of health literacy, developing a comprehensive measure of health literacy, further explicating and measuring the role of health literacy as a social determinant of health, and identifying and promoting the use of best practices in health-literacy interventions.

Development of Measures of Health Literacy for Canadian Schools

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The aim of the study is to develop an empirically/theoretically-driven measurement tool for assessing secondary school students' health literacy in BC. Such measures may be used as the basis for the development of standardized measures of health literacy for schools across Canada. Findings from key-informants and teachers' focus groups, and experts and students' survey indicated an overall agreement with our health-literacy definition, standards, and framework. As a result, five matrices were developed linking the web-based and written surveys, focus groups and literature review with our proposed framework. Results of the student survey (N_i197) indicate that almost 39% of the respondents said they used the Internet as a source of health information. As a consequence, the research team decided to explore the use of a web-based approach to measuring health literacy. Our exploratory student survey also contributed to an understanding of how students find, understand, evaluate, and communicate health information. The data obtained from the surveys and focus group discussions were used in the development of scenarios and scripts for the planned web-based measurement tool. In addition, almost all of the teachers and students who participated in pre-post-test measures of our framework were in favor of the proposed platform and web-based tool. We believe our work will stimulate important dialogue and lead to a useful tool for appraisal of health literacy among school-age children in Canada. The work will be useful for policy-making, school curriculum development, and training of health promoters/educators about important aspects of literacy and health and their interactions.

Cultura de la Salud y Periodismo

Author(s): Sáinz M. María, Gallardo Carmen, Munugarren Rosa, Zambrana Joanna

Las pandemias del siglo XXI están fuertemente relacionadas con los comportamientos humanos: tabaquismo, obesidad, accidentes de tráfico, violencias, se retransmiten por los medios de comunicación de masas. La divulgación de las enfermedades y catástrofes entran en los esquemas formativos del

periodismo como novedad, independientemente del rigor informativo de las empresas de comunicación. También existe una máxima: las buenas noticias no venden. Hay que promover urgentemente la formación especializada en salud de los profesionales de la información, fundamentalmente en los Periodistas de prensa escrita, ya que son referentes de otros profesionales de la comunicación oral y visual. La Fundación de Educación para la Salud-FUNDADEPS ha creado desde el área médica el primer Master en Periodismo Sanitario como Título Propio de la UNIVERSIDAD COMPLUTENSE-Madrid. Formar periodistas en Cultura de la Salud. Dotarles de los conocimientos médicos necesarios para tratar la información del sistema sanitario y de temas de salud, sin descuidar aspectos éticos y legales. Enseñar a trasladar con eficacia la información científica compleja dirigida hacia la población general a través de los medios. Que sepan transmitir de una forma correcta la información sobre la salud, enfermedades y tratamientos. Dotarles de habilidades y actitudes favorables a nuevas prácticas ocupacionales hacia un periodismo especializado en salud. Manejar con profesionalidad las fuentes especializadas en la información de salud y médicas. Todo ello para que contribuyan al desarrollo de hábitos y conductas saludables en la población general. Crear puentes entre los profesionales de la Medicina y del Periodismo modificará los sistemas de información sanitaria.

How do Stigma, Marginalization, and Criminalization Impact Health Literacy and Health Promotion for Mothers who use Drugs?

Author: Amy Salmon

Policy makers, health educators, clinicians and others concerned with prenatal health literacy and Fetal Alcohol Spectrum Disorders prevention are increasingly interested in substance use among pregnant and parenting women. However, public discourse surrounding women who drink during pregnancy has remained judgmental, blaming and unsympathetic, and Aboriginal women have been particularly overrepresented and pathologized in studies of 'problem' alcohol use and risk for FASD. These conditions mediate the extent to which women understand, report and receive help for substance use during pregnancy and while mothering. This presentation considers the ways in which stigma, marginalization and criminalization mediate the lived experiences of pregnant women and mothers who use drugs. To this end, I highlight their consequences in 4 key areas: women's health literacy; screening practices for substance use during pregnancy; access to treatment and harm reduction; and mothers' ability to retain custody of their children. I conclude with a brief discussion of the benefits and limitations of stigma as an organizing concept for understanding and acting on social determinants of health and improving health literacy for mothers who use drugs.

Relevance of Health-Literacy Models for People with Severe Mental Illness

Author(s): Ann Taket, Melissa Graham, Natalie Hakman

People with severe mental illness experience elevated levels of impairment, morbidity and health-risk behaviours compared with the general population. Despite this, it is consistently reported that they do not visit health professionals, including preventative health professionals, as regularly as the general population. Their poor health suggests that current health-promotion efforts have been largely ineffective in addressing their specific needs. Barriers that might explain this include lack of motivation, expense and lack of access. Health literacy is also a potentially important factor. As a part of a programme of work to develop appropriate and effective health promotion for this group, we have explored existing health-literacy models and their relevance to marginalized populations, in particular, people experiencing severe mental illness. A comprehensive search of the literature was undertaken. Models of health literacy identified were analyzed to determine the source population, underpinning theory/frameworks, supporting research evidence and to consider their potential generalisability. This paper presents an analysis of existing health-literacy models in the context of severe mental illness. We propose that because existing models of health literacy were developed through consultation with people experiencing challenges to specific health and social issues, for example, cancer, low income and limited education, this raises questions as to the applicability of these models to people experiencing severe and ongoing mental illness. Whilst such individuals were not actively

excluded in the development of the existing models, we propose the development of an alternative model which considers this population's needs and limitations in accessing effective health-promotion campaigns/programs.

The Place of Health-Literacy Concepts in the Reduction of Inequalities: The Relevance of the Physical Activity and Nutrition Resources of the Cancer Society of New Zealand for Disadvantaged Groups

Author: Martin Winn

Despite recognition of health inequalities, the design of health-promotion material does not always address the needs of groups with low health literacy. This paper explores the health-literacy concept in relation to determinants of health, including its relevance to health promotion, individual empowerment and health inequalities. It reports on New Zealand research that assesses the perspectives of both producers and consumer of health information, concentrating on the needs of low socio-economic or marginalized ethnic groups that often have lower levels of health literacy. Two methods were used: a postal survey of health promotion professionals' attitudes toward design and content of health information for disadvantaged groups; and four focus groups of consumers drawn from clients of organizations working with low income and marginalized groups. Findings from the survey of professionals found that 50% reported experience in developing resources targeted at disadvantaged groups. Professionals saw simplicity and relevance of the message plus consultation with consumers as important considerations. 60% were not aware the concept of health literacy and or what it might mean. Focus groups reviewed specific resources produced by the Cancer Society of New Zealand. Consumers placed importance on simple messages; plain English and well presented graphics. They demonstrated their preference for colourful postcards and bookmarks depicting key messages. The research concludes that there are gaps between the needs of particular groups and the material produced. The paper recommends steps to improve health information for people with low health literacy.

Langue d'usage et la littératie en santé au Canada : Un problème de littératies multiples ne touchant que des minorités ou plutôt une menace pour la majorité de la population?

Author(s): Margareth Zanchetta, Margot Kaszap

Cette présentation souhaite ouvrir la discussion sur les littératies multiples au sein de la littératie en santé et ses liens avec les divers aspects de la vie sociale et de l'acquisition de connaissances générales. Nous discuterons ses particularités et la vulnérabilité de certains groupes de la population pour la promotion de la santé plus égalitaire et socialement inclusive. Nous mettrons en évidence les origines de ces littératies au sein de la population francophone, en établissant l'influence des valeurs familiales concernant la santé, en scrutant la façon de faire face aux maladies ainsi que les pratiques de soins chez l'homme/la femme, en questionnant les facteurs de risque pour la santé dans une optique de prévention puis, finalement, en s'interrogeant sur les pratiques de lecture, de recherche ainsi que d'échange d'informations. La complexité inhérente à l'information scientifique en matière de santé offre l'opportunité «démocratique» de mettre en évidence les limites et les difficultés de la population en général quant à la compréhension et l'application des concepts scientifiques et mathématiques dans sa compréhension des diagnostics, des résultats des traitements médicaux, de la prise sécuritaire de médicaments ainsi que plus globalement, de la prise en charge de leur santé. Un autre défi est posé par les technologies de communication et leur utilisation pour l'apprentissage en santé chez des personnes de différents niveaux d'alphabétisation, d'expertise linguistique et de degrés de lecture. En effet, il s'agit d'un problème qui concerne une vaste majorité de gens, indépendamment de leur scolarisation, leur origine ethnoculturelle ou leur langue maternelle