An Analysis of Health Care Assessments Used for Sustaining Communities

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Abstract

This research addresses the needs for creating realistic health care assessment methodologies. The information acquired from health care assessments shape the policies which will ultimately sustain communities. Health care assessment tools and methods dictate the priorities of community health care. These priorities assist with the development of community health care research, the exploration of community based need initiatives and the design of pertinent policies which meet the demands of community health care. Community health assessment involves people and allows them to express their views, which leads to more self esteem, particularly in disadvantaged communities. Participatory community health care research relates to the continuity of the economic, social, institutional and environmental aspects of human society, as well as the non-human environment in which our communities thrive. This research will review the current literature pertinent to participatory action research. Additionally, this research will address the advantages, disadvantages and the ethical issues of participatory action research methods. Selected case studies are used to explain community based models which have identified necessary strategies which have been utilized to articulate and assist current community health issues in specified populations.

Keywords: Participatory community health, Health care assessments, Health care management

1. Introduction

For many years our health care systems, both for the professionals working in them, and those responsible for its management have debated issues regarding the scientific soundness of the policy decisions. Addressing community health care and management needs is complex. These complexities must addresses a cadres of issues relative to individuals, individuals, organizations, businesses and healthcare providers, problem of access and coverage to healthcare for the un- or under-insured, transportation, distribution, and other socioeconomic problems. Lack of insurance coverage may not be the only barrier to accessing health care in the community; many also feel there is a lack of funding for services for mental health and HIV prevention, as well as fewer health care resources available to address those needs. McNair and all (2008) research found that there is also a perception that access to health care is further limited due to clinicians' lack of understanding of many patients' cultural and social backgrounds, including ethnicity, language, and sexual orientation. The fields of public health and health care management also have problems with data; in that some is contradictory or some is non-existent. The purpose for this research is to review the importance of : (1) setting realistic community health care priorities, (2) developing effective participatory community health care research, (3) exploring community based need initiatives and (4) designing effective and efficient policies to meet the demands of community health care needs.

2. Review of Literature

There are several methods which are quite useful in developing community health priorities and needs. The accuracy of the determination of these needs is necessary for the public as well as the users in order to. A few of the more common and useful methods for collecting data and information include surveys, samplings, citizen juries, user consultant panels, focus groups and questionnaires. While these methods have been useful and applicable there are some problems associated with their usage. These problems include (1) the time spent on deliberation, (2) the legitimacy of the stakeholders in health care decisions, (3) the public's level of information, (4) the role of practitioner (is the practitioner serving as proxy for the patient), and (5) the adequacy of the financial resources sued in identifying the community's health needs.

Marianna Fotaki and all, (2008) published research designed to assess the demand for, and likely impact of, increasing patient choice in health care. Their study examined whether patients would like to exercise choice of hospital, primary care provider and treatment, and investigated the likely impact of policies designed to increase choice on equity of access, and on the efficiency and quality of service delivery. Their literature review included an analysis of the intended and unintended impact of choice-related policies in health care in the UK, European Union and USA. The findings indicate that choosing between hospitals or primary care providers is not currently a high priority for the public, except where local services are poor, meaning that they have long waiting times and where individual patients' circumstances do not limit their ability to travel. The increase in inequality which this could produce might be reduced by specific provision of information and help, enabling less advantaged populations to make choices about health care. Although patients may themselves make limited use of choices, the existence of choice may, in theory, stimulate providers to improve quality of care. Patients do, however, want to be more involved in individual decisions about their own treatment, and generally participate much less in these decisions than they would wish.

Several researchers have addressed problems of defining community health care needs including Scott Murray, in his article “Practice based health needs assessment: use of four methods in a small neighborhood”, BMJ, 1995. He categorized the methods of data collection in the following manner:

Rapid Participatory Appraisal – This is a qualitative technique used by social workers and community education workers. The users of these techniques collect information on nine aspects utilizing socio-ecological factors which may be influences by national, regional and local policies. Problems that have been associated with this method include (1) no sense of community identity, (2) common complaints about the environment, (3) stress, (4) poor diet, (5) drug misuse, (6) heart problems, and (7) arthritis. The advantages of using this method are that it encourages appraisal using a multidisciplinary approach to health needs, contain suggestions for change, and listens to the users’ priorities.

Postal Survey is a questionnaire designed to access the community health of the respondents. The variables which are commonly included are: (1) chronic illnesses. (2) acute illnesses, (3) health status, (4) use of health services, (5) the perceived need for current and potential services, (6) social and demographic characteristics, and (7) long term health problems. The problems with this method are that most residents actually thought they suffered from a chronic illness like high blood pressure, heart disease but this differs from age group to age group. The main advantage is that individual users get to identify their own perceived needs.

Routinely available local statistics consist of data collected from health information and statistical databases and services. This information is at the level of hospital episodes. No real problems exist. This method leads to more accurate data pertaining to patients and their illnesses. The main advantage is that it gives a clear description of morbidity and socioeconomic indicators.

Practice held information reviews documents kept by practitioners on clients to assess the chronic illnesses and the overall health of the community. Several types of information falls into this method including: deaths, acute illnesses, surgery consultations, house calls and out of hours visit, drug addicts, HIV patients, and the details of repeat prescriptions. This method gives an even closer picture of the community health assessment. One advantage of using this method over other methods is that the collection of data facilitated teamwork.

Most community health measurement scales address health issues for use by clinicians. This creates an entirely different set of problems. These problems include latent outcomes (unobserved outcomes), cognitive abilities (potential abilities based on a standard), attitudes and the quality of life. Questions that arise in using these health measurement scales include the following: (1) scale development, (2) scale interpretation, (3) reliability, (4) validity, (5) measuring change and (6) other controversial issues including clinicians' lack of understanding of many patients' cultural and social backgrounds.

The Encyclopedia of Public Health in “Health Measurement Scales”(2006) states that health is an abstract concept which cannot be measured directly using a mechanical scale. Indicators of health have to be selected, and some form of numerical judgment must be applied to quantify the responses. For example, if health is defined in terms of physical, mental, and social well-being, several indicators of each of these themes will typically be selected and a scoring system for rating a person on each indicator will be devised. Once this has been accomplished, a second scoring system must be developed to represent the relative importance of the physical, mental, and social areas in the final rating, or health measurement scale.

The indicators included in such a scale may be recorded mechanically as in a treadmill test, or they may derive from expert judgment as in a physician's assessment of a symptom. Alternatively, they may be recorded via self-ratings, as in a patient's replies to a disability questionnaire. Most indicators of physical or mental health

assess the intensity, duration, or frequency of symptoms. The application of a numerical rating scale is often quite simple (as in counting a patient's arthritic joints). Alternatively, scores may be derived from sophisticated experimental scaling protocols, such as the Time Trade-off or the Standard Gamble, which represent the severity of a disabling condition by showing how many years of life a person with that condition would be willing to lose in order to return to full health for his or her remaining years.

Because of the complexity of developing a reliable and valid health measurement, there has been a steady growth over the past half century in the range of standardized health measurement scales that are available for general use. Using the same instrument in separate studies enables direct comparisons to be drawn among them. The current repertoire of health measurements numbers in the hundreds, and these have been described in several books. These ready-made health measurement scales may be classified by their topic, scope, purpose, or design.

Measurement scales exist for the majority of common diagnoses, as well as for broader-ranging themes such as disability or health-related quality of life. Measures range from those that focus on a particular organ system (vision, hearing), to methods concerned with a diagnosis (anxiety or depression scales), then to scales that measure broader syndromes (emotional well-being), to measurements of overall health and, broadest of all, to measures of quality of life.

Scales may be generic or specific. The latter may be designed for a particular disease (such as a quality-of-life scale for cancer), but can also be specific to a particular type of person (women's health measures, patient satisfaction scales) or to an age group (child health indicators). Specific instruments are generally intended for clinical application and are designed to be sensitive to change following treatment. Generic instruments, such as the Sickness Impact Profile or the European Quality of Life Scale, permit comparisons across disease categories and are used in evaluating systems of care.

The purposes of measurement scales include diagnosis, prediction, and evaluation. Diagnostic scales (such as the Cambridge Mental Disorders of the Elderly Examination or CAMDEX) collect a wide variety of information from self-report and clinical ratings, and process these using algorithms that suggest differential diagnoses. Prognostic measures include Health Risk Appraisal measures (which estimate the odds that a person with certain characteristics will die from specified causes within a given time frame), or methods such as the Functional Assessment Inventory, which estimate whether a patient will be able to live independently in the community following rehabilitation. Finally, evaluative indices measure change over time and are used to indicate the impact or outcomes of care. This category forms by far the largest group of instruments, and includes both generic and disease-specific outcome measures.

Measurement scales may be grouped into rating scales and questionnaires; there is also the distinction between health indexes and health profiles. Cutting across these categories, there is the distinction between subjective and objective measures. Rating scales refer to methods in which an expert, typically a clinician, assesses defined aspects of health; an example is the Hamilton Rating Scale for Depression. In self-assessed measurement scales, set questions are answered by the person being rated. Both are examples of subjective measures, in which human judgment (by clinician or patient) is involved in the assessment. Objective measures involve no judgment in the collection of information (although judgment may be required in its interpretation). Subjective health measurements hold several advantages. They extend the information obtainable from morbidity statistics or physical measures by describing the quality rather than merely the quantity of function. They give insights into matters of human concern such as pain, suffering, or depression that cannot be inferred solely from physical measurements or laboratory tests, and they do not require invasive procedures or expensive laboratory analyses. Measures of either type can be summarized as a single index score, or as a profile of scores. Supporters of the profile approach argue that health or quality of life is inherently multidimensional and scores on different dimensions should be presented separately. Conversely, index scores allow ready comparisons of the impact of different medical conditions, useful, for example, in economic evaluations of health care.

Shopper and all (2000) researched the Delphi method which was used to determine the health priorities in one Swiss canton. The opinion of various groups concerned, either as health professionals or as representatives of the general population, was gathered to identify the health determinants and health problems perceived as most important, to clarify the reasons for these choices, and to recommend interventions to be undertaken in order to improve the situation in the identified priority areas. Five panels, including health professionals as well as selected leaders of community groups with no direct involvement in health, were given the opportunity to reply to two rounds of questionnaires. There findings indicated that there was a high convergence of opinion on health determinants and problems to be given priority between panels and between the first and second round. Priorities identified are mainly physical problems (cardiovascular disease, respiratory and breast cancer, AIDS, injuries

due to road accidents, chronic back pain), psychosocial disorders (depression, suicide, violence in the family, stress), and problems of substance abuse (alcohol and tobacco). Unemployment and social isolation were chosen because of their perceived impact on health. Through the identified priorities and the proposed activities, a new vision of health emerged which gave more importance to psychosocial problems and the social environment. In this context, health promotion is seen as essential, acknowledging that sustained change in individual behaviors can only occur if the social and cultural context is taken into consideration. The results of this survey show that the Delphi method is a useful tool to reach consensus on health priorities and corresponding activities among a variety of actors.

Additionally, health measurement scales have become firmly established as a routine part of evaluating new therapies and in planning care. Newer and more sophisticated techniques for scale development are being applied to health measurement scales. Future advances will include further consolidation of the repertoire of health measurement scales, including the replacement of some outdated methods with newer instruments. Population norms are gradually being developed that will permit fuller interpretation of scores against reference standards.

3. Effective Participatory Community Health Care Research

In recent years, national organizations, funding agencies and researchers have called for a renewed focus on an approach to public health research that recognizes the importance of social, political and economic systems to health behaviors and outcomes. This renewed focus is due to many converging factors, including our increased understanding of the complex issues that affect health, the importance of both qualitative and quantitative research methods, and the need to translate the findings of basic, interventional, and applied research into changes in practice and policy. Additionally, key concepts of successful community-based research beyond the aspect of location, including prevention focus, population-centered partnerships, multidisciplinary cooperation, and cultural competency must be included.

As a result, participatory models of research, in which communities are actively engaged in the research process through partnerships with academic institutions, have become central to the national prevention research agenda as articulated by the Institute of Medicine, the Centers for the Disease Control and Prevention (CDC), Research America, Partnership for Prevention, the Public Health Foundation and others. These models re-enforce that in order to effectively implement participatory community based research the following strategies must be adhered to: (1) an identification of the current community health issues, (2) a renewed emphasis on the importance of community based health research and (3) the involvement of an active community in the role of research.

4. Selected Case Studies using Community Based Initiatives

Many community based initiatives place women at the center of their population's health activities. The World Health Organization (WHO) has developed a program which enhances the role of women and their roles in the health of families, as well as their status. Of course some countries have gender determinations which have an adverse effect on the health of females. These include social structure and beliefs, community autonomy for women and marriage customs. Countries have supported the WHO programs have had many positive outcomes including; an increase in governmental collaboration, an increase mobilization of communities and an increase in community development as measured by increases in monetary opportunities, health, sanitation, nutrition, water, maternal care, family planning, and empowering of community resources (both realized and potential).

Developing community health education strategies is an important program component. Health education should be aimed at the behavioral changes in individuals and the community. There is no standard for the delivery of health care messages. Conventional methods have had great impacts in developed, city and urban areas but limited efforts in rural communities. A few reasons for the limited impacts to the rural communities are due to decreased literacy rates, interest, internet accessibility and availability. The conventional delivery methods have included posters, pamphlets and electronic media.

There is a great deal of differentiation in global delivery of health care education messages. One such case is Kalajatha, a popular, traditional art form of folk theatre depicting various life processes of a local socio-cultural setting, is an effective medium of mass communication in the Indian sub-continent, especially in rural areas. Ghosh and all (2006) researched the Kalajatha medium which was used to carry out a community-based health education program for bio-environmental malaria control. In India, there is no standard format for delivering health education messages on malaria. Many conventional methods, such as posters, pamphlets, hoardings, and electronic media, have limited effects on the rural community due to low literacy rate. Thus, Kalajatha has been used experimentally as a medium of mass communication to assist the malaria control program. In December 2001, the Kalajatha events were performed in the evening hours for 2 weeks in a malaria-affected district in

Karnataka State, southern India. Thirty local artists, including 10 governmental organizations and NGOs, actively participated. Kalajatha has proven to be an efficient medium for mass communication in the Indian sub-continent especially in rural area. Using this medium, an operational feasibility health education program was carried out for malaria control. The results were amazing in that the exposed residents had a significant increase in knowledge and a change in attitude regarding malaria and its control methodologies, especially on bio-environmental measures.

Opiyo and all (2007) found that the involvement and active participation of communities has been identified as a key factor for success of malaria control in rural environments. Opiyo and all evaluated community factors relevant for participatory malaria control on Rusinga Island, western Kenya. Results from the study's focus groups and interviews showed that, though malaria is considered one of the major threats to life, there is little effective knowledge of malaria prevention, including causal knowledge of the transmission cycle. Misconceptions about malaria and distrust of messages from the outside were consistent with those found elsewhere in Africa. Despite the fact that there is a lot of knowledge in the community, this knowledge was distorted and causal connections were not understood, raising questions about the quality of past health education messages and whether they might be more confusing than helpful if not implemented in a cultural sensitive way.

The 2007 Malaria Journal investigated the impact of information and communication network (ICN) density variables on malaria death probability. Mozumder researched pooled data from 70 different countries in order to construct a panel dataset of health and socio-economic variables for a time span of 1960-2004. Researchers used this dataset to study the effects of the density of telephone lines and television sets in malaria-exposed populations to see if ICN density improves the effectiveness of existing resources for malaria prevention and treatment. They found that well-communicated information and collective decision making can lead to faster and superior home based treatment. Through the use of ICN, sources of shared information on treatment of disease can be made available to a community as a kind of social capital, and communities with high social capital have proven to have lower disease rates.

5. Meeting Community Health Care Needs for selected Populations

The Population Reference Bureau (PRB), highlights the poor-rich health divide that leaves more than 1 billion people worldwide excluded from both essential basic care and the benefits of advances in health and medical technology because of their extreme poverty. Key factors that contribute to these persistent health inequalities include lack of responsiveness by health systems to the needs of the poor; low quality of care; and the reality that public spending on health (justified on equity grounds) benefits non-poor groups more than the poor. Few countries have taken measures to track progress in reducing socioeconomic disparities in health.

Recommendations for addressing these inequalities include: shifting the focus of public health from the majority to meet the specific needs of poor and vulnerable groups, focusing on the preventable and treatable diseases which most affect poorer people; adopting a comprehensive pro-poor approach to policy in the long term, influencing the many social and economic determinants of health disparities by improving access to vital services and opportunities, and by reducing discrimination and isolation. How individuals, households and communities respond to risks and manage shocks holds direct implications for the poverty-health linkage.

Resilience relates strongly to asset shocks and the livelihood approach can be helpful for the community and families. This traces the pathways through which ill-health reduces productivity and increases the burden on households, leaving them less able to withstand shocks. Also important however is the nature of the shock itself, (its duration, severity, and repetition), and who is affected (child, adult) and their role within the household (dependant, productive, reproductive, care). Responding to vulnerability is critical in reducing the poverty-ill-health linkage. Focusing on curative care is important but so are more wide ranging support and livelihood promotion.

Many countries have formulated poverty reduction strategies (PRSs) to ensure that government, local stakeholders and development partners coordinate their efforts. Measures to improve health are an important aspect of a strategy to reduce poverty. Pro-poor health strategies give priority to common problems for which cost-effective interventions exist. Implementing these interventions can be difficult in certain locations, particularly where government administration and governance are weak.

Studies have shown that there is evidence that the distribution and degree of inequality in economic welfare has a direct impact on community health. In a book entitled, Medical Apartheid," by Harriet Washington, a journalist and research scholar in ethics, the history of blacks and medical research thus leading to years of distrust for the medical profession. Despite a history of medical research that has left many blacks with mistrust of the health

system, Washington in the book says blacks' participation in clinical research is necessary, writing, "African Americans desperately need the medical advantages and revelations that only ethical, essentially therapeutic research initiatives can give them."

According to the 2000 report on "Children's Health Needs" by The Center of Health and Health Care in Schools, there were 70.4 million children 17 or under in the US (26 percent of the population). 64 percent were white, non-Hispanic; 16 percent Hispanic, 15 percent African-American, 4 percent Asian-Pacific, and 1 percent American Indian/Alaskan Native. There findings indicate that (1) Minorities have less access to mental health services and are less likely to receive needed care, (2) Minorities in treatment often receive a poorer quality of mental health care, (3) Minorities are underrepresented in mental health research, (4) Tooth decay (or dental caries) is one of the most common chronic childhood diseases 5 times more common than asthma and 7 times more common than hay fever, and (5) Children living in poverty suffer twice as much tooth decay as their more affluent peers, and their disease is more likely to be untreated.

In 2003, there were approximately 36 million individuals over the age of 65 in the United States. In 2010 the "Baby Boomers" will begin reaching 65 years, and by 2050 there is expected to be 87 million individuals over the age of 65 or 20% of the total US population. The symptoms of chronic illness are the elderly is insidious and often ignored by the client and their family, relating the changes to the normal aging process. Medscape Today "Community-based Elder's Health Needs", findings indicated that community-dwelling elders reported that up to 26% of community-dwelling elders did not report changes in their health or functional status to their primary care providers until significant changes occurred, leading to an acute episode with significant morbidity or mortality. The implications is to develop a screening tool in the geriatric examination are monumental. It is evident that both healthcare providers and reimbursing agencies must find cost-effective innovative methods for providing cost-effective quality healthcare to the aging population.

The American Nurses Association (ANA) identified that an efficacious means of controlling the escalating healthcare costs was to utilize advanced practice nurses (APNs) to provide primary and preventive care to the aging population. The Advance Practice Nurses established that 60% to 80% of basic healthcare needs can be provided by the APN at significant savings. If controlling costs is the issue, then providing care and special treatment of elders must meet a basic level and must include a screening assessment.

6. Summary

Community –based health care priorities should address the needs of an informed community and will detail how this community will bear these health impacts. These community defined priorities will assist in comparing options, and suggest proper recommendations to maximize the community's health benefit from a proposal or program.

Many disadvantaged groups are often exposed to more health hazards and are also more susceptible. The way health impact assessment is carried out may also be important in improving overall equity in health. Community health assessment can be done in a participatory way, which involves people and allows them to express their views. This can itself raise self esteem, particularly in disadvantaged communities. Addressing health inequalities in community health assessment should bring several important benefits. It should raise awareness of inequalities in health and of their causes; it should lead to better decisions that help prevent health inequalities arising in future; and it should produce decisions which are based on sound management methods and principals.

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