

HEALTH NEEDS ASSESSMENT

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هذه الدراسة اتخذت طريقة الصحة العامة للتعرف باختصار على مفهوم تقييم الرعاية لصحة المجتمع ودور المؤسسات الأكاديمية في تقييم الاحتياجات الصحية وكذلك دراسة الاحتياجات الصحية لمنطقة جازان بالمملكة العربية السعودية .

طرق منهج الدراسة اشتملت على تحليل أدبيات البحث والخبرات من دراسة الاحتياجات الصحية لمنطقة جازان بالإضافة لتقارير ودراسات هيئة الصحة العالمية.

المشاكل الصحية في منطقة جازان، من وجهة نظر المبحوثين/المشاركين، تشمل قلة العاملين الصحيين ، زيادة انتشار الأمراض المعدية والتدهور في صحة البيئة . على المؤسسات الأكاديمية ووزارة الصحة العمل سوياً لاستحداث طرق جديدة خاصة في مجال رفع الوعي الصحي حول محاور الصحة العامة و زيادة التمويل للدراسات المجتمعية على مستوى المنطقة والمستوى القومي.

دراسة تقييم الاحتياجات الصحية الأساسية لمنطقة جازان التي يستعرض نتائجها هذا التقرير يمكن أن تستخدم كمعلومات أساسية ومرجعية لصياغة السياسات ومن ثم التخطيط و تصميم التدخلات ذات المردود الملائم للتكلفة. يمكن أن تستخدم المعلومات كذلك في تطوير المناهج ولدراساتها في كليات الطب الموجهة للمجتمع.

الكلمات المرجعية: الإحتياجات الصحية، التقييم ، جازان

This paper takes a public health approach to briefly examine: (i) the concept of community health care need assessment ; (ii) the roles of academic institutions in health needs assessment ; (iii) Jazan study to address the health care needs in Jazan region, Saudi Arabia . The methods included an analysis of the literature, distillation of experience from the recently Jazan Health Need Assessment Survey, and WHO reports. The most important perceived health problems in Jazan region are shortage of health care providers , increased prevalence of communicable diseases and poor environmental health. The academic institutions , Ministry of Health and other health care institutions need to work together to look for innovative approaches, especially to increase the awareness of the society on public health issues, and give more support to increase national and regional funding for community based studies.

The findings of the assessment of the health needs of Jazan presented in this review could be utilized as a baseline and reference information for policy formulation, subsequent planning and cost effective intervention programs. It could also be utilized for the curriculum development or review for a community oriented medical schools.

Key Words: Health Needs, Assessment, Jazan.

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INTRODUCTION

"Health needs assessment" is a process of determining the health and health care needs of any given population or sub-group in an area. It is a complex task requiring epidemiological expertise, the ability to work across organizational boundaries as well as an understanding of, and an

ability to engage with all appropriate population groups. The "health needs assessment" process needs to take account of the diversity within these populations. Health improvement programs provide opportunities to engage in such assessments in the national and regional population.

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Research has shown that preventive programs can improve community health when properly implemented.¹ There are examples of successful prevention programs in local communities. However, many still have significant challenges, which demonstrate a gap between science and practice. Though in the United States, there are such common strategies (training—programs), to address this issue, outcomes are still unsatisfactory. Building the capacity of the community to implement high quality prevention can help communities achieve positive health outcomes, thereby narrowing the gap between theory and practice. While there is ample research on the efficacy of evidence-based programs, there is little on how to improve community capacity to improve the quality of prevention. What is being proposed is a new model of research: one based on Community Science that improves the latest theoretical understanding of community capacity and evaluates technologies designed to enhance it.

In most developing countries, the evolution of health services has been dominated by Western models of health care². These have rarely taken into account how local people explain illness, seek advice, or use traditional healing methods. The emphasis has been on hospitals and curative care rather than on trying to address local health needs equitably and effectively. Since the Alma Ata declaration on primary health care, more attention has been given to increasing coverage of basic services and preventing common diseases. However, the bias in resource allocation towards secondary care and urban areas remains.

Health care needs are changing and new challenges arising from chronic diseases and HIV infection must be faced. Better coverage of preventive and essential healthcare services has led to greater emphasis on improving the quality of health care to ensure the efficient and judicious use of scarce resources. For example, infant mortality has fallen dramatically in the past two decades through such interventions as oral rehydration for diarrhea and immunization programs. With fewer children dying, there has been greater emphasis on the need to tackle the causes of infant and child morbidity. The size of families can be reduced with the improvement of the availability of family planning.

If health services are to respond to the changing health needs of their local populations, planners and managers would need useful and timely information about the health status of these populations. Some of this information can come

from routine data sources or may be collected from large, one-off population studies. Some information can be obtained from community surveys.

COMMUNITY HEALTH NEED ASSESSMENT

Community appraisals describe approaches to needs assessments that emphasize the involvement of local people. A confusing number of terms describe similar methods: rapid evaluation methods, rapid appraisal methods, rapid community surveys, rapid rural appraisal, relaxed rural appraisal, participatory rural appraisal³. The development of rapid appraisal methods in the 1980s came in recognition of the time consuming and rigid nature of traditional epidemiological and questionnaire surveys. Experience with these appraisal methods showed that when they were perfectly executed, they provided valuable, reliable, and timely information on health status, knowledge, attitudes, and behaviors. More recently, emphasis has been placed on encouraging people to participate in their own appraisal (for example, participatory rural appraisal)⁴.

The hardest part of any needs assessment is translating the results into policies and practices to elicit and (or) initiate beneficial change. The involvement of health care workers in techniques such as rapid or rural appraisal will encourage changes at an individual level. Local workshops can provide opportunities to review the lessons learnt with other health care workers. If this change is going to be sustainable and adaptable, then the appraisal should be a continuous process with ongoing feedback. Implementation of strategic changes can be facilitated if the policy-makers themselves are active in the process. Active collaboration between communities and researchers is critical in developing appropriate public health research strategies that address community concerns.⁵

Partners for Healthy Communities conducted interviews with community members from the ethnically diverse neighborhoods of Central and Southeast Seattle. The results suggest that effective community-researcher collaborations require a paradigm shift from traditional practices to an approach that involves: acknowledging community contributions, recruiting and training minority people to participate in research teams, improving communication, sharing power, and valuing respect and diversity.

ACADEMIC APPROACH TO COMMUNITY HEALTH

Academic institutions have always found it a challenge to persuade community members to participate in academic research projects⁶. Starting an open dialogue is usually the critical first step. To begin this dialogue with community members in Dayton, Ohio, in 1999, staff from Wright State University decided to organize a community forum, "The History of Health in Dayton." The forum was intended as the first project of a new research organization, Alliance for Research in Community Health (ARCH), established with federal funding from the Health Resources and Services Administration in 1998. ARCH was created as a bridge between the Department of Family Medicine of Wright State University School of Medicine and the Center for Healthy Communities, a health advocacy and service organization committed to health profession education. ARCH's mission is to improve the health of citizens of Dayton through research involving community participation. Through ARCH, community members help researchers define priorities, resolve ethical issues, refine procedures, and interpret results.

Guidelines for participatory research, proposed by the National Primary Care Research Group in 1998 adopted by the alliance, emphasize the importance of open dialogue among researchers, subjects, academics, and community members. The initial response to the forum was enthusiastic, with a majority of community residents expressing interest in attending future presentations.

Barker (1999) described the different ways in which academics and community groups may work together, including academic/practice/community partnerships. Several principles of practice for engaging in these research partnerships are presented followed by a description of how these principles have been put into operation in a family violence prevention program⁷. The principles presented are: (1) Identification of the best processes/models to be used based on the nature of the issue and the intended outcome; (2) Acknowledgement of most of the differences between community input and active community involvement; (3) Development of relationships based on mutual trust and respect; (4) Acknowledgment and honoring of the different agendas of partners; (5) Consideration of multi-disciplinary approaches; (6) Use of evaluation strategies that are consistent with the

overall approach taken in the academic/practice/community partnership; and (7) Awareness of partnership maturation and associated transition periods. The limitations of these principles and their application in various settings are discussed.

While many members of the public are deeply interested in and supportive of the three traditional missions of academic medicine--education, research, and clinical care, they also want to know what academic health centers (AHCs) are doing to improve the overall health of their communities⁸. Much is already being done toward this goal, but improving communities' health in a measurable way requires a far broader agenda. AHCs must bring together the approaches of medicine and public health, and need to form partnerships with many other players. This agenda must proceed despite all the other challenges that AHCs face. The author reviewed illustrative and emerging national, state, and local efforts, both public and private; in both medicine and public health, in partnerships with individuals and institutions in the larger community. He also highlights the physician's role in assisting stakeholders' efforts to deal with health threats from the environment, and offers advice on how such efforts should proceed. He closes by emphasizing the importance of community-based research in learning about the health status, problems, and resources of particular communities; and presents a set of principles for such community-based research.

Lillie-Blanton and Hoffman (1995) examined strategies and methodological issues for researchers to consider when conducting community-based research within a racial/ethnic minority group.⁹ Members of minority communities have considerable skepticism about the health care system and researchers who work under its auspices. To facilitate quality research, it is necessary to build a mutually beneficial partnership between the community and researchers. Suggested strategies for accomplishing this, such as searching for information on the social and political forces shaping the community and developing the community's capacity to undertake research of this type, are described. Methodological issues include the importance of community input in defining the minority population group and its leadership, the benefits and limitations of conducting comparative analysis, and the need for measurement tools and techniques that are culturally and socially appropriate. Minority and non-minority researchers must make a concerted

effort to understand and have respect for a community whose culture, values, and beliefs may differ.

PRIMARY HEALTH CARE IN SAUDI ARABIA

A recent study reported that nearly a quarter of the children in Riyadh contracted diarrhea during the two weeks preceding the data collection, giving about six episodes of diarrhea per child per year¹⁰. Diarrhea was more common in children over 6 months of age, in children who had no vaccination or follow-up cards, and in those who were being cared for by friends and neighbors as their mothers were working outside home. The mothers of the affected children were young, married before 25 years of age, with 2–6 years of normal schooling. During diarrheal episodes, about 25% of mothers stopped or reduced breast-feeding, 11.3% reduced the volume of fluids given to their children, and 22.7% of the children were fed less solid/semi-solid foods. Mothers used oral rehydration salt in more than 40% of diarrheal episodes and unprescribed antibiotics were used in 17% of cases. The mothers who were not taking appropriate action included young mothers with low level of education and those working outside the home.

In response to the need for comprehensive, cost-effective and cost-benefit services, there have been major changes in the health care system of Saudi Arabia since the early 1980s. This followed government's commitment to the Alma Ata declaration in 1980. Currently, there are nearly 1800 governmental PHC centers distributed evenly throughout the country, 1707 of which belong to the Ministry of Health (MOH)¹¹. The remainder are run by various health care providers, including universities, the military, the National Guard and the Security Forces. Entry into the health care system is through PHC centers. More than 180 secondary and tertiary care hospitals serve as referral units and each group of PHC centers is attached to a hospital.

HEALTH NEED ASSESSMENT: PRIMARY HEALTH CARE APPROACH

A number of themes emerged as important to the impact of health needs assessments on policy and planning¹². These included careful design, strict methodology, decisive leadership, good communication, involvement and the ownership of the work from relevant stakeholders, support from senior decision-makers, appreciation of

political dynamics, and engagement with local priorities, availability of resources and, finally, an element of chance. These themes can be categorized broadly into contextual factors, and quality or robustness of the work. Although this study has demonstrated that there are conditions under which needs assessment are more likely to be effective in terms of its influence on policy and planning, it is clear that it is not central in the decision-making process of the health service, for it remains vulnerable to a range of factors over which those responsible for implementation of the decisions have little or no control.

It has been reported that quality of life was unrelated to satisfaction of services, but was strongly associated with unmet needs of mental and physical health, and of rehabilitation.¹³ The quality of life decreased as needs increased. Needs are also strongly related to diagnosis and cognitive functioning. Furthermore, more intensive care settings were provided as needs increased.

Primary health care can meet the needs of the population in an equitable way only if these needs are known. The WHO Regional Office for Europe convened a working group to examine the consequences of the assessment of the health needs of the population at the district level for primary care.¹⁴ The group discussed a useful model for community-oriented primary care (COPC), which involved the delivery of programs tailored to community needs. The group considered needs assessment as the basis for allocating resources, prioritizing the needs of community health programs, planning and evaluating these programs; in the third area, they stressed the need to develop further the model for a community-oriented planning and evaluation cycle (COPEC).

The impact of community needs assessments was used in South Australia where the data was collected from regional health planning officers.¹⁵ The needs assessments were found to vary from the regional to the locally driven. Approaches ensured local involvement, but the process was slower and more arduous for the planner. The use of community health needs assessment was useful, but for greater impact these should not be broad, but focused on feasible changes that the health services could support. Other priority-setting techniques, such as marginal analysis, should be used to determine where it could also be used to determine where maximum health gains are possible.

An area of controversy of need assessment is that which asks the question "whose need"? Several researchers stress the importance of collecting both quantitative and qualitative data from a variety of sources to ensure that community needs are examined from a variety of perspectives^{16,17}. Other studies have described four types of need that should be considered in needs assessment. These include comparative, normative, expressed and felt.^{18,19} Indicators of normative needs can be seen as the "vision of health" or benchmarks or targets that are described by experts, task forces, commissions, etc. Indicators of comparative needs include information about the determinants of health for the population as they compare with benchmarks of other populations and other areas of health. Expressed needs are described as information about demands or as 'wants to put into action' related to health gathered from key informants, survivors, advocacy groups, government directives, etc. Felt needs are wants or attitudes related to personnel or the community's visions of health, e.g., "we want to feel safe walking alone at night" The proposed framework is based on indicators of needs for each of these dimensions.

Doctors, sociologists, philosophers, and economists all have different views on what needs are.²⁰⁻²² In recognition of the scarcity of resources available to meet these needs, health needs are often differentiated as needs, demands and supply. Need in health care is commonly defined as the capacity to benefit. If health needs are to be identified then an effective intervention should be available to meet these needs and improve health. There will be no benefit from an intervention that is not effective or if there are no resources. Demand is what patients ask for; it is the need that most doctors encounter. General Practitioners play a key role as gatekeepers in controlling this demand, and waiting lists become a surrogate marker with an influence on this demand. Demand for a service from patients can depend on characteristic of the patient or on the media interest in that service. Supply is the health care provided. This depends on health interests of the professionals, the priorities of politicians, and the amount of money available. The demand and supply of needs overlap. This relationship should be an important consideration when assessing health needs.

A lead article which introduced the community survey concept, detailed reasons for a community survey, and outlined mythological

framework for completing such a study.²³ The article defined a community survey as "a survey of population researched by health services provider within a defined geographic area such as hospital service area". The most critical step in conducting a community survey is for the manager to specify what types of information are needed and how that will be used. To assess health needs of a rural community, it is also important to include a cross-section of health care providers in the "information identification process" to avoid focusing only on services offered by major health care providers (i.e. the local hospital).

Recently, a study reported the awareness of General Practitioners (GP) and their experiences of needs assessment.²⁴ Most GPs were unfamiliar with the concept of needs assessment, and there was no evidence that needs assessment had influenced commissioning decisions. Most of the GPs argued that it was not a core activity. Besides, they lacked training in the relevant skills. The motivation and attitude of the majority of the GPs is a barrier to needs assessment in primary care. GPs require more resources and training if they are to bear this responsibility.

Over the past 20 years, governments throughout Western Europe and North America have encouraged patients to contribute to the planning and development of health care services.²⁵ In England and Wales, the involvement of patients is central to current efforts to improve the quality of health care. Underlying these changes, is the belief that involving patients leads to more accessible and acceptable services and the improvement of health and quality of life of patients.

Rapid appraisal can be used to involve the public in the identification of local health needs and supplement more informal methods of assessing needs.²⁶ Rapid Appraisal is best used in homogenous communities. The process of rapid appraisal can give structured orientation to new workers in the community. Rapid appraisal can be adapted to introduce medical students to the concept of community diagnosis as a natural adjunct to individual clinical diagnosis.

Palmer identified the need for reproductive health care in a community affected by conflict in Southern Sudan.²⁷ The study comprised interviews with key informants, in-depth interviews, and group discussions. Secondary data were collected. Reproductive health in general, and sexually transmitted diseases in particular

were important issues for these communities. Perceptions of reproductive issues varied between service providers and community leaders.

To improve the health of any population or subgroup of that population requires coordinated efforts of many partners in health. These are the health authorities, the local authorities, local business, the voluntary sector, the pharmaceutical industry, and organized groups of the society.²⁸ Improving health is far more complex and long-term than the provision of health care, as some of the root causes of ill health (poverty, housing, lifestyle, employment and crime) are beyond the control of health services.

JAZAN HEALTH NEED ASSESSMENT

Occupying an area of about 16000 km² and with a population of about one million (1421 census), the Jazan region is in the south-western region of Saudi Arabia. It has three geographically distinct zones: the mountain zone which is 2000-2500m above sea level with >300mm of rain/year, the hill zone, 400-600m above sea level with <300mm of rain/year, and the coastal zone that is <400m above sea level with very little rain. The region is intersected by perennial streams.

As a result of its special climate and topography, poor sanitation, inadequate water supply and a middle to low socio-economic status of some communities in the mountainous areas, water borne and water associated diseases such as malaria, schistosomiasis, leishmaniasis, hepatitis, typhoid etc. are prevalent. Tuberculosis is highly endemic. Health statistics from the area indicate high rates of morbidity, mortality & low health care coverage compared to other regions of Saudi Arabia.

The people of Jazan are mostly livestock farmers. The close association and proximity of man and animal has resulted in endemicity of such zoonotic diseases as brucellosis. Jazan city is only 70km from the Yemen border. The 1999 epidemic of the Rift Valley Fever occurred at the border areas as a result of the movements of the border population and the introduction of animals from neighboring countries.

The recent Ministry of Health annual report²⁹ has shown that the prevalence of infectious diseases in Jazan region as follows: TB 147/2322 (6.3%), Bilharzias 18.35%, Malaria 67.48 %, Hepatitis A 100/2250 (4.4%), and measles 26/617 (4.2%). There are 135 Primary Health Care Centers (PHCC), and 13 hospitals, only two of which are specialized.

Academic public health plays an important role in teaching and research, as well as supporting service departments of public health at national and local levels.³⁰ The academic-service is a continuum and is essential in providing high quality public health delivery for the nation.

Concerns with health conditions of the population have become a part of a wider concern with the direction of development of human resources. All social and economic development is underpinned by the development of the country's human resources to their full potential. Thus, the training of Saudi personnel in various health fields is important for the success of the Kingdom's plans for health development. The Jazan College of Medicine was therefore, established in 2001.

The expected mission of Jazan Medical College is to raise the standard of health in this area by training health personnel who would be involved in community programs to combat health problems, and work with other health agents in the region in preventive and curative programs. The Jazan Medical College conducted a comprehensive health survey of Jazan³¹ which involved three techniques: key informant interviews, focus group interviews and a household survey.

The key findings were as follows: (1) the most important perceived health problems in Jazan were the shortage of health care providers, and an increased prevalence of communicable diseases and poor environmental health, (2) high level of awareness of communicable diseases with weakness in prevention, (3) most frequently reported chronic conditions: hypertension, bronchial asthma, diabetes mellitus and joint diseases, (4) diarrhea in around 15.6 percent of children, and malaria treatment of 35.9% at the health facility, (5) an estimated 33% of the rural and 37.7% of the urban are current cigarette smokers, and the 61.7% current Khat users in rural compared to 45.7% in the urban areas. The overall Khat use is 48.7%. The data and information generated from this study will be utilized as a baseline and reference information for policy formulation, subsequent planning and cost effective intervention programs, and will be important in the development of the curriculum of Jazan Medical College. It will also help decision makers in the Jazan region in the planning of any future health program.

Though a combination of quantitative and qualitative approaches is recommended in health

service research, it has advantages and disadvantages. The incorporation of the view point of the general population through development in the health service has the potential of improving the relevance and impact of research and the quality of subsequent services provided.^{32,33}

A very recent study documented important lessons learned from the use of community key informants in needs assessment surveys to identify health problems and needs. The study suggested the means to control and prevent major health problems in the region of Jazan. The study also emphasized the role of the Jazan medical college in providing skilled manpower and expertise to improve the health care service delivery in the region of Jazan.³⁴

CONCLUSIONS AND RECOMMENDATIONS

The historical development of health services has been dominated by Western models of health care and health beliefs.³⁵ These have rarely taken into account how local people explain illness or seek advice. However, the assessment of health needs is not simply a process of listening to patients or reliance on personal experience and anecdotes. It is a systematic method of identifying unmet need and making changes to fill this need. In public health, it is the need of the population, which perhaps could be that of a district or perhaps a section of the population such as women of childbearing age, which have to be assessed.

In conclusion: the academic institutions, Ministry of Health, and other health care institutions should cooperate in looking for innovative approaches to increase awareness of the broader social and public health issues, and increase funding from both regional and national sources to support community based studies.

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