

## Assessing the Health Needs of a Community through Participatory Research

**De Villiers MR** - Department of Family Medicine, University of Stellenbosch, PO Box 19063, Tygerberg, 7505

- Tel 021 9389449
- Fax 021 9389153
- e-mail: mrdv@gerga.sun.ac.za

**Dreyer Y** - Bishop Lavis Community Health Centre, Department of Occupational Therapy, University of Stellenbosch

**Howes F** - Department of Social Work, University of Stellenbosch

**Koornhof HE** - Bishop Lavis Community Health Centre, Department of Human Nutrition, University of Stellenbosch

**Mentoor H** - Bishop Lavis Community Health Committee

**Rhode A** - Bishop Lavis Community Health Centre, Department of Physiotherapy, University of Stellenbosch

**Statham S**, Department of Physiotherapy, University of Stellenbosch

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### Abstract

**Introduction:** Each community has unique needs for health care based on the experiences and problems of that community. The health care provider must have an understanding of the needs of the community that s/he is serving. Needs assessment at the community level is of particular importance in the identification of problems presenting at the primary care level. The assessment of these needs must not only be based on objective indicators, but also on the very real requirements of that population. This necessitates a process of participatory research, where the community forms an active partner in the identification of needs.

**Method:** A household survey was conducted in a peri-urban community using community members as field workers, and assessing needs on a multi-disciplinary level.

**Results:** 337 Questionnaires were analysed. The total surveyed population comprised 1612 people. The demographic profile is that of a poor, urbanised, ageing, Afrikaans, religious community, with a high unemployment figure, dependent on pension schemes and state health services. A significant number regard their health as poor. A 9% acute morbidity was reported. 72,1% of respondents smoke. The study found a high self-reported prevalence of chronic diseases of lifestyle.

**Conclusions:** Peoples' perception of their own health status influence their decisions about if, when and where health care will be sought. The low self assessed health status is a strong indicator of the need for health care in this community. The prevention, management and rehabilitation of chronic diseases is an important priority for this community. They are in need of holistic care encompassing physical, spiritual, social, economic and ecological dimensions of the community.

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### Introduction

The planning and delivery of health care services to a community must be based on the needs of that community. Needs assessment at the community level is of particular importance in the identification of health problems presenting at the primary care level. Community-based health workers regularly accumulate huge amounts of

information on their patients, mostly only available as raw data, and which does not reflect true needs.<sup>1,2</sup> Service providers must have an understanding of the unique requirements of the community that they are serving, and should therefore view the assessment of health needs as an integral part of clinical practice.<sup>3,4,5</sup>

The exclusive use of objective indicators such as mortality and morbidity rates in the establishment of health needs is regarded as authoritarian and prescriptive.<sup>6</sup> Age distribution, literacy rates, unemployment figures, habits and disease profiles are all factors that influence the health status of a



population. Also, the people in a community must be allowed to express their own needs. The World Health Organisation regards community participation as an important concept in the development of strategies for health care delivery.<sup>7,8,9</sup> This implies that the community identify needs as well as resources, prioritise services, and assist in the development of health programmes. Prioritising of needs is essential and forms the balance between quality of care, quality of life, and those services which can be delivered.<sup>10,11</sup> For the researcher this signifies a participatory research process, where the researchers and community form an equal partnership.

The aim of this study was to obtain an holistic profile of the health care consumer system of Bishop Lavis which can serve as the basis for planning and participatory management of health care delivery from the Bishop Lavis Community Health Centre, a public health care facility. A multi-disciplinary team approach incorporating community participation was utilised.

Bishop Lavis is a suburban community on the Cape Flats, with a population of 40 000 people. The Bishop Lavis Primary Health Care Project comprises a partnership between the public health services, the community and the University of Stellenbosch.<sup>12,13</sup> The Bishop Lavis Community Health Committee was formed from this partnership. This committee requested a survey of the needs of the community so that the integration of the Bishop Lavis health services can be based on the needs of the community. It was decided to obtain a comprehensive overview of the community, given the close relationship between a health care system, the environment, and the consumer system. This article reports on the demographic and medical results of the questionnaire only.

## Method

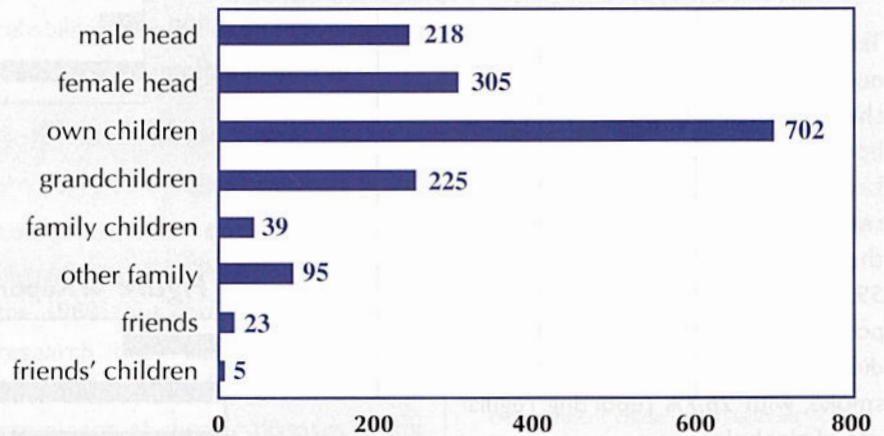
A household survey was conducted within the municipal borders of Bishop Lavis in the spring of 1995. The different types of housing in the region were stratified into clusters in collaboration with a statistician and community representatives, adapting an existing Medical Research Council sample frame. A 10% simply randomised sample of dwellings was taken from each cluster.

A structured multi-disciplinary questionnaire was used as the research instrument. Sections on the demography of the population, dietary habits, acute and chronic illnesses, reported disabilities, the use of alcohol and tobacco, and health seeking behaviour, amongst others, were included in the questionnaire. The questionnaires were completed by trained field workers during an interview with a respondent from the household. The respondents were adult persons who identified themselves as the head or the substitute for the head of the household. Completed questionnaires were reviewed by the researchers for completeness, and follow-up visits were done to those households whose questionnaires were not completed correctly.

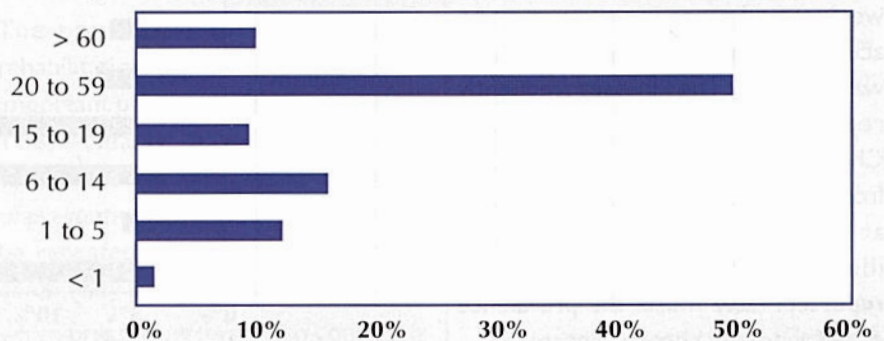
Community participation in this survey included: (a) the identification of the need for a health needs survey by the community themselves; (b) participation in the planning of the survey; (c) a community member serving on the core research team; (d) community members recruited and trained as fieldworkers; and (e) the results discussed in collaboration with the community to identify priorities for the health of the community.

## Results

**Figure 1: Composition of surveyed households**



**Figure 2: Age distribution of people in community survey**





A total of 337 questionnaires were analysed, reporting a total number of 1612 people in the study, with an average of 5,3 people per household. 54,3% were female. Figure 1 demonstrates the extended families comprising the surveyed households, and Figure 2 the age distribution. 69,4% of households have been living in this community for more than 10 years. Afrikaans is the home language of 84,6% of the households. 12,5% of the people indicated that they are not able to read or write, and only 1% have post-matric qualifications. 95,3% of the respondents belong to a church. Unemployment was reported in 42,5% of those 16 years and older. From these 22,4% reported being medically unfit for work, and a further 26,7% received some kind of pension. The industrial sector provides work for 39,5% of the respondents, and 38,3% are unskilled labourers. A significant amount of respondents chose not to answer the question on income, however the 1991 census showed that a third of the community has an income of less than R1000 per month.

Table I demonstrates that a significant number of the respondents regard their health as poor. 75,4% of households make use of the Bishop Lavis Community Health Centre. In response to the question on whether they were satisfied by the service, 59,6% of the respondents answered positively, 10,7% said no, whilst the rest did not respond. 72,1% of respondents smoke, with 26,7% reporting regular use of alcohol.

Acute illness was defined as the occurrence of an illness during a two week period preceding the survey. An acute morbidity of 9% (150 persons) was reported. The illnesses frequently reported are shown in Figure 3. Chronic illness was defined as an illness from which the person had suffered for at least twelve months. Figure 4 illustrates the chronic diseases reported. Table II lists the prevalence of self reported chronic illnesses.

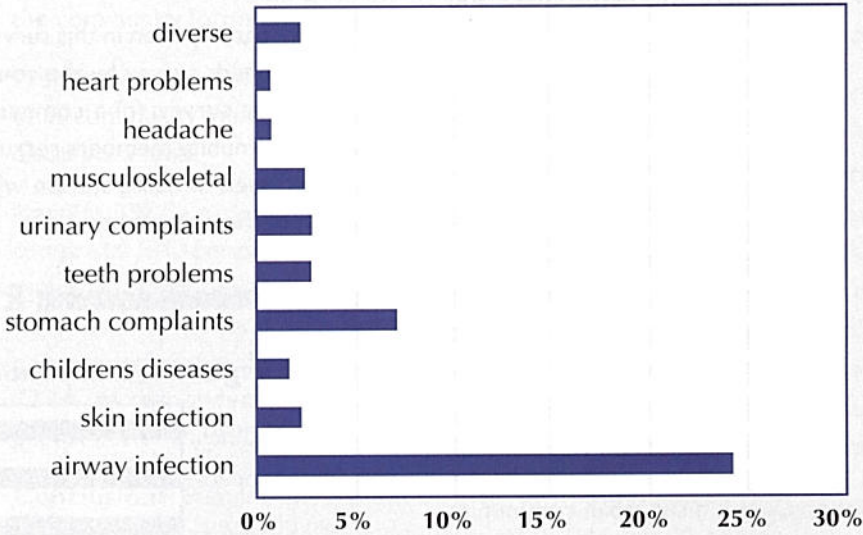
**Table I: Self assessment of respondents on health status**

| Health Status | Respondent | Household |
|---------------|------------|-----------|
| excellent     | 13.9%      | 12.2%     |
| good          | 32.6%      | 42.7%     |
| average       | 28.2%      | 23.7%     |
| reasonable    | 13.6%      | 8.3%      |
| poor          | 10.1%      | 2.7%      |
| no response   | 1.5%       | 10.4%     |

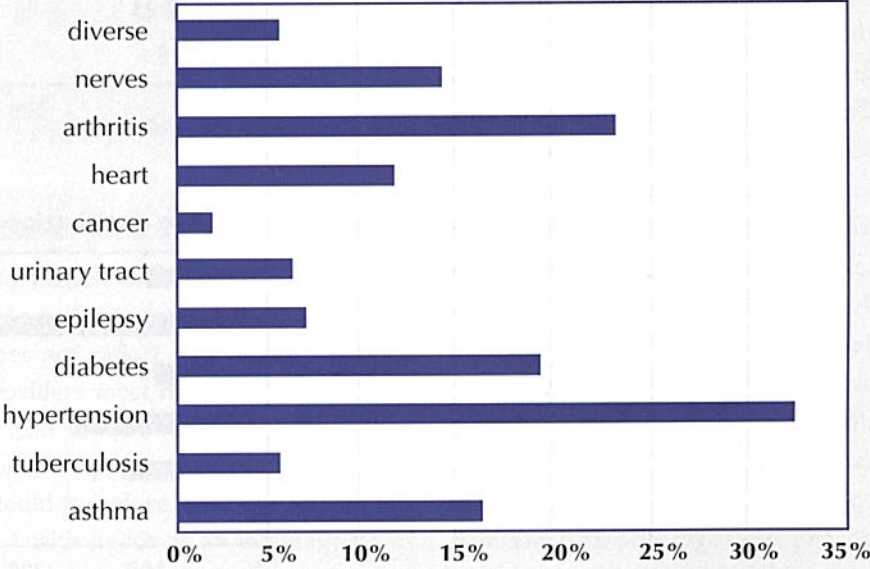
**Table II: Prevalence of self reported chronic diseases (per 1000)**

|              |    |
|--------------|----|
| hypertension | 65 |
| arthritis    | 47 |
| diabetes     | 39 |
| asthma       | 33 |
| 'nerves'     | 29 |

**Figure 3: Reported acute illnesses**



**Figure 4: Reported chronic illnesses**





The use of a multi-disciplinary, participatory approach as well as a strict epidemiological method resulted in many positive effects, but also caused unique problems. The latter are worthwhile to report as they provided a valuable learning experience. We were able to collect comprehensive demographic information, however the process was expensive, cumbersome, and time consuming. The lack of qualitative data also diminishes the value of the findings. The multi-disciplinary questionnaire provided an extensive profile of the community, however using a team approach resulted in a lengthy planning process. Community participation contributed significantly to the out-come of the project, and ensured community ownership of the re-sults. Our experience thus illustrates that methodology for needs assessment necessitates careful consideration.<sup>14,15</sup>

The survey results reflect a clear picture of the Bishop Lavis community. The community reports to be rather religious, with a majority of females, and an ageing population. Women's health issues are thus of importance to this community, as well as the effect of geriatric disorders on health care provision. The community is poor, with household size, literacy levels and unemployment figures similar to results of studies done in poor suburban populations.<sup>16,17,18</sup> This also explains the huge dependency on state pensions.

The low self assessed health status is a strong indicator of the need for care, and confirms the findings of other South African studies.<sup>19,20</sup> Self assessed health status correlates with a wide range of health and socio-economic variables. Peoples' perception of their own health status influences their decisions on if, when and where health care will be sought, and should be taken into

consideration by service providers.<sup>21,22</sup>

The most common acute illnesses reported were airway diseases and gastro-intestinal problems. Although seasonal changes influence patterns of disease, our spring survey findings correlate with studies in similar communities.<sup>23,24,25</sup>

This community is largely urbanised resulting in continuing exposure to the effects of urbanisation. There is a high self reporting of chronic diseases. 53% of deaths in the Western Cape in 1990 were due to chronic diseases of lifestyle. It is known that there are approximately 200 000 diabetics, asthmatics and rheumatic sufferers in the Western Cape, with a further 400 000 hypertensives and patients with chronic obstructive airway disease.<sup>26,27</sup> Our results highlight the high percentage of households affected by these diseases, with potential lack of income, as well as a burden of care. This implies a greater need for health services, rehabilitation facilities, and government subsidies for the disabled.

A significant risk for chronic disease is the high percentage of smokers in the community. Our findings are much higher than the CRISIC study done in the 1980s, but confirms more recent research in the same pop-ulation.<sup>28,29</sup> Smoking, together with the high prevalence of chronic diseases in this com-munity, points to a huge health education task for health workers.

The prevention, management and rehabilitation of chronic diseases is an important priority for this community. They clearly have a need for comprehensive care where the value of preventive and promotive care must be repeatedly emphasised. A healthy community is a complex living organism which breathes, grows, and is constantly

changing. This confirms the holistic nature of health, and recognises the interaction between the physical, spiritual, social, economic and ecological dimensions of life.<sup>30</sup>

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