Access to health care in
Namaqualand: Klein Nourivier
by
D. E. Whittaker and F. M. Archer

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OBJECTIVE

The objective of the study was to form an overview of health and health care needs in a rural coloured group, looking particularly at access to care and how limited access might adversely influence health and more specifically how poverty might limit access to necessary care.

INTRODUCTION

In order to see how health was affected by access to health care in an area that receives little research attention in a population that is very much part of the Cape yet relatively forgotten, and also to see how poverty, if present, affected health, we went to Klein Nourivier in the Kamiesberge-Leliefontein Coloured area, Namaqualand.

We stayed with two people whom my research assistant had come to know well during her field work on the ethnobotany of the region. Her knowledge of and acceptance by the people of the district was essential to our joint survey and her subsequent work on my survey there.

I decided that this survey would attempt to construct an overview of health and health care in the area with information from as many sources as possible with an emphasis on the residents' subjective view of their situation. I felt that this would give an overview complete enough for us to form an opinion on the health care needs of the region.

We completed an initial survey in two days which allowed us to interview 25 homes, and to interview a nurse in a clinic at Leliefontein Mission Station serving this group. The survey population were scattered in the area and this activity involved considerable travel to families living in isolated stockposts which limited the number of families interviewed. We thanked people for their cooperation with small donations of tea, sugar and other produce.
During my assistant's subsequent visit it was possible to interview appreciably more families in Klein Nourivier on a Saturday because many people had come into the village to attend the funeral of a child who had drowned in the dam nearby.

**The Nama people**

An idea of the history of the people and how they come to be there is essential to an understanding of this region. Here I am indebted to L E Webley (1) for my information on the history of the region.

The little Namaquas - derived from the Nama group of the Khoi-Khoi peoples of Southern Africa - are thought to have inhabited this area as early as 1500 years ago. They have retained many aspects of their traditional lifestyle. Prior to 1700 they were thought to have occupied a territory as big as 47,000 km² bordered by the Olifants River to the South, the Kapenberge to the North, the coast to the East and Bushmanland in the East. The Kamiesberg has traditionally been the home of a large Nama group. It is believed that the Kamiesberg was the residence of the Namaquas during the summer months, the people leaving during winter for a warmer climate.

Contact with Europeans broke down traditional grazing patterns, the first colonist to be offered a grazing concession being H Beukes in 1760. In 1772 Governor van Plettenberg gave a piece of land at Leliefontein to the Namaqua captain Wildskut for his people. By 1797 the Namaquas had lost most of their cattle and now owned mostly sheep or goats. Many Namaquas left the area to join the Great Namaqua north of the Orange River. A remnant in the Kamiesberg invited the Rev B Shaw of the London Methodist Missionary Society to settle among them. He established a Mission Station called Leliefontein in the Kamiesberg in 1816, and the herdsmen congregating round the church and school began to live a more
settled life. Grain cultivation was introduced by the missionary to supplement their diet of meat and milk. By 1824 fully 400 acres of former grazing land was under wheat. In 1854 the people of Leliefontein were granted a 'ticket of occupation'. The coloured area was now formerly bordered and regarded by the Cape Colony as being inalienable. The coloured area has fallen under the Department of Coloured Affairs since 1952. The Nama in the coloured area have been stock farmers and have a tradition of keeping goats and sheep on outlying stockposts or communal grazing. A policy of closer settlement is being implemented; land which was communal is being allocated to individuals to farm. The stock farmers are losing their former grazing rights and are increasingly obliged to live permanently in Nourivier and to seek employment on farms, the diamond diggings or wherever else they can find it. The pattern of semi-subsistence living is thus changing rapidly and it is likely that many people who cope now will be hard hit as they lose their livelihood and are forced to seek work in these hard economic times. The coloured area is now inhabited by descendants of Nama-speaking herders who have intermarried with European and Baster people.

Health care in Leliefontein Communal Reserve

Preventive health services

The responsibility for administering preventive health services formerly fell under the Namaqualand Divisional Council. The local authority, in this case the Management Board for the Leliefontein Communal Reserve, was responsible for collecting one-eighth of the cost of the service from the community. The Board was unable to raise this sum and in consequence has not been able to avail itself of funds (approximately R15 000 late in 1983) allocated to it by the State Health Department for the provision of preventive health services. The Coloured Management Boards requested the
State Health Department to assist them to improve preventive health services. Services which include immunization, T.B. treatment, follow up and contact tracing, mental health services and family planning. Much church resistance has been noted to the latter. The State Health Department acceded to this request and has planned an improved service coordinated by a community health trained nursing sister based in Vredendal. She will undertake circuits at 6 weekly intervals to supervise and assist nursing staff at Leliefontein and at This service was instituted in December 1983 and can be expected to improve coverage appreciably in outlying areas.

METHODS

We obtained our information by direct observation of the area as a whole, by means of household interviews against a free-form interview questionnaire (Appendix I). We also noted the domestic hygiene and practise in the homes we visited. We relied heavily on my colleague's extensive knowledge of and good relations with the people of Nourivier. We attempted to reach as many households as possible.

I was able to obtain corroborative information on the health of the village from the Nursing Division of the State Health Department and from the Kamiesberg district nurse who is based at the Leliefontein Mission Clinic. This information was an invaluable objective adjunct to the subjective information derived from the questionnaires.

RESULTS

1. Survey in general

We conducted household interviews in 65 of the total of 74 households and obtained complete health information on 37 households. These households comprised 259 people which accounted for % of the estimated
total for Nourivier which was (100%). An age-sex breakdown was obtained for 25 households which gave the following figures:

**AGE/SEX ANALYSIS OF 25 HOUSEHOLDS**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>12</td>
<td>9</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>10-19</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>20-29</td>
<td>6</td>
<td>8</td>
<td>14</td>
<td>15.6</td>
</tr>
<tr>
<td>30-39</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>12.2</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6.7</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>8.9</td>
</tr>
<tr>
<td>60-69</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>6.7</td>
</tr>
<tr>
<td>70+</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Total 39 51 90 100

Male:Female ratio 39:51
Ratio M:F 0.76

Mean household monthly cash income for 35 households - R194 (range R0-R1035 p.m.)

Seven individuals in 35 households were covered by some form of health insurance.

2. Objective health data

Estimated total population
On treatment for active P.T.B. 1
Treatment for T.B. prophylaxis 1
Treatment for S.T.D. 1
Treatment for Mental Illness 1
Number of children 0-5
Number of children 0-5 below 3rd percentile N.C.H.S. ( %)
Number of children under age of 5 having had full immunisation
Environmental status

1. General impression: Environment clean, very little detritus. Rubbish is generally collected, what can be burnt is burnt and what cannot be burnt is buried. This correlates well with traditional Nama methods of household cleanliness.

2. Water: Klein Nourivier has a developed water supply whereby water is pumped by windmill from the river bed and stored in two closed reservoirs from whence a piped supply is delivered to the village via 13 stand pipes of which 2 are for general public use, 10 are in the yards of private homes and 1 is in the schoolyard. At the time of the survey, the water supply had been fouled by a dead bird getting into the system. There was a delay in getting the system cleaned, which appeared to be due to local managerial failure and an inability to rectify a quite simple fault locally. The water scheme was built in 1982 and the people do not yet seem to have accepted and adapted to this. This does seem to reflect a pattern of resistance to 'development' and a weakness in the managerial infrastructure necessary for the easy introduction of new technology. People were distressed at the fouling of the water, some refused to use it, quite understandably, ascribing recent episodes of diarrhoea and vomiting to this contamination. At the time of the repeat survey the water system had been cleaned and clean water was available again. The water supply is controlled, and is open between 6 p.m. and 8 p.m.

In the areas not supplied by the pumped storage scheme, use is made of river beds and springs. Shallow protected wells are dug near water sources and a good supply of clean and pleasant tasting water is obtained. These wells are covered when not in use and the surface water is discarded before water is drawn. People in Namaqualand have a clean
protective approach to water use and are fully aware in a pragmatic sense of domestic hygiene - they are clean.

3: Sanitation: In general use the bush 'gaan klippe toe' for defaecation but there has been a recent trend in the village to build pit latrines. These are 12 feet deep and cost + R55 to have one built. Seventeen such pit latrines have been built in the village. Of 40 households where information was obtained on sanitation, 21 used the bush and 20 used pit latrines in the village. A further instance of innovation in this society. In many ways paralleling the tendency to permanent residency here.

4. Food preparation: All cups and plates and rinsed with hot water before use and are hung up in the cooking hut. Cooking vessels are scoured with sand and water after use. The main health hazard in the cooking hut is the smoke from the fire. Food is kept cool by putting it on the roof at night and in the coolest part of the house during the day. We were given meat by one family which was cold to the touch and which had been stored in this way.

Health questionnaire

This questionnaire was designed to elicit information on:

1) Reported illness in the preceding 2 months
2) The action taken for this illness
3) The nature, source and cost of medicines used
4) The pattern of chronic illness in the community
5) The curative services available and the use made of them
6) The use of traditional medicine
7) Common sicknesses
8) People's view of their health and health care needs
Individual episodes of illness reported in the past 2 months:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper respiratory tract infection</td>
<td>6</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>14</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Source of care for reported illnesses in the past 2 months:

<table>
<thead>
<tr>
<th>Source of care</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self care</td>
<td>12</td>
</tr>
<tr>
<td>General practitioner</td>
<td>6</td>
</tr>
<tr>
<td>Clinic nurse</td>
<td>1</td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
</tr>
<tr>
<td>Chemist</td>
<td>1</td>
</tr>
<tr>
<td>Nothing</td>
<td>1</td>
</tr>
</tbody>
</table>

Households reporting medicine usage in the past 2 months:

31 individuals in 37 households

Sources of medicines:

<table>
<thead>
<tr>
<th>Source of Medicine</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store bought</td>
<td>17</td>
</tr>
<tr>
<td>Dispensed by G.P.</td>
<td>8</td>
</tr>
<tr>
<td>Bush medicines</td>
<td>3</td>
</tr>
<tr>
<td>Dispensed by nurse at clinic</td>
<td>3</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
</tr>
</tbody>
</table>

Preparations mentioned:

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesics</td>
<td>21</td>
</tr>
<tr>
<td>Cough mixture</td>
<td>6</td>
</tr>
<tr>
<td>Antacids</td>
<td>1</td>
</tr>
<tr>
<td>Asthma preparations</td>
<td>1</td>
</tr>
<tr>
<td>Laxatives</td>
<td>1</td>
</tr>
<tr>
<td>Counterirritants</td>
<td>3</td>
</tr>
<tr>
<td>Colic preparations</td>
<td>2</td>
</tr>
<tr>
<td>Hypnotics</td>
<td>1</td>
</tr>
<tr>
<td>Cardiovascular preparations</td>
<td>1</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>1</td>
</tr>
</tbody>
</table>
Preparations mentioned (continued)

Tonic 1
Anti inflammatory 1
Vitamin preparations 1
Gargle 1
Soothing ointment 1
Bossiesmedisyne 5
Assorted proprietary preparations from store 27
Hollandsegeneesmiddels (Dutch Medicines) (average cost 55c/20 ml bottle)

Households reporting 1 hospital admission during the previous year

For major illness - 6 individuals in 37 households
For delivery - 5 individuals in 37 households

Households reporting a member receiving treatment for chronic illness

Hypertension 4
Chronic lung disease 1
Arthritis 1
Myocardial infarction 1
Rheumatic heart disease 1
Pulmonary tuberculosis 1
Unspecified gastrointestinal disorder 1

Curative Services
1) Leliefontein Mission Station Clinic staffed by an SRN. This clinic is 26 kms from Nourivier and the sister here dispenses medicines for minor ailments at cost price. A few people from Nourivier consult the clinic sister for minor ailments mainly in children. The district surgeon who is a general practitioner in Garies calls once a week and brings a limited range of medicines with him. People from Nourivier prefer to see him at Garies where he has a wider range of medicines.
He also calls weekly at Kamieskroon.

2) General practitioners in Garies and Springbok: A visit to the G.P.
in Garies entails a 90 km journey via Kamieskroon (round trip 180 km).
Three members of the local population have cars and undertake to trans­
port people to Garies where they wait for them until they have seen the
doctor. Mr Barend Hein takes 4-6 people 2 to 3 times weekly. He will
take urgent cases at night. The trip takes 1-1½ hours, one way, and he
charges R40-45 for a round trip which is shared amongst those who go
to Garies. He also brings back bodies from Cape Town when deaths have
occurred in the city. G.P. fees are R7,00 for consultation and treat­
ment.

People do elect to see general practitioners in Springbok which is
further away (110 km) and for which the round trip fee is R60,00.

Pregnancy and delivery
The pattern of deliveries is changing now. The local traditional
birth attendants (TBA's) still exist and will still deliver people
when called on to do so but are wary of practising their art as they
have been told that it is illegal to do so. Most primiparous women
are delivered in hospital at Garies, whilst multiparous women are
generally delivered at home by a registered midwife (vroedvrou). In
deliveries when complications are anticipated and caesarian section
is likely, women are admitted to Springbok hospital which is better
equipped to cope with complicated deliveries.

Estimated costs of

1) Ante natal care at hospital (Garies) relying
on lifts and the bus R85,00
2) Hospital delivery conducted by G.P. at Garies

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery</td>
<td>40,00</td>
</tr>
<tr>
<td>Consultation</td>
<td>5,00</td>
</tr>
<tr>
<td>Admission</td>
<td>8,00</td>
</tr>
<tr>
<td>Hospital</td>
<td>80,00</td>
</tr>
<tr>
<td>Transport</td>
<td>40,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>173,00</strong></td>
</tr>
</tbody>
</table>

3) Home delivery conducted by registered midwife

<table>
<thead>
<tr>
<th>Status</th>
<th>Cost (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married woman</td>
<td>20,00</td>
</tr>
<tr>
<td>Unmarried woman</td>
<td>25,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45,00</strong></td>
</tr>
</tbody>
</table>

4) Traditional midwives do not charge for their services but donations in kind are generally given.

**Accidents and injuries**
In cases of injury, the police at Kamieskroon are contacted and an assessment is made of the severity of the patient's condition. If considered serious, the police will collect the patient and take the patient to Springbok. On other occasions when transport is available the patient is taken to Kamieskroon, the police are alerted and the traffic police escort the patient to Springbok or to Garies.

**Chronic illness**
Patients under surveillance at clinics at major hospitals make their way by train to Cape Town to attend special clinics at Tygerberg Hospital.

**Tuberculosis**
Patients with pulmonary tuberculosis are admitted to the SANTA Hospital at Springbok for an initial 120 days' therapy before being discharged for outpatient treatment. One 22 year old female from Nourivier is currently in hospital for P.T.B. Her sister aged 13 is on INH prophylaxis.
Schoolteacher's observations

The primary schoolteacher observed that skin infections and ringworm are common. She administers INH daily to one child on INH prophylaxis who has an elder sister hospitalised with T.B.

Use of traditional medicine - bossiesmedisyne

A wide variety of herbal medicines are still in use and are generally used for colds, influenza, mild intestinal infections and for sores. They are generally prepared as an infusion by certain older people familiar with the technique.

There was considerable hesitation in divulging the use of these preparations in the presence of a doctor as it was considered that it might be illegal. Plants in common use now include:

- Salie (Salvia spp)
- Koorsbos
- Jantjie Bèrend (Sutherlandia frutescens)
- Ballerja (? Mentha longifolia)
- Ysterhout
- Dagga (wilde)
- Stinkblaar

They are commonly used for colds, 'flu and other febrile conditions as well as for colic and gastrointestinal upsets, and also kidney complaints, backache, toothache, nosebleeds and childhood illnesses.

Traditional medicine

One herbalist practises in the area and people consult him for a range of common complaints which include upper respiratory tract infections, gastrointestinal disorders and common childhood illnesses. He uses a combination of 'bossiesmedisyne' and 'boeremedisyne'. People reward him according to their means, some pay in kind giving a donation of meat or produce, whilst others pay R1 or R2. Some cannot pay and are
treated free-of-charge. He is experienced in the treatment of conditions like febrile convulsions (which he distinguishes from epilepsy), for which he recommends an infusion of dried powdered Jackal liver with kalmoes and ground wild garlic together with placing the child in a bath of cold water.

He acquired his expertise from other herbalists and recognises his limitations, referring conditions he cannot treat to the G.P. in Garies. He would appear to be a valuable resource in the informal health care sector. It was not possible to assess the degree of success or failure. For colds or 'flu he prescribes an infusion made from a pinch each of the dried leaves of:

a) voëlent
b) sand salie (Salvia lanceolata Lam)
c) baster olienhout (Datura stromonium)
d) jantjie bêrend (Sutherlandia frutescens R. Br.)
e) koorsbos (Dodora viscosa Jacq. var. angustifolia Berth)

People's views on their health care needs

The people interviewed were asked for their opinion on what was necessary in Nourivier to improve health care. Their views included:

1) The need for a resident nurse, trained to give medicines.
2) Some training in first aid, the informant volunteering that people rush to the doctor with trivial complaints.
3) The training of local people in how to manage common illnesses. People are often uncertain of what to do and afraid to move the patient.
4) Some would like the resumption of weekly calls by a G.P. as was practised by a doctor until 1978. This was seen as a valuable service at a reasonable fee.
5) Several commented on the distance they had to travel for attention, one poignantly remarked that 'death comes quickly'.

6) Not all respondents were forthcoming with their opinions. One older woman when asked simply said 'what can I say?'. An eloquent reply from people whose expectations are low and who exhibit stolid self-reliance.

DISCUSSION

Health care in Klein Nourivier is, in general terms, good. Health care is available when needed but the patient goes to the service and pays to get there. The cost is high relative to income and this comparatively high cost limits the use made of services for minor conditions. People here still use traditional remedies for certain conditions and consult a herbalist for common complaints. This trend being more likely in older members. This pattern of self-care is reflected in the use of locally bought proprietary preparations, many of which are traditional 'boeremedisyne'. These remedies are widely resorted to in the first instance by people wanting care for minor illnesses. For more severe illness recourse is had to G.P.'s in Garies. Of interest is the fact that people appreciated the visiting G.P. services - there still appears to be a place for 'free enterprise' medicine of this type especially where the service is not exploitative and the G.P. will travel to regions to which other people are reluctant to travel. Preventive services though logistically difficult to implement, are well supplied and coverage is good.

Self-care

The element of self-reliance in this population is in my view a great asset and one on which much could be built. It is quite possible that
informed self-care could be encouraged and medicine made available for a comprehensive range of common complaints with guidelines for the recognition of more serious illness for which self-care would be wrong. The primary school teacher could, in collaboration with a clinic nurse and with some instruction, treat the conditions that the children have. She ably supervises the INH prophylaxis that one child receives and could easily do more.

At the time of the initial survey one infant was recovering from a recent bout of gastroenteritis. The child had been rehydrated in hospital in Garies and sent home. The mother had put the child on the bottle and did not know how to clean the bottle or how to prepare the feed properly, neither was there sufficient cash in the house to pay for the milk powder the child needed. The child was again having loose stools and the mother needed help in caring for the child. A village health worker supervised by a visiting nurse would be ideally placed to assist this mother and to prevent the child's readmission to hospital. On the second visit one child was noted to have extensive impetigo on the face - again a problem that a local health worker could have treated cheaply and effectively with some training and some medicine.

CONCLUSION

My overall impression is not of a community needing extensive curative health care services but of one where people who are severely constrained by limited income and 'arrested development' could benefit from simple primary care available in the village given by a trained and trusted member of the community.
ACKNOWLEDGEMENTS

This study was funded by and expressly conducted for the Carnegie Inquiry into Poverty. My thanks to the people of Nourivier for generously giving of their time, and to Hannah and Helletjie Beukes for accommodating us.
REFERENCES

SURVEY - ACCESS TO HEALTH CARE IN NAMAQUALAND

QUESTIONNAIRE

1. In the past month has anyone in the family needed treatment?

2. Who did you go to for treatment?

3. Have you used any medicines in the last month?

4. What sort of medicine was it?

5. Do you have any medicine here now?

6. Has anyone in the family been in hospital in the last year? If yes, what for?

7. Is anyone in this family on treatment for any special condition? TB - Epilepsy - Diabetes - High blood pressure - mental illness

8. Where do people go to have their babies?

9. Where do people go with a sick child with a minor illness?

10. Where do people go with a sick child with a major illness?

11. Which conditions do people use traditional medicines for?

12. What sicknesses are common here?

13. For what conditions is suitable treatment not available?
These papers constitute the preliminary findings of the Second Carnegie Inquiry into Poverty and Development in Southern Africa, and were prepared for presentation at a Conference at the University of Cape Town from 13-19 April, 1984.

The Second Carnegie Inquiry into Poverty and Development in Southern Africa was launched in April 1982, and is scheduled to run until June 1985.

Quoting (in context) from these preliminary papers with due acknowledgement is of course allowed, but for permission to reprint any material, or for further information about the Inquiry, please write to:

SALDRU
School of Economics
Robert Leslie Building
University of Cape Town
Rondebosch 7700