# Health status of hostel dwellers

## Part VI. Tobacco smoking, alcohol consumption and diet

M. A. RAMPHELE, M. HEAP


## Summary

**Smoking, alcohol consumption and diet were among the criteria selected to screen health status among the residents of the urban migrant council-built hostels of Langa, Nyanga and Guguletu outside Cape Town. Smoking patterns fell within the range found elsewhere. Problems associated with alcohol consumption were exacerbated by the overcrowded hostel living conditions. Dietary patterns were not examined against the concept of an 'ideal diet'. They are understood in the context of the poverty of the hostel dwellers and in the context of limited space available in the hostel environment for cooking and storage. In comparison with a home-based migrant population, the urban migrant hostel dwellers eat more frequently, more regularly and have more variety in their diet. In the light of the findings on the lifestyle indicators of the hostel dwellers, it is concluded that improved living conditions, rather than health education that focuses on individual behaviour, will have a greater impact on improvements in their health status.**


*S Afr Med J* 1991; **79:** 717-720.

A survey that screened the health status of the urban migrant hostel dwellers of Langa, Nyanga and Guguletu outside Cape Town was carried out in October - November 1987.[1] The lifestyle indicators — smoking, alcohol consumption and diet — included among the criteria[1] selected to measure health status are described here.

Tobacco smoking, alcohol consumption and diet were selected for study because they are three of a number of lifestyle indicators, said to have a deleterious effect on health status. They focus on individual behaviour and these indicators are often easily accessible to epidemiological research methodology. Tobacco smoking had received considerable research attention and is recognised as a major health hazard.[2,3] The use of alcohol was included at the request of the hostel dwellers, who perceive this to be a major problem and associate it with tuberculosis, which is also one of their major concerns. Diet is related to certain chronic conditions, such as diabetes and hypertension, which were part of the survey.[1] It is the focus of much of the 'health education' for these conditions. Diet has also been used as an indicator of health/survival strategies among an impoverished migrant population.[4]

The forced oscillation of the migrant hostel dwellers which provides the context for the interpretation of their health status has been described.[1] The majority of the male 'bedholders' (the individual in whose name the hostel bed is rented) (78%) are employed as unskilled labourers.[5] Hostel dwellers are poor. Average 'bedhold'[1] income is R100 per week.[5,6] This income supplies the needs of both town and home-base dependants.

**Department of Social Anthropology, University of Cape Town**
M. A. RAMPHELE, M.B. CH.B., D.P.H. (S.A.)
M. HEAP, M.A. (SOC. ANTHR.)

Accepted 8 Aug 1990.

Physical amenities are poorly supplied. The ratio of persons to working toilets is 133:1 and persons to taps is 117:1.[5] There is no hot water supply. Electricity is limited to light and has largely been installed at the hostel dwellers' own expense. Overcrowding is severe. An average of 2,8 persons share a single bed.[5] Up to 48 people can share a single living space. An estimated average living space per person has been calculated at 1,85 $m^2$.[7] Storage space for food, and cooking facilities, are minimal.

## Method

The analysis in this section is based on 420 returns on the adult health questionnaire. Respondents were asked whether they smoked or drank alcohol, the type, the frequency and the amount. Since excessive alcohol consumption is perceived as a major problem in the hostels, an effort was made to measure the extent of ethanol abuse objectively. Although not an exclusive measure, $\gamma$-glutamyltransferase (GGT) tests were carried out on volunteers.

Diet was investigated by asking respondents to describe their dietary intake for the day preceding the interview. The 24-hour recall method currently in use was not applicable for this study, since it screened health status and diet was but one of a range of health status indicators investigated in a single survey. A screen for health status may be 'thin' at the level of the investigation of the single health or disease index, which is the more common research convention in epidemiology, but it has the advantage of being economical in time and funding. A screen of a range of health criteria in a single survey provides a useful overview of health status (seldom available) in a relatively short space of time.

Thus, within the limitations of time and funding, the method used to investigate dietary patterns in this study overcame the problem of recall. It provided an overview of dietary patterns and makes no claims to have been an exact measure of nutritional content. It provided no more than a basis for a description of a sample of diets and must be seen as such.

Dietary information was analysed as follows. Respondents' descriptions of their diet over 1 day were examined for content. Content was examined by listing for each respondent the food type (meat, samp, bread, and so forth) by number of times taken in a day.

## Results

Fig. 1 shows the age and sex profile of the 420 returns of the adult health questionnaire on which these findings are based.

### Tobacco smoking

The overall prevalence of tobacco smoking was 28,3% (119/420). Prevalence among male subjects was 50,5% (103/204), and among female subjects 8,1% (16/198). Fig. 2 lists prevalence by age. Prevalence of smoking was high in the older age group (55,6% among those aged 70 - 79 years), among those aged $\leq$ 19 years (33,3%) and among the 50 - 59-year-olds (32,9%).

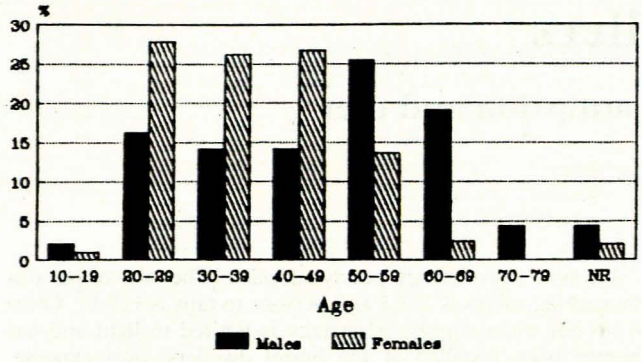


**Fig. 1. Age and sex profile from 420 health questionnaire returns (male subjects 204; female subjects 198) (NR = sex not recorded (18)).**

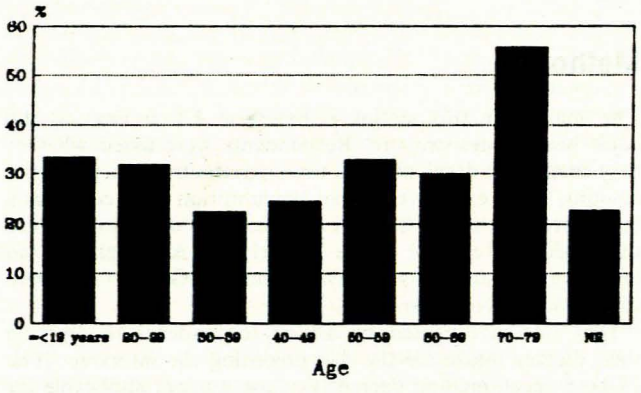


**Fig. 2. Smoking prevalence by age (NR = not recorded).**

Cigarettes were the preferred type of tobacco smoked (Fig. 3) — 74,7% of smokers (66,3% male subjects; 8,4% female subjects) smoked cigarettes, and 21,8% (19,3% male subjects; 2,5% female subjects) smoked a pipe and 3,3% took snuff (snuff was given in response to questioning on smoking type and is included for this reason). Cigarette smokers, on average, were younger (average age 39 years) than pipe smokers (average age 58 years). Snuff was taken by older women (average age 51 years) (2,5% female subjects; 0,8% male subjects). The majority of cigarette smokers smoked less than 10 per day (Fig. 4.).

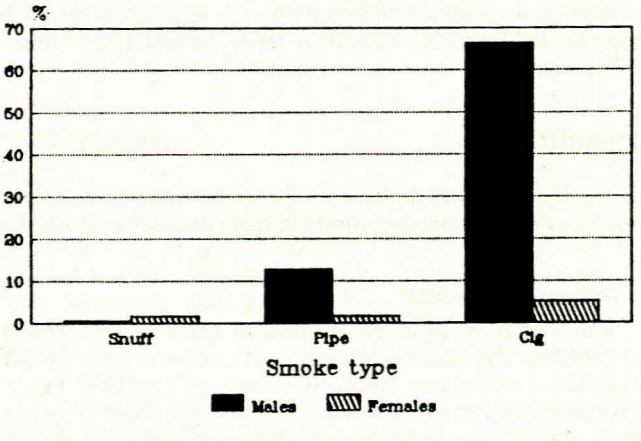


**Fig. 3. Type of smoking by sex (male subjects 204; female subjects 198).**

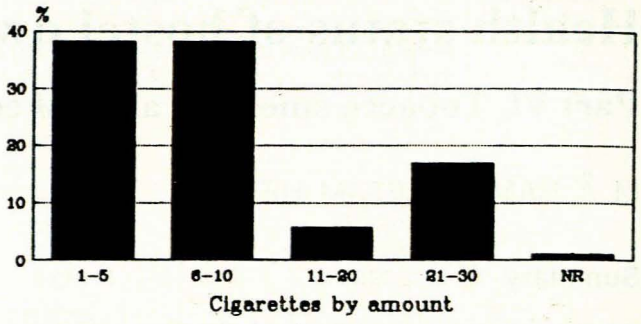


**Fig. 4. Percentage of cigarette smokers by amount smoked per day (*N* = 89) (NR = not recorded).**

## Alcohol consumption

Alcohol was consumed by 24,5% of the sample (103/420) — 42,6% of men reported drinking alcohol (87/204) and 8% of women (16/198). Alcohol consumption tended to increase with age (Fig. 5), the highest consumption being among 60 - 69-year-olds (36,4%). Beer and homebrew were the preferred types (Fig. 6 — beer and homebrew also predominate in the combinations).

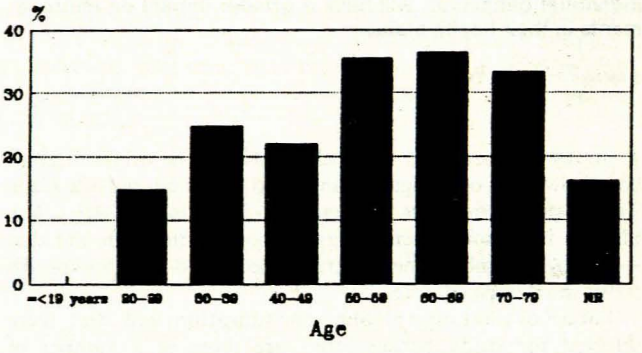


**Fig. 5. Prevalence of alcohol consumption by age (NR = not recorded).**

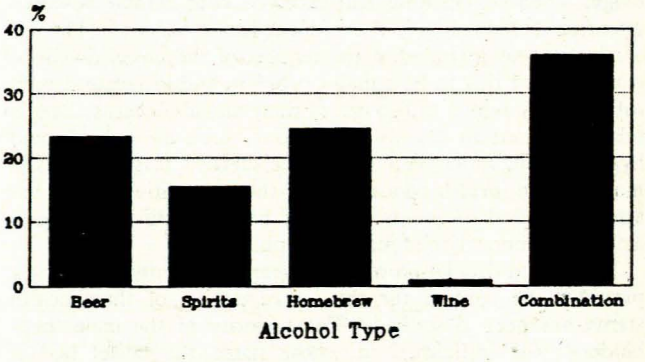


**Fig. 6. Percentage of alcohol consumers by alcohol type (*N* = 103).**

The distribution of the results of the GGT tests by age are shown in Fig. 7. Volunteers for GGT testing comprised 69% of the adult health questionnaire respondents (290/420). Overall, serum GGT levels of > 40 U/l were present in 13,1% of the sample tested (38/290 (18,5%) of men (25/135); in 8,4% of women (13/155)). In those subjects < 40 years of age serum GGT levels of > 40 U/l were present in 11,8% of the sample tested (14/119 (14,3%) of men (5/35); 10,7% of women (9/84)). For those > 40 years, overall serum GGT levels of > 40 U/l

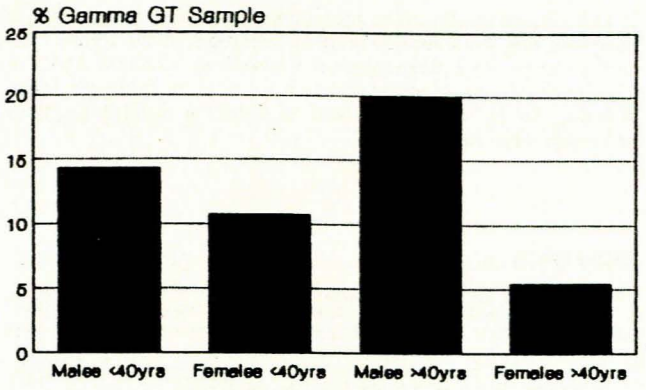


**Fig. 7. GGT test results ($N = 290$) (■ = serum GGT level > 40 U/l).**

were present in 14% of the sample tested (24/171) (20% of men (20/100); 5,6 % of women (4/71)).

## Diet

Fig. 8 lists percentages of the population partaking of the various categories of food. The majority had meat and staple carbohydrates. Staples, such as maize porridge, formed the bulk of the diet. Meat was eaten in the form of 'stews'. Sour milk is usually taken with maize porridge. The average bread intake for the sample was 1,7 slices per person per day. Bread (dry 'half loaf') formed a major part of the male workers' diet. Non-alcoholic beverages included tea and coffee (81,4% of the sample drank tea or coffee during the day, either black, with a synthetic creamer or with fresh milk); 27,1% had cooldrinks; and 8,3% had water. Sugar was taken with tea and coffee or on porridge. The average sugar intake for the sample was 2 teaspoonsful per day; and the average per cup tea/coffee, 1,4 teaspoons.

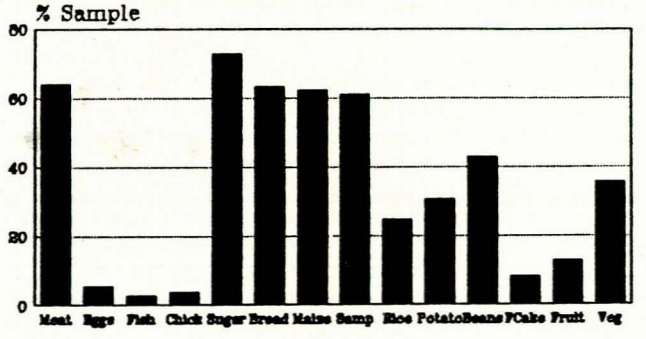


**Fig. 8. Percentage solid dietary intake for a sample of hostel dwellers ($N = 420$).**

# Discussion

## Tobacco smoking

As has been described elsewhere,[8] gender differences in smoking patterns are evident in the results. For studies that use categories based on a 'rural-urban' distinction,[9] the findings for a sample of migrant hostel dwellers, whose lifestyle is one of movement or oscillation between 'rural' home-base and 'urban' workplace, are not comparable. However, it was interesting to note that the percentage of smokers in this sample (28 %) fell within the range represented by findings for rural (21,4%) and urban (32%) areas.[9] It was also difficult to compare the findings in this sample of migrants with studies that used an index of urbanisation based on number of years in the city.[8] For a migrant household with access to the city via a cash-wage income earner, such as these hostel dwellers, the 'impact of the urban setting' is not 'sudden'.[8] Movement patterns of the migrant population suggest that contact with the urban workplace starts as early as childhood (even when influx control was strictly applied, migrant-worker child and female dependants visited the city — the significant numbers of pass law arrests in the western Cape are ample testimony). The findings in this sample suggested that smoking behaviour was possibly related to a combination of gender, access to income, age and the stress of unskilled labour.

## Alcohol consumption

For this sample more men than women reported using alcohol. Similar gender differences were reported for recent surveys in Port Elizabeth.[10–12] The percentage of male subjects (43%) using beer in Port Elizabeth was similar to our findings for overall consumption of alcohol by male subjects (42,6%). However, beer was the preferred type of alcohol taken by the hostel dwellers.

The frequency and amount of alcohol used was investigated in this study, but alcohol consumption was not graded. Figures on alcohol consumption are notoriously inaccurate and excessive alcohol consumption is difficult to quantify. Partaking of alcohol is not in itself a problem. It is said to be a problem when it is recognised as such by the individual and/or by others. It is recognised as a problem when excessive alcohol consumption is seen to interfere with social and vocational activity.

Individual hostel dwellers and the hostel dwellers as a group acknowledged that alcohol consumption was a problem. As mentioned above, the investigation of alcohol consumption was included in this study at the request of the hostel dwellers. Individuals who had lost employment because of excessive alcohol consumption requested assistance with their drinking problems during the course of fieldwork. Alcoholics Anonymous (AA) was contacted and expressed a willingness to assist. However, while language differences can be overcome, the lack of facilities, such as telephones, privacy, transport and postal services, which are basic to the success of AA rehabilitation programmes, present insurmountable obstacles.

GGT is not a sensitive measure of the effects of alcohol abuse. The GGT findings are also problematic in that they refer to a single sample population. There is no control group. Interpretation is difficult. The GGT findings suggest that the majority of the sample population did not appear to have liver damage from excessive alcohol consumption. Chronic alcoholism is not widespread, although there are indications of the effects of excessive alcohol intake among men aged > 40 years (James Davidson, Department of Chemical Pathology, University of Cape Town — personal communication).

The difference between perception and objective measurement raises the following issue for consideration. Overcrowding in the hostels, relative to greater Cape Town, is severe. In the low-income areas, the average number of persons per *room* (range 2,08 - 2,67)[13] is lower than the number per *bed* in the hostels. The difference between the hostels and the high-income areas of Cape Town is even more marked. Here average number of persons per room ranges from 0,47 to 0,66.[13] The dormitory-like design of each hostel does not allow for any measure of privacy.

It can be argued that it is the overcrowded living conditions that exacerbate the problem and perceptions. But by objective measure, alcohol consumption among the hostel dwellers is possibly similar to that of wider Cape Town society. Moreover, where there is little else, alcohol provides solace for people

brutalised by poverty and dehumanising living and working conditions.[14]

## Diet

The diet of the hostel dwellers was not examined against any concept of an 'ideal'.[15] The diet was seen in the context of the material poverty of the hostel dwellers and the physical impoverishment of the hostel living conditions. Facilities for the cooking and storage of food, for instance, were severely limited. Yet relative to the dietary intake of a 'rural' home-base migrant labour situation,[4] the diets of the hostel dwellers compared favourably. The hostel dwellers ate at least one meal every day. At the home-base, meals taken can be numbered by the week and not by day. Maize porridge is the staple in both locations. But the hostel dwellers' diets showed a variety not apparent in the home-base diets. The hostel dwellers included in their daily diet meat, eggs, milk (fresh, sour or powdered), chicken, fish and fresh fruit. These are expensive at the home-base and often unobtainable. At home, water is the main non-alcoholic beverage. In town people have tea/coffee and cool-drinks. A visit to town by dependants is associated with a better diet.[4]

An examination of the hostel dwellers' diet in the context of their living conditions and a comparison with the home-base is not to say the diet is 'good'. But given the living conditions, it cannot be improved upon by health educators.

## Final remarks

The alcohol consumption of the hostel dwellers was no worse than the rest of the population, nor were their smoking patterns. Like diet, the problems do not lie at the level of changing individual behavioural patterns, which is the thrust of the majority of health education packages. Their problems are their overall living conditions. As has been shown elsewhere, time and time again, it is improvement here that has the major impact on improved health status.

Our sincere thanks to the hostel dwellers for the opportunity to carry out this work and for their co-operation; to Dr Derek Yach of the Centre for Epidemiological Research in Southern Africa of the South African Medical Research Council; to Professor Johan Koeslag; to Hilton Trollip; and to Denham Trollip for their assistance with this study.

REFERENCES

1. Ramphele M, Heap M. Health status of hostel dwellers: Part I. Introduction, methodology and response rates. *S Afr Med J* 1991; **79:** 697-701 (this issue).
2. Uma Ram Nath. *Smoking — Third World Alert*. Oxford: Oxford University Press, 1986.
3. Yach D. The impact of smoking in developing countries with special reference to Africa. *Int J Health Serv* 1986; **16**: 279-292.
4. Heap M. Health and disease in two villages in south-eastern Lesotho: a perspective from social anthropology. Centre for African Studies, University of Cape Town Communications, No. 16, 1989.
5. Ramphele M. The dynamics of gender politics in the hostels of Cape Town: another legacy of the South African migrant labour system. *J S Afr Studies* 1989; **75**: 393-414.
6. Segar J. Living in anonymity — life in the hostels of Cape Town. Paper presented at the Annual Conference of the Association of Anthropologists of Southern Africa, Rhodes University, Grahamstown, 7 - 10 September 1988.
7. Thomas E. Conflicts and their resolution in Guguletu migrant hostels: a study of the role of the Western Cape Hostel Dwellers Association. Thesis for the degree B.A. Hons, Department of Social Anthropology, University of Cape Town, 1987.
8. Strebel P, Kuhn L, Yach D. Determinants of cigarette smoking in the black township population of Cape Town. *J Epidemiol Community Health* 1989; **43**: 209-213.
9. Yach D, Townsend GS. Smoking and health in South Africa. *S Afr Med J* 1988; **73**: 391-399.
10. Gatley SM. A report on a research project on patterns of use and attitudes towards the use and misuse of alcohol, dagga, mandrax and inhalants in the black community of Zwide, Port Elizabeth. Vista University, Department of Sociology, November 1988.
11. Gatley S. Community attitudes to alcohol and drug abuse in black urban townships. *S Afr J Sociol* 1989; **20**: 200-205.
12. Gatley SM. Community attitudes to alcohol and drug abuse in a black urban township. *Int J Med Law* 1989; **8**: 73-81.
13. Riley N, Schuman C, Romanovsky P, Gentle R. Spatial variations in the levels of living in the Cape metropolitan area. Paper presented at the Second Carnegie Inquiry into Poverty and Development in Southern Africa (No. 13), Cape Town, 13-19 April 1984: 14.
14. Ndaba N. Nutritional status of adults in Willowvale. Paper presented at the Second Carnegie Inquiry into Poverty and Development in Southern Africa (No. 209), Cape Town, 13-19 April 1984: 9.
15. Koeslag JK. What is normal? (Guest Editorial). *S Afr J Cont Med Educ* 1990; **8**: 319.