

Public housing, public health: health needs of public housing tenants

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Despite being ranked as one of the healthier countries, marked differentials in health status exist between population groups in Australia.¹ In Australia, as in other countries, socio-economic differentials in health status appear to be a generalised phenomenon, affecting both genders, almost all age groups, involve a wide range of health concerns, and appear to be either stable or increasing.^{1,2} Reduction of socio-economic health status differentials is a recognised health goal in this country.³

Attempts to reduce socio-economic differentials in health status have been constrained by questions of how to best identify and access socio-economically disadvantaged individuals.⁴ To remove this constraint, the following specific population groups that could be considered to experience socio-

economic disadvantage have been suggested: unemployed, elderly, single parents, members of particular racial or ethnic minority groups, and people with a disability.⁴ Considerable data support the lower socio-economic status and poorer health status of sections of these groups.¹

The public housing sector represents a potential setting for initiatives to improve the well-being of socio-economically disadvantaged individuals: it is the charter of this sector to assist such people,⁵ the existing public housing infrastructure provides a ready basis for disseminating services, and the delivery of such services by the sector is supported by the community and the sector itself.^{6,7} There is some evidence that health promotion initiatives can be effective in improving the health and welfare of public housing tenants.⁸

Abstract

Objectives: To determine the health needs of public housing tenants, measured in terms of self-reported health status, health risk factors and expressed need for health risk reduction intervention.

Method: Face-to-face interviews were conducted with a randomly selected sample of public housing tenants in the Hunter Region of New South Wales.

Results: Of 463 contactable tenants, 329 consented to participate in the study.

Participants were 2.5 times more likely to rate their health as fair or poor relative to the community generally, and visited a doctor twice as often. The prevalence of smoking was more than twice that of the community generally, and the prevalence of falls was approximately three times greater. Risk of injury due to domestic violence was approximately six times greater, and the risk of injury due to violence in other locations was more than double that in the community. Between a quarter and a half of the participants requested support to reduce their health risks.

Conclusions: The findings suggest that public housing tenants are one of the more severely health-compromised groups in the Australian community.

Implications: An urgent need exists for public health initiatives that are directed at improving not only the current markedly poorer health status of public housing tenants, but also the greater prevalence of health risk factors that predict a likely continuation of such differentials into the future.

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Despite the suggested appropriateness of the public housing sector as a setting for improving the well-being of socio-economically disadvantaged groups, limited data have reported the health needs of public housing tenants in Australia, let alone the effectiveness of interventions in this setting. This study was undertaken to assess the health status and expressed health needs of public housing tenants and to determine whether public housing tenants represent an appropriate group for public health intervention.

Method

Sample and setting

Participants were drawn from a random sample of 600 residences managed by the New South Wales (NSW) Department of Housing in the State's Hunter Region. All selected residences were eligible to participate in the study unless identified by Department of Housing officers as accommodating a tenant with a history of violence. One eligible tenant over the age of 18 years was randomly selected from each residence to participate in the study.

Procedure

The Department of Housing telephoned each household to obtain consent from the adult with the next birthday. Consenting tenants were visited by trained interviewers and asked to complete the study questionnaire in their home.

Measures

Health status

All participants were asked to rate the state of their health as either: excellent, very good, good, fair or poor,⁹ and to indicate how many times they had visited a local or family doctor in the previous year.

Health risks

The following health risks were assessed:

- *Smoking*: Either an occasional or daily smoker.¹⁰
- *Excessive consumption of alcohol*: Consumption of more than four standard drinks per day (males), or more than two standard drinks per day (females).¹¹
- *Body Mass Index (BMI)*: BMI score of 25 or greater.¹²
- *Physical activity*: No physical activity (sedentary).¹³
- *Risk of injury due to falls*: Reported one or more falls in previous 12 months (65 years and over).¹⁴
- *Risk of injury due to violence*: Victim of one or more acts of violence in the previous 12 months in home or elsewhere.¹⁵
- *Perceived stress*: Cohen's Perceived Stress Scale score (PSS-4).¹⁶

Expressed need for health risk intervention

For each health risk, participants were asked whether they wished to be forwarded information designed to facilitate risk reduction. Participants who were 'at-risk' and who accepted the offer of information were classified as expressing a need for intervention.

Socio-economic status

The questionnaire included items that assessed participants' gender, age, highest level of education completed, current employment status, Aboriginality, country of birth and language spoken at home.

Analyses

Data describing the socio-economic status, health status and health risk characteristics of the study sample are reported as percentages. To determine the relative extent of health and risk status differentials, comparisons are made, where possible, with equivalent health risk measures obtained from a previously conducted random community survey of the Hunter Region population.¹⁵ Such comparisons are made with the total regional population and with socio-economically disadvantaged members of that population. Where such data were not available, comparisons were made with other appropriate State or national data. Differences between the study and comparison data were assessed by t-test and chi-square analyses.

Results

Sample

Nineteen of the 600 randomly selected residences housed a tenant with a history of violence and were excluded from the study. Contact was made with the tenant with the next birthday in 80% (463) of the remaining 581 residences. Of these, 329 (71%) individuals consented to participate.

Relative to the regional population, the study sample contained significantly more participants who were female ($\chi^2=46.7$, $p<0.001$), aged 60 years or older ($\chi^2=22.7$, $p<0.001$) and outside the workforce ($\chi^2=187.9$, $p<0.001$). Participants were significantly less likely to have completed Year 10 or an equivalent level of education ($\chi^2=87.7$, $p<0.001$). Participants were significantly more likely to be of Aboriginal or Torres Strait Islander descent ($\chi^2=23.5$, $p<0.001$) but there were no significant differences in terms of either country of birth ($\chi^2=0.15$, $p=0.698$) or language spoken at home ($\chi^2=0.65$, $p=0.422$).

Health status

The mean number of visits to a doctor by participants (mean=10.1, SD=9.14) was almost double the national average (mean=5.1; $t=8.94$, $p<0.001$).¹⁷

Forty per cent of participants rated their health as either fair or poor, approximately 2.5 times greater than that of the region generally and almost twice that of socio-economically disadvantaged residents of the region (see Table 1).

Health risks

The prevalence of health risks is shown in Table 1.

With the exception of BMI and physical activity, study participants reported a significantly greater prevalence of all the health risks relative to the region and to socio-economically disadvantaged residents of the region. The mean level of perceived stress (mean=9.24, SD=3.71) was significantly higher than that

Table 1: Health status and health risk prevalence of the study sample and Hunter Region population.

Indicator	% Study sample 'at risk'	% Hunter Region/ Other comparison	% Hunter Region 'at risk' ¹⁵
Health status			
General health (fair or poor)	39.9	14.4 ^{15**}	23.9 ^{**}
Health risk factor			
Smoking (daily or occasionally)	43.7	21.9 ^{15**}	23.8 ^{**}
Excess consumption of alcohol	40.4	30.6 ^{24*}	—
Overweight/Obese	48.8	46.0 ^{15*}	51.0
Sedentary	15.2	14.0 ^{15*}	18.8
Risk of fall injury (65 years and over)	44.0	16.9 ^{25**}	—
Risk of injury due to violence			
– Domestic	6.7	1.1 ^{15**}	0.0 ^{**}
– Other (outside the home)	7.1	2.5 ^{15**}	1.8 ^{**}

Notes:
* $p < 0.01$
** $p < 0.001$

for both the region (mean score=7.54, $SD=3.10$; $t=8.18$, $p < 0.001$) and disadvantaged regional residents (mean score=7.84; $t=4.41$, $p < 0.001$).

Expressed need for health risk intervention

Table 2 shows the percentages of participants deemed 'at risk' for each assessed health risk factor who also accepted the offer of risk reduction information.

Discussion

The role of the public housing sector is to provide affordable housing to socio-economically disadvantaged people who cannot satisfy their housing needs through the private market.⁵ Given the clear association between socio-economic disadvantage and health status,¹ it can therefore be expected that public housing tenants will have a poorer health status. Although such an expectation is confirmed in this study, the findings suggest that the health status of public housing tenants is markedly poorer than

that of disadvantaged members of the community generally, indicating that such tenants represent one of the more severely health compromised groups in the community.

Equity of access to health care and the provision of health care services according to need are important principles underpinning the provision of health care in Australia.¹⁸ The markedly poorer health of public housing tenants suggests an urgent need for interventions that are directed at improving not only their currently poorer health status, but also the higher prevalence of risks that predict a likely continuation of such differentials into the future. The need for such interventions is supported by the extent of interest expressed by participants in accepting risk reduction information.

A number of factors should be considered when interpreting the results of this study.

First, the consent rate of 71% of contacted individuals is comparable to findings from other household health surveys conducted in Australia.¹³ As no data are available that describe the demographic characteristics of public housing tenants generally, the extent to which the findings can be generalised to the broader population of public housing tenants is unknown.

Second, the study is limited in part by its appraisal of a restricted range of health problems and risk factors. The extent to which a similar pattern of difference is evident for other issues and risks is unknown. However, existing evidence concerning socio-economic differentials in health status and other indicators suggest that such differentials exist across a wide range of indicators of well-being.^{1,19}

Third, public housing caters for a range of diverse demographic groups of unemployed, single parents and the elderly. The prevalence of health risks is likely to vary between these groups. The reporting in this study of aggregate levels of risk across all of these groups is therefore likely to mask the prevalence of risk in particular groups. Further research of risk prevalence in such groups is required.

Fourth, the use of self-report measures of risk is likely to have resulted in a lower prevalence of risk than is actually the case.²⁰ Similarly, the possibility exists that respondents may not have found the type of support offered to be suitable or sufficient, yet may nonetheless have had a need for support of some form. If this is the case, the levels of expressed need found by this study represent an under-estimate of the actual level of need for support.

Finally, non-equivalent measures were used in the comparison concerning alcohol consumption and risk of fall injury. The actual extent of differences in prevalence between the study findings and population levels of these risks is therefore unknown.

The Acheson Report into socio-economic health differentials in Great Britain² has proposed that such differentials arise from the interaction of a number of factors including differences in behavioural risk factors, extent of social support, access to employment and public services, and broader government social and economic policy. In proposing such an explanatory framework, Acheson identifies a clear role for a variety of agencies,

Table 2: Requests for information concerning health risk factors.

Health risk factor	Percentage of at-risk participants who requested information (%)
Smoking	54.5
Excess alcohol consumption	7.0
Overweight/obese	47.1
Sedentary	23.1
Injury due to falls	27.3
Perceived stress ^a	36.7

Note:
(a) Percentage of all participants as there is no 'at-risk' category.

not just health services, in both reducing the level of socio-economic disadvantage and ameliorating the health and well-being consequences of disadvantage. In Australia, the *1993 Industry Commission Inquiry into Public Housing* identified a need for agencies other than public housing to be involved in addressing the needs of public housing tenants.⁷ Given the breadth of resource deprivation experienced by socio-economically disadvantaged individuals,² it is important that such a recommendation is seen to include a range of agencies, such as education, police, justice, welfare and transport services, as well as public housing and health.

Research and other evidence suggest that intervention programs from a range of public and community services have the capacity to both reduce the extent of socio-economic disadvantage and to improve the health and well-being of specific socio-economically disadvantaged groups.⁸ For example, modification to the design and management of public housing itself has been suggested to be associated with improvement in a number of quality of life indicators.⁵ Similarly, the provision of additional support to disadvantaged parents of young infants through out-reach and home visit programs has consistently been suggested to be effective in improving both parental and child outcomes, including the incidence of family violence.²¹ Further, the structuring of health care delivery practices in a way that prioritises the needs of disadvantaged clients has been shown to be effective in modifying health risk management, health risk factors, and morbidity and mortality.²² Recent Australian data suggest that the involvement of schools in community-oriented programs may be effective in reducing child abuse and related welfare notifications.²³ These latter findings are of particular significance in that they suggest the potentially greater effectiveness of approaches that involve an integrated approach to meeting the needs of socio-economically disadvantaged individuals.

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