

Factors influencing the utilisation of health services by rural men

DERMOT BUCKLEY AND TONY LOWER

Dermot Buckley is a Project Officer and Tony Lower is a Senior Lecturer Rural & Remote Health Education at the Combined Universities Centre for Rural Health in Geraldton WA.

Abstract

This research identified the barriers and enablers that influence the utilisation of health services by rural men in the Midwest region of Western Australia. The methodology was based on participatory action research, including qualitative assessments to determine the issues for a larger quantitative study. Four variables were identified as predictors for the use of health services: those who attended for preventive reasons; those not affected by seasonal work; men who thought a medical telephone line was not important; and those who did not consider privacy an important issue. Modification of health service delivery to men could potentially enhance appropriate utilisation of health services in rural areas.

Utilisation of services

Men's health is gaining increased attention amongst health professionals, with sound epidemiological evidence showing disproportionately high mortality and morbidity rates for men. For example, the life expectancy for males is approximately six years lower than women (Australian Institute for Health and Welfare, 2001).

In rural areas this differential is further amplified, with data indicating large disparities in health status indicators when compared to their urban counterparts (Commonwealth Department of Human Services and Health, 1996). Indeed, mortality data illustrate that rural males have a 15% higher death rate for all causes than urban males. Humphrey and Rolley (1991) concluded that this variation is due primarily to geographical location, shortage of health care providers and health services, socio-economic disparities, greater exposure to injury, lower road quality, small sparsely distributed populations and Indigenous health needs.

An essential component of health behaviour is access to and utilisation of health services. Rural men tend to deny symptoms of a chronic nature and only utilise health services when symptoms are regarded as life threatening (Strodl, 1994). This has major implications for screening, as detection of disease could be too late for effective treatment (Barret, 1994). Ultimately, many men are hospitalised on presentation with serious illnesses from which they frequently die (Strodl, 1994).

While men utilise health services at a much lower rate than women (Australian Institute for Health and Welfare, 2001), the reluctance to seek assistance may also promulgate the practice of self-diagnosis and self-medication. Together, these can have serious detrimental effects on health, owing to both the iatrogenic effects and the delay in seeking professional advice for the treatment of major illnesses (Fitzwarryn and Fitzwarryn, 1982). Other studies also support this contention, with men having a predilection to postpone visits to health services, deny symptoms of a chronic nature and only utilise health services when symptoms are regarded as life threatening (James, Christie and English, 1994).

Given this background, the aim of this pilot study was to determine and describe the factors that influence the utilisation of health services by rural men in the Midwest region of Western Australia. From these findings, it is

envisaged that barriers to utilisation of services may be removed, resulting in potential improvements in the health status of rural men.

Methodology

This research was a cross-sectional descriptive study and included a significant amount of community input through the process of “Participatory Action Research” (PAR). The research design utilised the process of complementarity in combining both qualitative and quantitative research methods. In this instance, a small qualitative study helped to guide the development of the content for the questionnaire. This process increased the validity of the items covered in the questionnaire, ensuring they were relevant and culturally appropriate to the rural men (Morgan, 1998).

PAR elements consisted of community involvement in organising a community men’s health workshop; setting up a men’s health steering committee; incorporating that committee; participating in this research; organising a community men’s health forum, involving many local health agencies and speakers; completing a business plan for rural men’s health; and gaining funding for men’s health projects and further research.

The qualitative data were obtained from individual interviews (n= 6) and focus groups with a total of 71 rural men. All interviews and focus groups were tape-recorded, with field notes taken concurrently. In addition, a further 106 men from a community men’s health forum also had input during an interactive discussion.

Taped transcriptions and field notes were manifestly analysed for meta-themes, commonalities, clusters and redundancy to form the basis of the items in the questionnaire. Six domains were identified: (i) importance of men’s health; (ii) health issues for men; (iii) health services for men; (iv) privacy; (v) experience of health visits; and (vi) attitudes towards health campaigns.

Face and content validity were confirmed through reference to the literature in the area and by piloting the instrument with a purposive sample of 20 local men. Modifications were made to the questionnaire in accordance with their recommendations and returned to these men to confirm validation. In total, there were 33 questions with 102 items in the final questionnaire.

A further purposive sample of 55 men in the region, who had not participated in the validation process, was selected from the mailing list of the incorporated men’s health group to assess the instrument’s reliability. Measures of both internal consistency and test-retest reliability were assessed. The internal consistency of each domain was measured using Cronbach’s alpha (α) and while low in two domains, both of these had the fewest items (two) (Cronbach, 1970; Bland et al, 2001). The domain scores were importance of issue (0.17), privacy (0.31), visits (0.52), campaigns (0.62) and health services for men (0.75).

The test-retest assessment involved completion of the instrument with a two-week interval between test and retest. In the initial instance, subjects were not advised that they would be involved in a repeated test. A total of 31 matched responses were available for analyses. Results indicate the instrument had good overall reliability, with 90% of items having at least fair to good reliability (0.41-0.75) and 40% being excellent (>0.75) (Fleiss, 1981). The three items with Kappas below 0.40 remained in the questionnaire, but they were not included in subsequent analyses.

The Electoral Commission register was utilised to obtain a stratified random sample of men in the Midwest region. A total of 1000 questionnaires with reply paid envelopes were posted to the sample. On return, their data were entered into the Statistical Package for Social Sciences (SPSS) version 10 (SPSS Inc., 1999).

Descriptive analyses were completed on the data set to identify factors that influence the use of health services in this sample. A series of chi-square analyses were undertaken, employing utilisation of health services in the past six months as the dependent variable. Where significant relationships were identified ($p < 0.05$), these factors were included in a forward stepwise logistic regression model. Odds ratios (OR) were also calculated, comparing the likelihood for those men who visited a health service to those who did not for these factors.

Results

A total of 289 survey responses were attained, with a further 68 surveys returned to sender (RTS) as subjects no longer resided at the address. This represented an effective response rate of 31% (289/932). A high proportion of RTS surveys from the more remote districts in the Midwest was apparent (64% of RTS). Descriptive data revealed a bias towards the older age group (skewness minus 0.537; kurtosis minus 0.783), with 55% of questionnaires being returned by men over 50 years of age.

Chi-square analyses identified a number of variables that were statistically significant in respect to use of a health service within the last six months. These factors are presented in Table 1. Respondents who were older, accessed services for preventive purposes, had check-ups and who reported that they felt comfortable communicating with a male doctor, were significantly more likely to have visited health services in the previous six months.

Barriers to accessing services included age, long working hours, the requirements of seasonal work, discomfort in the waiting room environment, privacy issues centring on others not knowing they have visited a service and a fear of knowing their true health status.

Table 1: Factors related to use of health services in past six months

Variable	X ²	df	p
Age	22.78	4	<0.001
Visit for check-up	11.49	1	0.001
Seasonal work – carry on working if sick (2)	13.87	1	0.001
Medical advice line	12.04	1	0.001
Long working hours	8.71	1	0.003
Privacy	8.41	1	0.004
Fear of knowing health status	8.04	1	0.005
Access for prevention	7.34	1	0.007
Waiting room environment – affects prior to visit (1)	5.27	1	0.009
Seasonal work - prevents visiting (1)	6.09	1	0.014
Waiting room environment – long waits (2)	5.27	1	0.022
Communication with a male doctor	6.15	1	0.046
Men's health an important issue	6.06	1	0.048

Four factors were identified as predictors of health service use in the past six months from the logistic regression. Males who accessed services for preventive purposes (OR 2.44), who were not restricted due to seasonal work (OR 1.62), those who thought a medical telephone line was not important (OR 4.98) and those who were not unduly concerned by privacy issues (OR 2.57) were predictive factors.

Table 2: Logistic regression analysis of factors predicting use of health services by males in the previous six months

Variable	n	Parameter estimate	Standard error	OR	95% CI	p
<i>Access for prevention</i>						
No	80					
Yes	140	-0.891	0.368	2.44	1.18-5.00	0.015
<i>Seasonal work</i>						
Yes	77					
No	141	0.481	0.202	1.62	1.09-2.40	0.017
<i>Medical telephone line</i>						
Yes	176					
No	80	-1.607	0.459	4.98	2.02-12.19	0.000
<i>Privacy</i>						
Yes	128					
No	92	-0.945	0.368	2.57	1.25-5.29	0.010

Discussion

This cross-sectional pilot study, conducted in the Midwest region of WA, aimed to identify the factors that influence the utilisation of health services by rural men. For this sample, the issues that predict use are visits for preventive purposes; not being involved in seasonal work activities; not believing a telephone medical line to be important; and having few concerns regarding privacy.

Strengths of this study included the assessment of the instrument's validity and reliability, in addition to the stratified random sampling used for questionnaire distribution. However, the low response rate (31%), along with age (>55 years) and geographic (major town) bias, limit the findings. The main limitations are the threat to external validity and the difficulty in being able to generalise these results to the overall Midwest population.

Males who accessed health services for preventive purposes were 2.44 times more likely to visit than those who did not access services for preventive reasons. However, it should be realised that this may be due to the age bias of the respondents. Nevertheless this result implies that greater attention in promoting the preventive capacity of health services to the male rural population may be warranted.

Those males who were not restricted in utilising health services due to seasonal work were 1.62 times more likely to utilise health services than those that were restricted. It is clear that seasonal work affects the life style of rural men, but how this factor could be addressed with respect to utilisation of health services requires further research.

Those men who thought a medical telephone line was not important accessed services more frequently. Such a finding could well have been expected, as these individuals may not feel uncomfortable with the use of existing services. However, a significant proportion of men still perceived a medical telephone line as important. It may therefore be hypothesised that many men would use a medical help line to obtain at least some assistance rather than visit a health service. Although not optimal in terms of health care delivery, such a service may possibly negate the barriers of cost, distance, time away from work, privacy and the waiting room environment. Further research is required to test this hypothesis.

Men not unduly concerned by privacy were 2.57 times more likely to visit a health service than those who showed concern for privacy issues. As such, the adoption of measures to ensure privacy for rural men who use health services is required. This could include locating services for men in discreet areas that increase anonymity

and adhering to appointment times, thereby minimising time spent in waiting rooms and the potential to be “seen” by other locals.

Although this study has identified a small range of specific predictors, none of these issues can be treated in isolation. Rather, it is likely that the issues raised act in a synergistic framework to influence men’s use of health services.

Conclusion

Although the generalisability of this study is limited, the results suggest that there are specific issues that influence the use of health services by subjects in this sample. Further research addressing the limitations of this study and providing a more widespread view of issues influencing men’s use of health services is required. In summary, it is important to recognise that services may be modified to address these issues. In turn, this may make health services more appropriate, encouraging their use and improving health status.

Acknowledgements

The authors would like to thank the members of the management committee of the Midwest Men’s Health Inc. for their invaluable input with this program and Rhonda Owen for statistical assistance.

References

- Australian Institute for Health and Welfare 2001, Australian Health Trends 2001, AGPS, Canberra.
- Barratt A 1994, Men’s Health Starting to Take Centre Stage, *Australian Doctor*, October.
- Bland C, Starnaman S, Harris D, Henry R & Hembroff L 2000, “No Fear” curricular change: Monitoring curricular change in the W K Kellogg Foundation’s national initiative on community partnerships and health professions education, *Academic Medicine*, 75: 623-633.
- Commonwealth Department of Human Services 1996, Draft National Men’s Health Policy, *Commonwealth Department of Human Services and Health*, Primary Health Care Group: Canberra.
- Cronbach L 1970, Essentials of psychological testing, New York, Harper & Row.
- Fleiss J 1981, Statistical methods for rates and proportions, New York, Wiley.
- Humphreys J & Rolley F 1991, Health and health care in rural Australia: a literature review, Armidale, Department of Geography and Planning.
- James M, Christie D & English B 1994, Farm health and safety in rural New South Wales, *The Medical Journal of Australia*, vol 160, pp 417-420.
- Mathers C 1995, Health Differentials Between Australian Males and Females: A Statistical Profile, Paper presented at the *1st National Men’s Health Conference*, Melbourne, pp1-22, 10 August.
- Morgan D L 1998, Practical Strategies for Combining Qualitative and Quantitative Methods: Applications to Health Research, *Qualitative Health Research*, vol 8(3), pp 362-376.
- Strodl E 1994, A Review of Men’s Literature, Health Promotion Unit, Darling Downs Regional Health Authority.