Men in Australia Telephone Survey (MATeS): predictors of men's help-seeking behaviour for reproductive health disorders

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ABSTRACT

Objective: To identify sociodemographic factors associated with help-seeking behaviour for reproductive health disorders in middle-aged and older Australian men.

Design: A cross-sectional, population-based, computer-assisted telephone interview exploring sociodemographic factors and general and reproductive health.

Participants and setting: Analysis of data from the Men in Australia Telephone Survey (MATeS) of 5990 Australian men aged 40 years and older interviewed between September and December 2003.

Main outcome measures: Self-reported diagnosis of prostate disease and erectile dysfunction (ED), help-seeking behaviour (including visiting a doctor, prostate-specific antigen testing, treatment of prostate disease, speaking to a health professional about ED and treatment of ED).

Results: Age was a significant predictor of all help-seeking behaviour studied, other than treatment for ED. Controlling for all predictor variables, never-married status predicted a lower likelihood of visiting a doctor (odds ratio [OR], 0.68 [95% CI, 0.48–0.97]) or speaking to a health professional about ED (OR, 0.44 [95% CI, 0.21–0.93]), while divorced/separated status predicted lower likelihood of having a prostate-specific antigen test (OR, 0.63 [95% CI, 0.50–0.79]). Living in a regional or remote area or being from a non-English-speaking background predicted lower likelihood of receiving treatment for ED (ORs, 0.62 [95% CI, 0.42–0.92] and 0.41 [95% CI, 0.24–0.72], respectively), but did not influence screening for prostate disease.

Conclusion: Seeking advice or treatment for male reproductive health disorders is predicted by sociodemographic factors specific to different reproductive health problems. As middle-aged and older men do attend doctors, opportunities exist for health professionals to optimise their consultations by routinely discussing reproductive health with all men, to identify under-reported male reproductive health disorders.

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As men age, they are more likely to visit doctors, primarily because of chronic disease.[1] Reproductive health also deteriorates with advancing age, as significant numbers of men are affected by prostate disease, erectile dysfunction (ED) and lower urinary tract symptoms (LUTS).[2-5] Yet, given the prevalence of reproductive health disorders in middle-aged and older men, treatment rates are strikingly low. For example, studies demonstrate a wide gap between the estimated prevalence of ED and the number of men actively seeking or undergoing treatment.[2,3,6]

As few studies seek to account for such disparities, we aimed to explore the sociodemographic and geographic factors that influence help-seeking for different reproductive health disorders in order to inform health policy development, service provision, and community and professional education strategies targeted to the needs of the middle-aged and older male population.

METHODS

The methods and initial findings from the Men in Australia Telephone Survey (MATeS) have been described previously.[2] In brief, between September and December 2003, computer-assisted telephone interviews (CATIs) of a representative sample of men (aged 40 years and over) were undertaken. Respondents were recruited from across all Australian states and territories by random selection of households from the electronic telephone directory (Electronic White Pages), with oversampling in some age groups and geographic regions to ensure proportionate representation. The study was approved by the Southern Health Human Research Ethics Committee, Melbourne.

Telephone survey instrument

The CATI included more than 90 questions on sociodemographic, biomedical and lifestyle factors, and knowledge and attitudes about male reproductive health and disorders. The full CATI is available on the Andrology Australia website (http://www.andrologyaustralia.org/docs/Methods_Manual_CATI.pdf).

All information obtained from the interview was self-reported with no check against medical records. Where available, questions from other validated instruments and those previously used in an Australian context were incorporated.[2]

Sociodemographic data

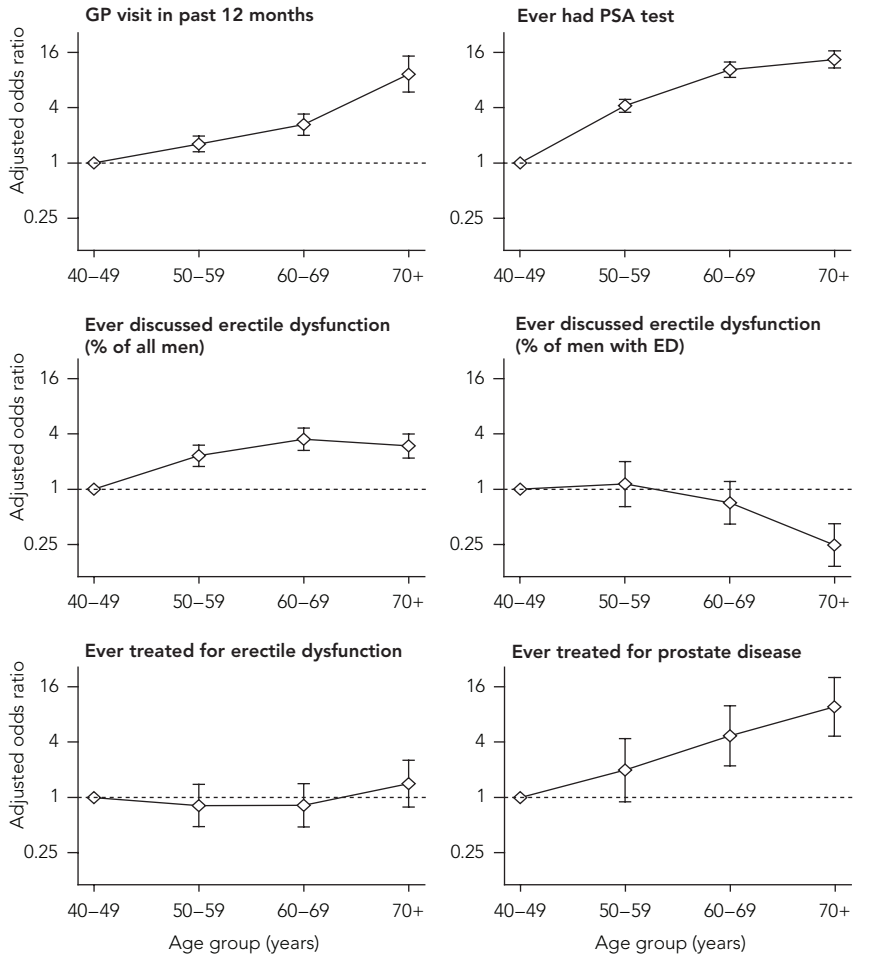
Age, marital status, country of birth, occupation level and educational attainment were asked of all respondents. Sociodemographic characteristics of the men participating in the study were representative of the Australian population.[2] Men of Indigenous (Aboriginal or Torres Strait Islander) origin represented 1% of men born in Australia. Men who were not Australian-born were classified as being of non-English-speaking or English-speaking background, according to their country of birth.

The Accessibility and Remoteness Index of Australia (ARIA) database[7] was used to compare the self-reported prevalence of help-seeking behaviour across geographic regions and differentiated into "major cities" and "regional and remote" areas.

Help-seeking behaviour

Help-seeking behaviour was determined by the respondent's answer to the following questions: "Have you visited a doctor in the last 12 months (before interview)?", "Have you ever had a blood test to check for a prostate problem?" and "Have you ever spoken to a health professional about treatments for ED?" When a self-reported diagnosis of a prostate or erectile problem was indicated, men were also asked if they

1 Association between age and help-seeking behaviour in middle-aged and older Australian men*



* By multivariate analysis. Each model controls for age, education, occupation level, marital status, geographic location, and cultural (non-Australian-born or Indigenous) background. GP = general practitioner. PSA = prostate-specific antigen. ED = erectile dysfunction. Bars represent 95% CIs. ◆

had ever had treatment for that reproductive health disorder.

Statistical analysis

Sample proportions were weighted according to age and state of residence, with weighting based on the age distribution of Australian men in the 2001 census.[8] Descriptive analyses were performed using SPSS software (SPSS Inc, Chicago, Ill, USA). Multivariable logistic regression analysis estimated the joint contribution of age, marital status, education, occupation level, geographic location and cultural (non-Australian-born or Indigenous) background to each help-seeking behaviour. Sampling weights were not incorporated into the logistic regression analyses as the outcomes of interest were the associations between measured variables, rather than prevalence estimates. Logistic regression analyses were performed using Stata statistical software, release 9.1 (StataCorp, College Station, Tex, USA).

RESULTS

From 7636 randomly selected households with an eligible male, 5990 men (78%) agreed to participate in the study.

When controlling for all predictor variables, age was a strong predictor for all help-seeking behaviour examined, except treatment for ED (Box 1). The associations of educational attainment, occupation level, marital status, geographic location and cultural (non-Australian-born or Indigenous) background with help-seeking behaviour are shown in Box 2.

Visiting a doctor

Overall, about 88% of men surveyed had visited a doctor in the past 12 months, with health service utilisation increasing with age (Box 1). Controlling for other predictor variables, men who had never married or who were living in regional or remote locations were less likely to have visited a doctor in the previous 12 months (odds ratio [OR], 0.68 [95% CI, 0.48–0.97], $P = 0.03$; and OR, 0.70 [95% CI, 0.59–0.84], $P = 0.001$, respectively). Educational attainment and occupational level did not influence visiting a doctor (Box 2).

Prostate-specific antigen testing

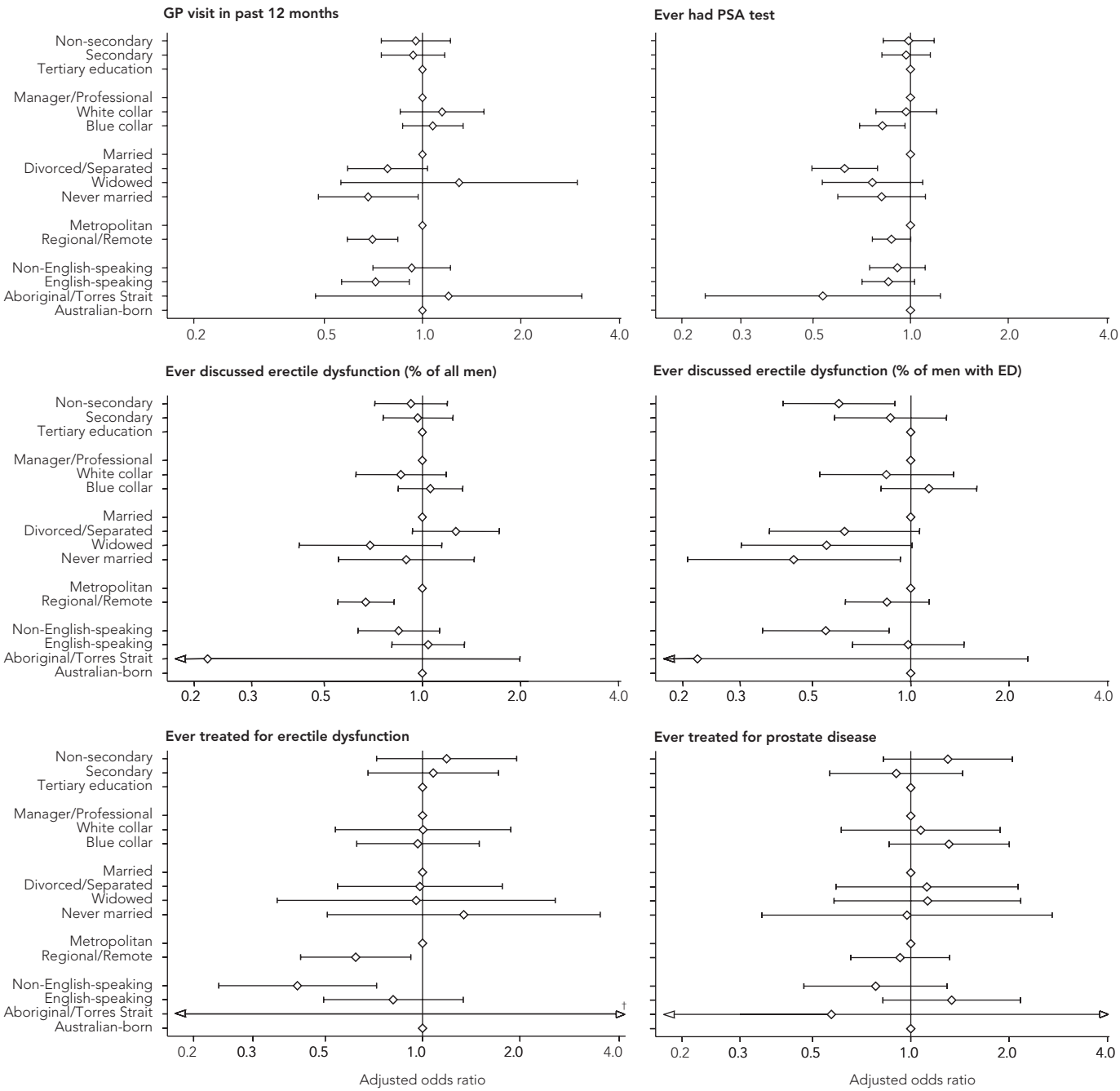
In this study, 49% of men reported having had a prostate-specific antigen (PSA) test, with the proportion increasing with age (Box 1). Being divorced or separated was an independent predictor of lower uptake of PSA testing (OR, 0.63 [95% CI, 0.50–0.79], $P < 0.001$). Likewise, men employed in a trade, labouring or related work (that is, "blue collar" workers) were less likely to undergo PSA testing (OR, 0.82 [95% CI, 0.70–0.96], $P = 0.02$). Educational attainment, geographic location, non-English-speaking background and Indigenous background were not independently predictive of having a PSA test (Box 2).

Erectile dysfunction

Of all men surveyed, irrespective of whether they had erectile problems, 11% indicated they had spoken to a health professional about ED. Overall, 21% of men reported moderate to severe ED ("sometimes" or "never" being able to get and maintain an erection), of whom 38% (ie, 8% of all men) had spoken to a health professional about their condition. Older men as a whole were more likely to discuss erectile problems with a health professional but, among men with ED, older men were less likely to do so (Box 1). Living in a regional or remote location was independently associated with a reduced likelihood of consulting a health professional about ED generally (OR, 0.67 [95% CI, 0.55–0.82], $P < 0.001$). However, geographic location was not a significant predictor for those men with moderate to severe ED (Box 2).

Additional significant predictors were also identified for men with ED to discuss the

2 Association between demographic characteristics and help-seeking behaviour in middle-aged and older Australian men*



* By multivariate analysis. Diamonds represent adjusted odds ratios, and bars represent 95% CIs. Each model controls for age and all other predictor variables. † Adjusted odds ratio for Aboriginal/Torres Strait Islander background as a predictor of ever being treated for erectile dysfunction was not estimable. GP = general practitioner. PSA = prostate-specific antigen. ED = erectile dysfunction. ◆

problem with a health professional. Marital status independently modified the help-seeking behaviour, with never-married men significantly less likely to discuss ED with a health professional (OR, 0.44 [95% CI, 0.21–0.93], $P = 0.03$). Men from a non-English-speaking background and those with below-secondary school education were also less likely to discuss ED with a health professional (OR, 0.55 [95% CI, 0.35–0.86], $P = 0.009$, and OR, 0.60 [95% CI, 0.41–0.89], $P = 0.01$, respectively) (Box 2).

Treatment

Overall, the treatment rate for ED (58% of men who had spoken with a health professional about ED) was similar to that for prostate disease (61% of men with a diagnosis of prostate disease). While older men were more likely to be treated for prostate disease, age itself was not an independent predictor of treatment for ED (Box 1). Indeed, age was the only independent predictor of prostate disease treatment, with no

association seen with educational attainment, occupation level, marital status, geographic location and cultural (non-Australian-born or Indigenous) background (Box 2). In contrast, men from a non-English-speaking background and those living in regional or remote locations were less likely to receive treatment for ED (OR, 0.41 [95% CI, 0.24–0.72], $P = 0.002$, and OR, 0.62 [95% CI, 0.42–0.92], $P = 0.02$, respectively) (Box 2).

DISCUSSION

This study highlights that, contrary to popular belief, men aged 40 years and over report high levels of health service use. However, attending a health service does not equate to seeking help for reproductive health problems, and factors such as age, marital status and area of residence significantly influence both initial access as well as likelihood of discussing reproductive health problems and receiving treatment. Consequently, distinct health promotion and education strategies may be required in different contexts to facilitate effective help-seeking behaviour.

We already know that ED and prostate disease are widespread problems affecting significant numbers of middle-aged and older Australian men (21% and 14%, respectively, of men aged 40 years and over),[2] with an increased prevalence in older age groups.[2-5] Education strategies directed at both the general public and health professionals, highlighting that significant numbers of men are affected by these conditions, will help reduce the barriers to men accessing information and health services, and facilitate discussion of these issues.

However, our research shows that these reproductive health problems are often not explicitly discussed with a health professional. Various factors appear to influence help-seeking behaviour for the different conditions, as reflected to some degree by the high proportion of men undertaking testing for prostate disease, while fewer seek treatment for ED.[3,9] The presence of LUTS, which men may erroneously associate with prostate cancer, may prompt many to have PSA testing.[10] In contrast, ED is not a significant motivator for seeking treatment, as many of the oldest men regard the condition as a normal part of ageing.[9] Focusing education campaigns on the association between ED, cardiovascular disease and diabetes, and providing high-quality, evidence-based information on ED, may help influence men to seek treatment for erectile problems. Similarly, education is needed to prompt medical practitioners to opportunistically enquire about reproductive health as part of a general health assessment, with older men benefiting from ongoing medical surveillance in areas of sexual behaviour and lifestyle issues.

We also found that 49% of the men surveyed had had a PSA test, with the proportion increasing with age. Despite the lack of a national policy on population screening for prostate cancer, the prevalence of de facto screening with PSA testing appears relatively high in Australia.[2,11] General practitioners assume a key role in a patient's decision to undergo PSA testing, with a focus on shared decision making after discussion of the benefits and limitations of PSA screening.[12] Conversely, we found that sexual health is often not discussed in primary care, particularly for older men,[13] a phenomenon at least partly attributable to doctors' perceptions that older people have low sexual interest and activity,[14] and partly to the fact that many older men view ED as a normal part of ageing.[9] However, as ED may be a harbinger of chronic medical conditions, such as diabetes, depression and cardiovascular disease,[15] and is of great concern to men,[2] medical practitioners should be encouraged to actively enquire into this area of reproductive health, irrespective of age or sexual desire.

In this study, marital status was a predictive factor for health service utilisation, particularly speaking to a health professional about ED, highlighting the influence of partners in help-seeking specifically for reproductive health disorders. As the presence of a conjugal partner appears to influence uptake of health services,[16] targeted education and health promotion strategies for men without long-term partners need to be considered. Indeed, women are often regarded as the custodians of family health, including influencing men's access to health services.[16,17]

We also found clear rural–urban gradients in help-seeking behaviour, independent of other predictors. For men living in regional or remote locations, more limited access to health services[18] may be an involuntary barrier to health service utilisation. Likewise, treatment for erectile problems may be influenced by limited opportunities for discreet consultations in smaller communities.[19] Similarly, speaking to a health professional about ED is influenced by cultural background, with men of non-English-speaking and Indigenous background less likely to speak to a health professional about the condition.[2] Education strategies for health professionals working with these population groups also need to recognise the impact of cultural beliefs on sensitive personal health issues.

While no distinctive associations were identified for help-seeking behaviour of men of Indigenous background, this can be partly explained by their small numbers in the survey, and the correspondingly wide confidence intervals. However, with high rates of cardiovascular disease and diabetes among Indigenous men,[20] anecdotal evidence suggests that ED is probably more prevalent than currently appreciated. The trends seen suggest that more strategic research and culturally appropriate health services need to be considered for Indigenous men.[21]

The findings from this MATeS report have important implications for clinical practice and primary health care, including the potential for identifying early-stage life-threatening conditions and providing ongoing medical follow-up, particularly for the population subgroups that suffer greater mortality and morbidity rates from chronic disease (including Indigenous communities). The drivers and barriers to men's help-seeking behaviour and health service use for reproductive health disorders need to be better understood to assist in the development of health promotion, service and education strategies to ensure that men receive overall health care.

General practitioners, while often seen as the primary source of contact for reproductive health problems, are often reluctant to initiate discussions with older patients about sexual health.[13,22] However, as middle-aged and older Australian men do attend doctors, education strategies for health professionals need to focus on making better use of the medical consultation to opportunistically engage men in discussing under-recognised reproductive health problems. Finally, community education strategies that raise awareness and understanding of male reproductive health disorders will help reduce the stigma associated with these conditions and reinforce help-seeking behaviour and the prospects for effectively addressing men's reproductive health concerns.

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COMPETING INTERESTS

None identified.

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