Queries about the PSA study

I read with interest this pilot study,[1] but am not entirely convinced with its interpretation of the results. More than 80% of identified cancers had a past history of lower urinary tract symptoms or past prostate issues... Is that not saying 'almost 20% of identified cancers were in asymptomatic men'? I think this is quite telling, especially as only seven of the 30 asymptomatic men were referred.

This study shows that GPs don't 'knee-jerk' refer men with raised PSAs. They manage them in a different manner. Unfortunately it doesn't tell us much about how that decision is made or what manner they are managed in. I base my decisions on velocity of change rather than absolute PSA; I may refer someone with normal PSA but high change rate etc., as the study identified (Table 1). Since the study was not able to look at anything other than immediate referral and outcome of that referral, not subsequent testing, I don't feel it was able to achieve its stated goal of looking at subsequent management, nor be sure it has identified all cases of prostate cancer that will eventually be detected by the tests done—it will be future results that determine the true number of men referred and cancers detected.

I also note the comment (about testing over-70s against guideline advice) that more education may be warranted. Ignorance of guidelines is not the only reason we sometimes elect not to follow them, and perhaps a better effort might be made to learn from the GP population why they don't follow the guideline before deciding to spend time and resources on educating them on doing so. Guidelines have been known to change, and perhaps the doctors involved are ahead of the game! I would have preferred to read this article in a later edition, with follow-up after another couple of PSA tests, or with more information about what follow-up was scheduled and why the doctors involved behaved as they did.

I also wonder about the correlation of erectile dysfunction as a lower tract symptom, and prostate screening as mentioned in the text.

Pete Barwell MBChB, PhD, FRNZCGP

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Authors' response

This was a pilot and we have now been funded to do a more in-depth study. Local laboratories recommend age-related cut-offs, but do not advise about PSA velocity; hence, our initial study has looked at local expected pathways. It was interesting to note that, although most testing is carried out in asymptomatic men, only a minority of cancers are identified in this group. Many of these will be in men aged over 70 years or men with low-grade Gleason 6 or less tumours. The efficacy of curative treating these patients is lacking (e.g. ERSPC and PIVOT trial). We therefore believe that our findings that most cancers are found in symptomatic men and that these are the cases which are most likely to be referred is of interest. We are aware that some GPs use PSA velocity to guide their practice and we intend to study this aspect through an analysis of referred patients. However, we are unaware that this strategy in asymptomatic men is more sensitive or specific than a referral strategy based on an arbitrary cut-off level. With regard guidelines—there are no nationally agreed guidelines on prostate screening, so we were really just trying to ascertain what GPs actually do!

Lower urinary tract symptoms and PSA testing

Hodgson et al. present an intriguing snapshot of the use of PSA testing by GPs,[1] but their suggestion that GPs focus their PSA testing on men with lower urinary tract symptoms (LUTS) requires further attention. Their recommendation is based on their finding that prostate cancer was diagnosed in a greater proportion of men who had LUTS than amongst those who did not. The link between LUTS and prostate cancer is unclear.[2] Whilst LUTS may be linked to an increased risk of prostate cancer diagnosis,[3] they appear to be associated with localised rather than advanced disease, and do not appear to be associated with increased prostate cancer mortality.[4] It is likely that the increased incidence of prostate cancer in men with LUTS is due to the presence of symptoms triggering PSA testing rather than LUTS being symptoms of underlying cancer.[4]

LUTS are common[5,6] and may prompt men to discuss PSA testing with their GPs[7] so may act as a 'back door' route to

Letters may respond to published papers, briefly report original research or case reports, or raise matters of interest relevant to primary health care. The best letters are succinct and stimulating. Letters of no more than 400 words may be emailed to: **editor@rnzcgp.org.nz**. All letters are subject to editing and may be shortened.

PSA screening. There is no evidence that screening men with LUTS is any more effective in reducing prostate cancer mortality than it is in asymptomatic men. Given the limited evidence in support of PSA screening and the risk of screening-associated harm,[8] we should ensure that men who present with LUTS only undergo PSA testing after careful discussion of the advantages and disadvantages of doing so, just as we do with men who are asymptomatic.[9,10]

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Authors' response

We believe Hudson has misinterpreted our sentence that GPs should focus their use of PSA on men with LUTS. The PSA test can be used as a screening tool or can be used to help in the diagnosis and management of men with suspected prostate cancer. As does Hamilton,[1] we believe it is appropriate to use a PSA test as part of the diagnostic work-up of a patient presenting with LUTS. The New Zealand Guidelines on the management of Suspected Cancer in Primary Care[2] recommend that a patient with LUTS in whom the PSA is raised should be referred for specialist assessment. We acknowledge that there is controversy about the benefit of early treatment of localised, low-grade cancers with prostatectomy and agree with Hudson that is important for a GP to discuss the implications of a referral with the patient. However, we stand by our statement that the greatest utility of the PSA test is probably as a diagnostic aid to decision making in symptomatic men, rather than as a screening tool.

Fraser Hodgson, on behalf of the Midland Prostate Cancer study team

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Self-reported data may be unreliable

The gender comparison paper by Jatrana and Crampton[1] used careless language that misrepresented the study's findings. This was repeated by news media perpetuating fashionable beliefs concerning women's disadvantage relative to men.

The study measured self-report about deferrals in purchasing medical services due to not being able to afford the cost. While the paper acknowledged it measured only self-report and included token discussion of the shortcomings of such data, its wording mostly implied that gender differences had been uncovered in real behaviour around purchasing medical services.

Self-report data have been widely criticised as being untrustworthy.[2] The present study provided no reliability or validity properties for its measurement instrument. In line with popular ideology, many women responding to the study's questions would have believed they were disadvantaged relative to men and, from comments in the paper, it was clear that the researchers held similar beliefs. Aside from likely interviewer demand characteristics, such beliefs can be expected to have influenced female subjects' responses. For example, they may have retrospectively attributed decisions not to purchase

medical services to unaffordability when other reasons were actually more prominent at the time, such as natural amelioration of the symptoms. Further, some or many subjects may well have taken the opportunity to support women's cause generally. The questions asked were leading and each subject will have recognised an opportunity to treat the research as advocacy research for all those women she believes will be struggling financially.

On the other hand, men may also have been unable to afford deferred medical services, but later resisted acknowledging this reason (even to themselves) because that would imply they were inadequate in their role as primary earner for their family. Without some measurement of the external validity of the self-report responses, little could be realistically concluded.

Misrepresentation of self-report data has frequently misled the public, especially in gender-related research. Honest science calls for the utmost care in describing accurately what a study has measured and what conclusions are warranted.

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Authors' response

In his comments on our study of gender differences in financial barriers to primary health care in New Zealand[1] Hans Laven has raised some points to which we would like to respond.

His main criticism is focused on self-reported outcome measures (cost-related barriers to primary health care) rather than other self-assessed measures (e.g. self-assessed health, K-10, smoking). He states that 'without some measurement of the external validity of the self-report responses, little could be realistically concluded'. In our paper we acknowledge the possibility of reporting bias in the measurement of delays in receiving health care (page 120), and state 'we are encouraged to see consistency in the findings with previous research in the areas explored here'.

Moreover, this self-reported measure (deferred visits to the GP) has been used in the New Zealand Health Survey 2006/07[2] and in international cross-country surveys.[3–6] Laven appears to condemn all self-reported data ('self-reported data have been widely criticised as being untrustworthy' etc.), but provides only modest evidence in support of this view. For example, he cites the van de Mortel article which finds that 43% (13) of the studies reviewed provided evidence of bias, and says nothing at all about the size of the bias. Similarly, the Squires et al. article focuses on the small proportion of studies that provided reliability measures and had no data on the proportion of acceptable measures. In fact, several self-reported measures used in this and other similar studies have been validated. For example, self-assessed health has been found to be related to health-related outcomes such as mortality in comprehensive reviews,[7,8] for functional status[9] and health care use.[10]

In summary, we believe that Laven raises a good point: namely that validation of self-reported data is an important area of research. However, his conclusion that self-reported measures are untrustworthy significantly overstates the case. In particular, we are not convinced that the citations he provides challenge the validity of our findings, especially since any bias would have to be large.

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