Supportive care intervention in prostate cancer: recent advances and future challenges

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Abstract

Prostate cancer is highly heterogeneous in its nature, effects, pattern of progression and outcomes. Survival, treatment approaches and mortality, differ substantially by socio-economic and geographic factors, and psychosocial outcomes are also likely to be affected by these factors and other personal characteristics. While a number of therapeutic approaches to supportive care have been found to have efficacy, unless these are responsive to patient preferences and can be integrated into routine clinical services or existing community services infrastructure, these are unlikely to translate broadly in the field. Accordingly, a framework to underpin the development of supportive care interventions is suggested that has application in not only genitourinary cancer, but cancer more generally.

Prostate cancer is the most common invasive cancer among males, with 16,349 men diagnosed in Australia in 2005, more than twice as many than with colorectal cancer.[1] Prostate cancer incidence trends are highlighted by the rapid rise in incidence soon after the introduction of prostate specific antigen (PSA) testing in the early 1990s, followed by a sharp reduction in rates, and then a gradual increase since 2000.[2] Mortality rates due to prostate cancer in Australia started to decrease from 1993 onwards, with these reductions in mortality also being seen internationally.[2] The implications of these trends for supportive care services are that the cohort of men in our community who are living with the consequences of prostate cancer is increasing. In 2004, there were about 100,000 Australian men estimated to be living with a diagnosis of prostate cancer,[3] with prevalence increasing due to current incidence and survival patterns. Hence, an understanding of effective approaches to psychosocial care for these men and their families, and the challenges to be faced in delivering this care in an approach that is both equitable and evidence-based, is crucial for public health in Australia.

Issues with equity

There are important geographical and socio-economic differences in prostate cancer outcomes in Australia. Prostate cancer survival is highest for men living in more affluent areas and decreases with reducing area-level socio-economic status, and is highest in major cities compared to inner and outer regional areas.[3] Consistent with this survival differential, prostate cancer mortality is also reported to be higher in non-metropolitan areas, with the mortality differential increasing over time.[4] While the cause of this differential could not be established using these ecological data, fewer radical prostatectomies in regional and rural areas, along with lower rates of PSA testing in these areas, remain among the several competing explanations.[4] Given these differences in survival outcomes, that are likely related to access to health care services, it can be expected that there will be differences in access to post-treatment care and support and that this will impact on adjustment outcomes in men.

Supportive care intervention targets

The diagnosis and subsequent treatment of any cancer is, for most people and their families, a major life stress that is followed by a range of distressing psychosocial effects. Accordingly, clinical practice guidelines have been produced both in Australia and North America that detail evidence-based approaches to ameliorating this distress.[5] Effective approaches include cognitive behavioural therapies, relaxation techniques, psycho-education, supportive psychotherapy, peer support and family and couples therapy. They may be delivered in a range of ways, including group and individual formats and face to face and tele-based delivery systems. It remains the case however, that there has not been widespread translation of psychosocial care into standard clinical practice. This has been variously attributed to the low value placed on such care in a disease focused health system, challenges with up-skilling health professionals in this area of practice and patient and family reluctance to seek help, even when distressed.[6,7] One approach to psychosocial care translation that has been widely discussed is where patients and family members are regularly screened for psychosocial distress, and those with elevated distress are referred to appropriate evidence-based care services.[6] In a stepped care model such as this, all patients and

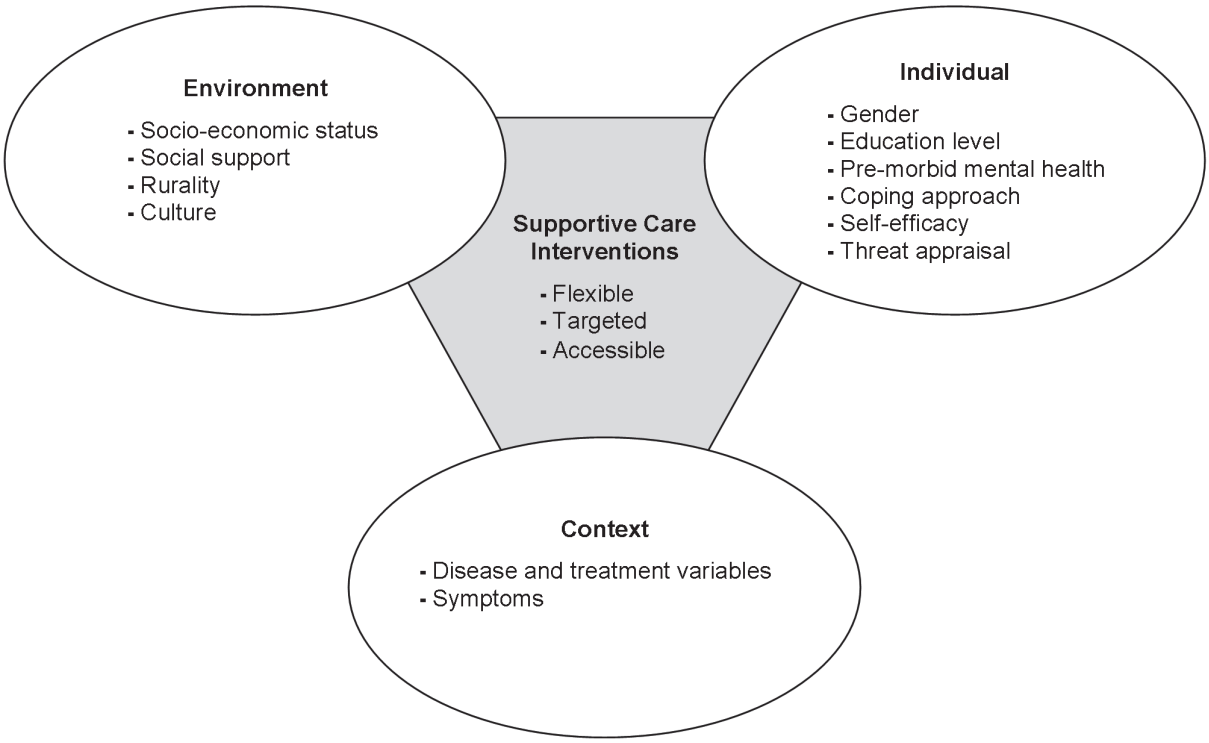
family members receive a standard level of psychosocial care. However, further care is targeted to the area of need and the depth of distress, such that more costly and time intensive interventions are utilised for those experiencing or at greatest risk of unremitting distress. This approach is currently being evaluated in Queensland and New South Wales in a Helpline setting for all cancer types, however to our knowledge has not yet been trialled elsewhere in a controlled design.[8] This approach would be expected to also be efficacious for people affected by prostate or any genitourinary cancer, with the proviso that treatment concerns relevant to those specific cancers and gender-appropriate approaches would be addressed.

Making interventions relevant

While it is reasonable to propose psychological distress as a therapy target for all cancer types, it is also the case that adjustment outcomes are heterogeneous both within and across cancer types. Put simply, some patients and carers will do better or worse than others due to pre-existing factors. These include socio-economic status, gender, age, family type and social support, co-morbid mental health conditions, extent of disease and treatment severity, as well as factors that may be amenable to change such as threat appraisal, coping approach and self-efficacy. Risk factors for distress that are not amenable to change remain part of the intervention model or approach, in order to identify 'at risk' for distress target groups and factors that may hinder uptake of services. For example, people who have lower levels of education may be at risk for poorer adjustment outcomes, but also less likely to uptake educational programs to mitigate that risk, unless these programs are tailored to address low literacy. Patients who reside in regional and rural areas may experience difficulties not only in accessing medical treatments, but also psychosocial care services, unless those services can be remotely delivered. Men who typically do not utilise mental health services to the extent that women do may be unlikely to access such services, unless these services are sensitive to gender issues and masculine approaches to help seeking. Finally, people are less likely to seek services that do not, at face value, resonate with their own cancer experience. On this view, unless psychosocial care services are integrated with symptom management, they will be less relevant for patients whose immediate concern in the case of genitourinary cancer may be urinary or bowel incontinence, or sexual dysfunction. Figure 1 is a diagrammatic representation of how environment, context and individual variables should be considered when developing interventions.

There are a number of therapeutic psychological approaches that have been found to be effective for men with prostate cancer, that are likely to be broadly applicable to other genitourinary cancers. Lepore trialled a group based psycho-education, plus peer support program for men with prostate cancer, finding that men in the intervention were more likely to maintain steady employment and experience less sexual bother.[9] Men who initially had lower levels of education, lower self-esteem, lower self-efficacy and higher depression, benefitted more. In a recent randomised control trial with 159 men undergoing radical prostatectomy for prostate cancer, Parker et al found that a pre-surgical stress management intervention improved mood and physical functioning, although the effects were modest and prostate specific

Figure 1: *Conceptual framework for supportive care interventions*



quality of life was not improved.[10] A group based cognitive behavioural stress management with men previously treated surgically for prostate cancer, found improvements in sexual functioning, with the effect moderated by interpersonal sensitivity,[11] as well as increased benefit finding and quality of life,[12] with the latter mediated by the development of stress management skills.

More recently the Australian Cancer Network has released draft Clinical Practice Guidelines for Advanced Prostate Cancer, where an in-depth systematic review of the evidence for psychosocial intervention for men with advanced prostate cancer was undertaken.[13] This review was widened to include men with prostate cancer of any stage, due to the paucity of research on men with advanced disease. A number of limitations in the research to date were noted, including the use of small convenience samples, cross-sectional designs, limited follow-up and a general failure to adhere to Consolidated Standards of Reporting Trials guidelines.[14] In addition, the economic benefits of interventions have also generally failed to be assessed. This may, at least in part, be hampering efforts to have these care models introduced into standard practice within cash strapped health care systems.

Case for peer support

It is notable that the one support model that has been widely introduced in Australia for men with prostate cancer is peer support. To date there are 92 prostate cancer support groups that are affiliated nationally with the Prostate Cancer Foundation of Australia, with individual membership approaching 10,000. Peer support models do not typically lend themselves to control designs due to their community based nature, with one ongoing randomised control study a recent exception.[15] However, despite the lack of high level evidence, the growth of these groups across the country and elsewhere internationally speaks to their face validity and suggests that health professionals and researchers working in this area should consider ways to incorporate peer support into care models and research designs.

Internet: are we there yet?

The internet is a medium that offers opportunities for delivering new types of psychosocial interventions and social support. To date, internet based peer support groups and mailing lists have been the most common type of intervention and have been reported to provide both informational and emotional support. Internet use has been associated with improving self-efficacy variables (confidence in actively participating in treatment decisions, asking physicians questions and sharing feelings of concern) in one large, cross-sectional study. Preferred features of cancer support websites are that they provide: a range of supports; cancer related information;[16] ability to chat to others with cancer; to ask questions of a clinician[17] and; in the case of young adult users, offer some sort of game.[18] Even after a decade of expanding internet use, internet support is not sought as commonly by some groups as others. Less frequent users include ethnic minorities, males and lower socio-economic status men and women.[19] Women may use internet support in different ways to men. A content analysis of messages posted to a breast cancer and a prostate cancer mailing list found that messages posted by breast cancer patients were more frequent and emotion focused. Those from prostate cancer patients were more cancer information focused and less likely to seek emotional support.[20] There are surprisingly few trials of web based time limited psychosocial interventions, despite the many advantages (including limited cost) of this type of intervention, and its emerging success in other health areas. The internet can be particularly useful to provide support for those who are time poor, geographically isolated or disinclined to face to face interactions. We are only at the beginning of the exploration of possibilities using this medium.

Conclusion

A 'one size fits all' approach to education and support for cancer patients cannot address the known inequalities in cancer outcomes. We need more precise quantitative evidence of where the greatest needs are, not only from the perspective of the individual patient, but also the characteristics and services of the areas in which they live and then evidence-based investigations on how best to meet these needs. This applies not only to people with genitourinary cancer, but to all cancer types. Finally, cross-disciplinary collaboration between clinicians, epidemiologists, psycho-oncologists, nursing and allied health professionals to underpin this is essential.

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