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Introspective Analysis of Knowledge Translation and Dissemination Within a Primary Health Care Model

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Short Communication

The Canadian Health Care system is mandated to follow a Primary Health Care (PHC) model where nurses are at the forefront both in direct care, accessibility, technology and public education. The following discussion focuses on client education during the different phases of prostate cancer, from surgical ablation to subsequent monitoring and follow-up. An emphasis on the importance of seamless care in providing follow-up information to clients following surgery and hospital discharge is included.

Concern/Issue Surrounding Client Access to Health Promotion Information

IBH is a 65-year-old man who had been diagnosed with prostate cancer following routine screening of prostate specific antigen (PSA) levels during a visit to his family doctor. He was referred to an oncologist and subsequently underwent complete radical prostatectomy to remove the tumor in 2003. He was discharged several days post-operatively with instructions to have his PSA levels checked routinely through his family doctor. IBH had biannual check-ups and now at the age of 71 had an elevated PSA level (5.6ng/ml) and excruciating pain in his leg and hip.

IBH's wife called the oncologist office and asked about the PSA levels which had risen consistently over the past several years despite complete radical prostatectomy. The nurse told her not to worry and stated IBH should see his family doctor for pain. IBH then asked his family doctor about the rising PSA levels. His family physician replied that it wasn't really a concern at this time. The issue of concern was that the family was not given any information or explanation for the increased PSA levels. To IBH increased PSA levels meant cancer recurrence. IBH was scared. The lack of information provided to the family was surprising. The key issues are lack of health promotion intervention strategies, lack of interdisciplinary care and lack of access to health information. Nursing diagnosis: Anxiety related to deficient knowledge secondary to previous cancer diagnosis and surgery and subsequent increased PSA levels as evidenced by client verbalization of being anxious and unable to sleep.

Critical Analysis

Prostate cancer is the most common type of cancer in men and the third most common cancer-associated death in men. Every week approximately 490 Canadian men will be diagnosed with prostate cancer and 17% of those diagnosed will die from the disease [1]. There is a reported 10-year survival rate of 93% with complete prostate removal [2] while only a 55% and 15% survival rate with local and distant metastases, respectfully [3]. Prostate cancer diagnosis to most clients is synonymous with death. A cancer diagnosis results in significant client anxiety [4]. Radical prostatectomy is effective in slowing down the progression of prostate cancer and prolonging life for several years' post-surgery [5]. However, radical prostatectomy is associated with painful side-effects including osteoporosis [6]. It is also well known that the recurrence of prostate cancer is punctuated with rising PSA levels. The reemergence of PSA levels suggests metastasis of prostate cancer cells to nearby tissue [7]. If the tumor was successfully removed PSA antigen would not be detected [8]. Additional treatments are indicated in clients following a radical prostatectomy if detectable

PSA levels rise with subsequent measurements [9]. Moreover, metastatic prostate cancer may manifest as bone pain [10]. It will be recalled that IBH had significant pain in the leg and hip. Unfortunately, treatment options to date for metastatic prostate cancer are limited to radiotherapy which is associated with high failure rates [11]. Routine screening for PSA levels is recommended every 6 months for the first two years and yearly after that [10,12]. The screening schedule is recommended to detect increases in PSA levels. Increased PSA levels may be indicative of cancerous cells that escaped the initial surgery. Why do we continue to measure PSA levels in clients post-operatively if we do not have a standard follow-up treatment algorithm?

On the other hand, it should be underscored that PSA levels can result in false positive results. PSA levels can be elevated without cancer recurrence and subsequent medical interventions have risk and should not be implemented based solely on client anxiety [13]. Yet 60-75% of men with prostate cancer metastasis will have

elevated PSA levels [14] and this is information that should be provided to the client to direct informed-decision making. It is the primary physician that usually orders the test and provides the findings to the client [10]. However, in a multidisciplinary health care team, nurses should be educated in knowledge translation to support effective communication to the client during all phases of their disease.

Client centered care may include increased technological means of communication following treatment. In order to effectively communicate with clients at home, internet-based online client-nurse communication strategies have been employed to address unanswered questions and concerns. Such innovative strategies provide advice and information during the follow-up period to relieve anxiety and ultimately improve quality of care [15]. Such provision of services is embedded within the matrix of a PHC model. Advanced practice nurses may play an expanded role in a multidisciplinary health care delivery approach optimizing client education [16], and information dissemination across the trajectory of the disease [17,18].

Such procedures have been shown to be cost effective as the time between the reappearance of symptoms (i.e. increased PSA levels) and medical interventions was shortened and the need for more elaborate costly interventions were averted [19]. At the very least, there should be an information telephone number given to clients upon discharge that they are encouraged to call if they have any questions or concerns. More importantly, there needs to be someone on the other end of the phone who has the knowledge to explain test results and not simply dismiss them as not being of clinical importance. Nurse-led follow-up care aimed at assisting clients by means of providing information decreases anxiety in clients with prostate cancer [20]. Nurses are in a key position to be involved in health promotion strategies and provide comprehensive follow-up period services including advocacy, counseling and education to men living with prostate cancer and post-prostatectomy [21-24].

Action Plan

Although our health care system advocates a PHC model there is much work to be done within the system. The team needs to be educated on the importance of knowledge translation and the ultimate benefits to client well-being. A simple dismissal of client concerns regarding test results demonstrates a lack of empathy, although in IBH's case I do not think this was the intent. Although it may not be wise to rush into aggressive treatment as there is the possibility that the increase in PSA levels is benign [1], one should ensure to provide information and coordinate follow-up visits to help alleviate the anxiety such test results may produce. Following a definite treatment of prostate cancer and the knowledge around the importance of PSA levels for monitoring disease presence and progression, a spike in PSA levels should not be casually dismissed.

The client should be given information about the possible meaning and relevance of these test results to make informed-decisions about their health. Moreover, the nurse should determine the effect of such test results on the client's physical and emotional health and intervene appropriately. Members of the health care team should advocate for clients that are experiencing pain to not only treat the pain but to fully investigate the source (i.e. osteoporosis or bone cancer) and quality (i.e. PQRSTU) of the pain [12].

Establishing cancer registries within hospitals, such as Atlantic Path, a recent cancer registry set up by Dr. Louse Parker at Dalhousie University (http://dalnews.dal.ca/2009/03/25/atlantic_path.html) and developing clinical algorithms to inform and support future evidence-based models for follow-up care for men and their families living with prostate cancer is imperative. Increased education for all health care team members, including community family physicians, on key issues related to client care and to set up an information telephone hotline would also benefit knowledge translation. A liaison among the health care team providing care and monitoring health outcomes of clients in primary, secondary and tertiary care settings will further knowledge and promote client power and self-control over healthcare.

Conclusion

Effective client education strategies following hospital discharge for radical procedures such as prostate cancer surgery is lacking. Moreover, it is not clear who among the health care team is responsible to follow-up with clients' post-prostatectomy [21]. Nurses are in a key position to assume the role of educator and advocate for improved client education and follow-up health services beyond the immediate post-operative phase. It is evident that such health promotion strategies are key determinants to health and must be incorporated into client-centered nursing strategies and interventions.

References

1. Canadian Cancer Society (2010) Prostate cancer statistics.
2. Doyle-Lindrud S (2007) Prostate cancer: a chronic illness. Clin J Oncol Nurs. 11(6): 857-861.
3. Alberta Genito-Urinary Oncology Group (2005) Alberta Cancer Board: Clinical Guidelines: Prostate Cancer.
4. Oliffe J (2006) Being screened for prostate cancer. A simple blood test or a commitment to treatment? Cancer Nurs 29(1): 1-8.
5. Planas J, Morote J, Orsola A, Salvador C, Trilla E, et al. (2007) The relationship between daily calcium intake and bone mineral density in men with prostate cancer. BJU International 99(4): 812-816.
6. Ercolano E (2008) Follow up of men post-prostatectomy: who is responsible? Urol Nurs 28(5): 370-380.
7. Kawachi MH, Bahnson RR, Barry M, Busby JE, Carroll PR, et al. (2009) NCCN clinical practice guidelines in oncology: prostate cancer. J Natl Compr Canc Netw 8(2): 240-262.
8. Terris MK, Rhee A, Qureshi SM (2009) Prostate Cancer - Metastatic and Advanced Disease.
9. Delongchamps NB, Zerbib M, Mejean A, Rouach Y, Debre B, et al. (2009) Conformal radiotherapy for detectable PSA following radical prostatectomy: efficacy and predictive factors of recurrence. Can J Urol 16(5): 4813-4819.

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10. Fischbach F, Dunning, Marshall B (2009) A manual of laboratory diagnostic tests. In: Fischbach F, Dunning, Marshall B (Eds.), Wolters Kluwer Lippincott Williams and Wilkins, Philadelphia.

11. Moore KN, Allen C (2010) Assessment and management of problems related to male reproductive processes. In: Day, Paul, Williams, Smeltzer, Bare (Eds.), Brunner & Suddarth's Textbook of Canadian Medical-Surgical Nursing, Lippincott Williams and Wilkins, Philadelphia, pp. 1647-1681.

12. Dale W, Hemmerich J, Bylow K, Mohile S, Mullaney M, et al. (2009). Patient anxiety about prostate cancer independently predicts early initiation of androgen deprivation therapy for biochemical cancer recurrence in older men: a prospective cohort study. J Clin Oncol 27(10): 1557-1563.

13. Andersen T, Ruland CM (2009) Cancer patients' questions and concerns expressed in an online nurse-delivered mail service: preliminary results. Stud Health Technol Inform 146: 149-153.

14. Madsen LT, Craig C, Kuban D (2009) A multidisciplinary prostate cancer clinic for newly diagnosed clients: developing the role of the advanced practice nurse. Clin J Oncol Nurs 13: 305-309.

15. Ream E, Wilson-Barnett J, Faithfull S, Fincham L, Khoo V, et al. (2009) Working patterns and perceived contribution of prostate cancer clinical nurse specialists: a mixed method investigation. Int J Nurs Stud 46(10): 1345-1354.

16. Ross T (2007) Prostate cancer telephone helpline: nursing from a different perspective. Br J Nurs 16(3): 161-165.

17. Booker J, Eardley A, Cowan R, Logue J, Wylie J, et al. (2004) Telephone first post-intervention follow-up for men who have had radical radiotherapy to the prostate: evaluation of a novel service delivery approach. Eur J Oncol Nurs 8(4): 325-333.

18. Tärnhuvid M, Wändel C, Willman A (2007) Nursing interventions to improve the health of men with prostate cancer undergoing radiotherapy: a review. Eur J Oncol Nurs 11(4): 328-329.

19. Lander JA, Adams N (2010) Pain management. In: Day, Paul, Williams, Smeltzer, Bare (Eds.), Brunner & Suddarth's Textbook of Canadian Medical-Surgical Nursing, Lippincott Williams & Wilkins, Philadelphia, pp. 254-292.

20. Sublett C (2008) Translating evidence into clinical practice. Adding to the evidence base: a critique of 'follow up of men post-prostatectomy: who is responsible? Urologic Nursing 28(5): 378-380.

21. Abel L, Zeroski D, Brammer S, Butler W, Wallner KE, et al. (2007) PSA spike after brachytherapy for localized prostate cancer. Urol Nurs 27(6): 507-510.

22. Helgesen F, Andersson SO, Gustafsson O, Varenhorst E, Gobén B, et al. (2000) Follow-up of prostate cancer clients by on-demand contacts with a specialist nurse: a randomized study. Scand J Urol Nephrol 34(1): 55-61.

23. National Cancer Institute (2009) Prostate-specific antigen test.

24. Turner B (2007) Diagnosis and treatment of patients with prostate cancer: the nurse's role. Nursing Standard 21(39): 48-56.

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