University Library

MINERVA ACCESS

A gateway to Melbourne's research publications

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Reynolds, BR;Bulsara, C;Zeps, N;Codde, J;Lawrentschuk, N;Bolton, D;Vivian, J

Title:
Exploring pathways towards improving patient experience of robot-assisted radical prostatectomy (RARP): assessing patient satisfaction and attitudes

Date:
2018-05-01

Citation:
Reynolds, B. R., Bulsara, C., Zeps, N., Codde, J., Lawrentschuk, N., Bolton, D. & Vivian, J. (2018). Exploring pathways towards improving patient experience of robot-assisted radical prostatectomy (RARP): assessing patient satisfaction and attitudes. BJU International, 121 (S3), pp.33-39. https://doi.org/10.1111/bju.14226.

Persistent Link:
https://hdl.handle.net/11343/283670

Exploring Pathways Towards Improving Patient Experience of Robot-Assisted Radical Prostatectomy (RARP): Assessing Patient Satisfaction and Attitudes

INTRODUCTION

Author Manuscript

Prostate cancer (PCa) is the most common cancer in men, with implications on diagnosis for patients, their families and the broader community (1, 2). For younger men diagnosed with intermediate or higher grade localised PCa, the benchmark treatment is a radical prostatectomy (RP), either via an open or a robot assisted approach (RARP) (3). Despite a recent randomised controlled trial (RCT) demonstrating non-inferiority of outcome for the RARP, this still remains the preferred option for a majority of men due to minimally invasive approach (4).

We sought to achieve a greater understanding of patients' attitudes towards, and levels of satisfaction after RARP, in order to better personalise hospital care and potentially justify changes in current procedures. Data obtained could potentially also inform the key aspects of an ERAS (Enhanced Recovery After Surgery) protocol for patients undergoing a RARP in the future. Current research regarding ERAS and the treatment of PCa has revealed improved efficiency and patient benefit with a reduction in complication rates and length of stay (5-9). There is however a need for best-practice research evaluating ERAS protocols in RARP, where subjective patient assessments as well as objective end-points are determined (10, 11).

PATIENTS AND METHODS

A convergent mixed method design was employed where quantitative (via questionnaire) and qualitative (via questionnaire and focus groups) data were collected and analysed simultaneously (12). This research was approved by the Human Research Ethics Committees

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/bju.14226

This article is protected by copyright. All rights reserved

at the University of Notre Dame Australia, Fremantle and St John of God HealthCare (ref no. 16133F & 992).

All patients who had undergone RARP (with or without pelvic lymph node dissection) by two high-volume surgeons between 01/01/2014 and 31/06/2016 were contacted with regard to potential recruitment to the study. 412 such patients were identified who were then mailed a questionnaire with a reply-paid return envelope, and all invited to participate in a focus group via a separate opt-in document. All documents returned were separated from the questionnaires and then chosen at random until focus group positions were filled. Focus group participants were provided with a study information sheet and provided written consent for the research prior to these sessions.

The questionnaire utilised consisted of demographic questions, 22 close-ended questions and 7 open-ended questions. Assessment was divided into four sections: before surgery (e.g. - information, preparation, diet, alcohol, and smoking habits), the surgical procedure itself (e.g. - overall satisfaction and likely recommendation), after surgery whilst in hospital (e.g. - pain relief, nausea, mobilisation, return to diet), and after discharge (e.g. - return to urinary continence, normal functions). Closed ended-questions used a variety of five-level Likert-like scales, and open-ended questions addressed reasons for patient practices, satisfaction and expectations. No distinction was made for patients having had a lymph node dissection as researchers were unsure if the patients were certain or not and thus did not wish to introduce bias into the study.

Subjects then participated in one of two focus groups (with eight people in each) to discuss their experiences. As the ideal number of focus group sessions and size was pre-determined based on evidence, the remaining were not required to participate. Patients were informed that the purpose of the focus group was to share experiences with emphasis on ways in which the hospital and health team managed the process before, during and after surgery. The focus group schedule is provided in Table 1. One facilitator led the focus groups with one observer. The focus groups were audio recorded and transcribed verbatim. For patients who expressed interest in focus group participation but could not attend the organised session times, they were offered a phone interview session using the same focus group

Author Manuscript

This article is protected by copyright. All rights reserved

questions. One researcher made these phone calls, which were similarly audio recorded and transcribed.

Data Analysis:

Survey and focus group questions were designed using established protocols for this purpose and based off the key aspects of ERAS protocols (13-15). As a pilot study, these data tools were not previously validated. Quantitative data was analysed using SPSS (Version 24.0, 2016). The qualitative data from both the open-ended survey questions, phone interviews and focus group underwent thematic analysis using NVivo (Version 11, 2016). First, transcripts and written survey questions were reviewed to identify codes which described specific phenomena. Codes were used to systematically label phenomena in both the open-ended written responses and focus groups. Codes were arranged into relevant themes to contribute reasoning to the qualitative data.

RESULTS

Demographic information for the 214 questionnaires returned in full (response rate 52%) is presented in Table 2. The most common highest level of educational attainment was university or other tertiary degree (51.4%), and 92.1% of men were either married or in an equivalent relationship. Information such as the proportion of men who underwent lymph node dissection, nerve sparing surgery, had a positive margin or undetectable post-operative PSA were not retrieved from medical records nor directly asked of the patients in the data collection. Further, although a select number of men did mention complications, these did not emerge as common themes following analysis. While it would be possible to retrieve a majority of this objective data in retrospect, it would be an invalid representation of the anonymous respondent population.

Questionnaire Findings

97.6% of patients surveyed were satisfied or extremely satisfied were their experience in hospital. 91.1% responded that they likely would recommend this procedure if asked. 85.2%

Author Manuscript

This article is protected by copyright. All rights reserved

felt that they had stayed about the right amount of time in hospital after their procedure (mean length of stay 2.4 days).

Prior to surgery, 92.3% of respondents prepared in some way for the procedure. Preparation included activities such as pelvic floor exercises, general exercise, weight loss and more research into the procedure. 52.7% of men felt worried or anxious before the procedure. This was managed by speaking to healthcare professionals, family, or to other patients who have already had the procedure, doing more research and exercise. A majority of patients "agreed" or "very strongly agreed" that they were given a choice in anaesthetic (62.1%), their questions were well answered (66.9%), and the information they received was relevant (98.8%) (Fig. 1).

97.6% of patients "agreed" or "very strongly agreed" that their pain relief was adequate (97.6%) post-surgery, and that they were encouraged to mobilise early (97.6%) and eat (91.7%) (Fig. 2). Far fewer patients reported issues with post-operative nausea and vomiting (37.3%) or fatigue (42%) (Fig. 2). After discharge the majority of patients felt that their return to urinary continence (63.9%), normal function (78.1%) and quality of life (75.1%) were "as expected" (Fig. 3).

Author Manuscript

Qualitative Findings

The qualitative thematic analysis combined open ended data from questionnaires, six phone interviews, and focus groups. Table 3 lists themes, subthemes, and data excerpts. The key themes have been divided into four main sections: preparation prior to surgery, recovery whilst in hospital, recovery whilst at home, and the overall process.

1: Preparation Prior to Surgery

Key themes that emerged included balancing the psychological impact of diagnosis with a decision on which treatment modality to pursue. Patients found great benefit in many of the resources received directly from surgeons, as opposed to sourcing on-line reliable research that is relevant to the Australian context. The importance of compliance in pre- and post-

This article is protected by copyright. All rights reserved

operative pelvic floor exercises was noted, as was the benefit of pre-operative consultation with a continence nurse which facilitated realistic expectations of the post-operative recovery pathway.

2: Recovery whilst in Hospital

Key themes included the benefit of a multidisciplinary team (extending to nursing staff), and hospital facilities. Some men felt there was discontinuity in their care and several reported complaints common to other procedures such as not being happy with hospital food.

3: Recovery Whilst at Home

In this period key themes involved early recovery and return to normal functioning. Interestingly, the objective nature of the degree of urinary continence and sexual function was overshadowed by the strong influence of pre-operative expectations.

4: Overall Process

The minimally invasive nature of RARP compared to open RP influenced the themes surrounding the entire experience. Benefit in support groups and in speaking to other patients who had undergone the procedure was noted. Many men felt the issue of PCa isn't discussed as openly as it should be. After their diagnosis and surgery, some men were surprised to learn how many friends and colleagues were fellow PCa survivors. Participants also brought into the question the referral process as well as the out of pocket costs associated with RARP. Regardless of where each man was in their recovery the best outcome noted was repeatedly being cancer free.

DISCUSSION

In this Australian quantitative and qualitative study of patient outcomes after RARP, patients were overall very satisfied with the procedure and would likely recommend it to others. This is in contrast to previous international studies that have reported RARP as an independent predictor of greater dissatisfaction and regret when compared with open radical retropubic prostatectomy (16, 17). This previous finding has been ascribed to higher expectations associated with a new and highly publicised procedure as these studies were

Author Manuscript

This article is protected by copyright. All rights reserved

undertaken earlier in the popularisation of RARP (18). Interestingly, our patients' perception concerning overall satisfaction was independent of the measurable outcomes of continence and potency. Expectations of future health states have been shown to partially influence satisfaction and health-related quality of life (19). This supports the pivotal role that pre-treatment patient education and counselling facilitates, in setting realistic expectations of recovery following surgery (17).

Psychological distress after cancer diagnosis is well recognised (20), and partners and other family members may also suffer psychosocial impact (21, 22). The results from this current study reinforce the need for clinicians to maintain a holistic approach and to recognise that a prostate cancer diagnosis will affect an entire family (23).

The management of localised PCa may be controversial depending on patient age and tumour grade, and the significant decision-related distress reported by participants prior to treatment is notable (24). This occurred under differing circumstances and was influenced by the information provided. All men agreed that once a decision on a treatment pathway was made, the entire process became easier. Similarly, Steginga et al. (25) found that men who were undecided about what treatment to receive experienced greater decision-related distress. This debate around the most appropriate treatment for localised PCa enhances the role of doctors as patient advocates, and educators (26). In the future, interventions should target decision-related distress for all men and in-depth psychological support for those who experience ongoing difficulties.

Our study would suggest PCa survivors are generally happy with the information urologists and primary care doctors provide regarding treatment options. Some men however received either insufficient, conflicting, or confusing information. Studies of healthcare providers have found that clinicians frequently underestimate their patients' wish for information and discussion (27). Cancer patients may have numerous information needs and use a variety of sources to satisfy these requirements (28). Of note in this study is that the high level of patient satisfaction is in contradistinction to previously reported significant risk of decision regret after surgery and salvage radiation (29), and it may be that this level of support provided peri-operatively is sufficient to limit such decision regret. Although

Author Manuscript

This article is protected by copyright. All rights reserved

information on case mix, positive margin rate and post-operative PSA were note recorded and would no doubt negatively influence overall satisfaction, in the qualitative data received this did not emerge as a common theme in either groups of patients.

In our study, patients also described significant benefit from regular pelvic floor exercise programs pre- and post-operatively. Most respondents received counselling preoperatively and all postoperatively on pelvic floor exercises from trained physiotherapists or urology nurses extending to as long as was needed by any patient. Participants were very specific in attributing their use towards improvements in continence and quality of life. This study as well as previous research in this context provides evidence that pelvic floor exercise programs have multidimensional potential to improve the health status of patients who have undergone RP (30).

The importance of the nurse's role providing specialist supportive and clinical care is widely recognised in published literature (31). Similarly our study identified from patients' perspectives that great benefit is gained from the interpersonal and technical skills of both specialist clinical and continence nurses (32-35). This promoted patient advocacy, optimised preparation for surgery and improved compliance with pelvic floor strengthening (33-36). It is essential that specialist nurses are supported in their unique role.

The increase in life expectancy in patients with PCa has made post-treatment quality of life a key metric impacting upon issues as diverse as psychosocial and socioeconomic implications (37). However, it is largely accepted in meta-analyses that return to quality of life and functional outcomes occur earlier with RARP (6, 38). In this study early mobilisation, return to work, and overall quality of life were major priorities for respondents. Interestingly, patients' perception concerning the success of the surgery did not correlate with the measurable outcomes of continence and potency. This relationship or lack thereof has been similarly observed internationally (39). In health-related quality of life, satisfaction is mainly determined by personal perception, expectation and interpretation rather than the objective status of urinary and sexual function (39).

Author Manuscript

This article is protected by copyright. All rights reserved

Although the aim of retaining urinary continence and full sexual function after treatment is universal, they are accepted complications with the knowledge that ongoing improvement and full recovery can take up to 3 years (40). Overall, the benefit of giving a realistic picture alongside providing the right support and expectations to the patient helps in maximising outcomes and ensures the high levels of satisfaction in quality of life and normal functioning (41).

ERAS modifies both physiological and psychological factors surrounding surgery (10). Before any such protocol is developed and implemented, it is imperative to identify what factors and outcomes are most important to patients. This provides a baseline of reference and more importantly, justifies change to current procedures. As a result, this study has enabled patient empowerment by facilitating future patients to make a decision with the best available information. In a practical setting, consumer involvement will improve understanding of what patient's attitudes are towards their time spent in hospital. This will assist healthcare professions to comprehensively provide a targeted and personalised approach to the provision of care and ultimately deliver more meaningful health outcomes. Finally, with the key themes identified and an increased understanding of what is important to patients, we can use this to help inform a future study with the hopes of further improving early recovery and return to normal function.

Limitations and Strengths

There are some limitations to this study. The results are limited to a West Australian experience, within the private sector, and are a reflection of the two high-volume surgeons involved and thus may not easily be translated to less experienced surgeons. Further, there may be a hypothetical completion bias whereby respondents present the most positive experiences, with the negative experiences less represented. Unique to this study was the use of a mixed method approach, with a higher than expected response rate for a convenience sample. Finally, the data obtained from the questionnaires were all returned complete without missing data.

Conclusion

Author Manuscript

This article is protected by copyright. All rights reserved

The overwhelming majority of men in this study expressed satisfaction in their decision to undergo a RARP. Patients perceived great benefit from pre-operative preparations. For many patients, the greatest difficulty was the initial diagnosis and the subsequent decision regarding what treatment modality to pursue. Patient satisfaction is mainly determined by personal perception, expectation and interpretation rather than the objective status of functional outcomes such as urinary and sexual function. We must rely on more than surgical training and technology to enable optimal patient outcomes.

Author Manuscript

ACKNOWLEDGEMENTS

The Health Consumers Council of WA for their help and support in enabling consumer involvement and hosting the focus groups. Surgeons; Clinical Associate Professor Justin Vivian and Mr Richard Pemberton for allowing access to their patient database.

Funding

This work was supported by St John of God Subiaco Hospital and by donations to the St John of God Foundation.

REFERENCES

1. Welfare AIoHa. Cancer in Australia: an Overview 2014. In: AIHW, editor. Canberra2014.

2. De Carlo F, Celestino F, Verri C, Masedu F, Liberati E, Di Stasi SM. Retropubic, laparoscopic, and robot-assisted radical prostatectomy: surgical, oncological, and functional outcomes: a systematic review. Urologia internationalis. 2014;93(4):373-83.

3. Robertson C, Close A, Fraser C, Gurung T, Jia X, Sharma P, et al. Relative effectiveness of robot‐assisted and standard laparoscopic prostatectomy as alternatives to open radical prostatectomy for treatment of localised prostate cancer: a systematic review and mixed treatment comparison meta‐analysis. BJU international. 2013;112(6):798-812.

4. Yaxley JW, Coughlin GD, Chambers SK, Occhipinti S, Samaratunga H, Zajdlewicz L, et al. Robot-assisted laparoscopic prostatectomy versus open radical retropubic

This article is protected by copyright. All rights reserved

prostatectomy: early outcomes from a randomised controlled phase 3 study. The Lancet. 2016;388(10049):1057-66.

5. Gralla O, Haas F, Knoll N, Hadzidiakos D, Tullmann M, Romer A, et al. Fast-track surgery in laparoscopic radical prostatectomy: basic principles. World journal of urology. 2007;25(2):185-91.

6. Novara G, Ficarra V, Rosen RC, Artibani W, Costello A, Eastham JA, et al. Systematic review and meta-analysis of perioperative outcomes and complications after robot-assisted radical prostatectomy. European urology. 2012;62(3):431-52.

7. Sharma S, Kim HL, Mohler JL. Routine pelvic drainage not required after open or robotic radical prostatectomy. Urology. 2007;69(2):330-3.

8. Stevens RA, Mikat-Stevens M, Flanigan R, Waters WB, Furry P, Sheikh T, et al. Does the choice of anesthetic technique affect the recovery of bowel function after radical prostatectomy? Urology. 1998;52(2):213-8.

9. Biki B, Mascha E, Moriarty DC, Fitzpatrick JM, Sessler DI, Buggy DJ. Anesthetic Technique for Radical Prostatectomy Surgery Affects Cancer RecurrenceA Retrospective Analysis. Anesthesiology: The Journal of the American Society of Anesthesiologists. 2008;109(2):180-7.

10. Cerantola Y, Valerio M, Hubner M, Lassen K, Carli F, Persson BM, et al. Enhanced Recovery After Surgery for Pelvic Cancer. Pelvic Cancer Surgery: Springer; 2015. p. 39-47.

11. Melnyk M, Casey RG, Black P, Koupparis AJ. Enhanced recovery after surgery (ERAS) protocols: Time to change practice? Canadian Urological Association Journal. 2011;5(5):342.

12. Plano Clark V, Ivankova N. Mixed methods research. 3rd ed. Thousand Oaks, California: Sage Publications; 2016.

13. Patton M. Qualitative research and evaluation methods. 4th ed. Thousand Oaks, California: Sage Publications; 2015.

14. Krueger R, Casey M. Focus groups. 5th ed. Thousand Oaks, California: Sage Publications; 2014.

15. Jayasekara RS. Focus groups in nursing research: methodological perspectives. Nursing outlook. 2012;60(6):411-6.

16. Schroeck FR, Krupski TL, Sun L, Albala DM, Price MM, Polascik TJ, et al. Satisfaction and regret after open retropubic or robot-assisted laparoscopic radical prostatectomy. european urology. 2008;54(4):785-93.

Author Manuscript

This article is protected by copyright. All rights reserved

Author Manuscript

17. Hoffman RM, Lo M, Clark JA, Albertsen PC, Barry MJ, Goodman M, et al. Treatment Decision Regret Among Long-Term Survivors of Localized Prostate Cancer: Results From the Prostate Cancer Outcomes Study. Journal of Clinical Oncology. 2017:JCO. 2016.70. 6317.

18. Schroeck FR, Krupski TL, Stewart SB, Bañez LL, Gerber L, Albala DM, et al. Pretreatment expectations of patients undergoing robotic assisted laparoscopic or open retropubic radical prostatectomy. The Journal of urology. 2012;187(3):894-8.

19. El Douaihy Y, Sooriakumaran P, Agarwal M, Srivastava A, Grover S, Mudaliar K, et al. A cohort study investigating patient expectations and satisfaction outcomes in men undergoing robotic assisted radical prostatectomy. International urology and nephrology. 2011;43(2):405-15.

20. Bisson J, Chubb H, Bennett S, Mason M, Jones D, Kynaston H. The prevalence and predictors of psychological distress in patients with early localized prostate cancer. BJU international. 2002;90(1):56-61.

21. Brown LF, Kroenke K, Theobald DE, Wu J, Tu W. The association of depression and anxiety with health ‐ related quality of life in cancer patients with depression and/or pain. Psycho ‐ Oncology. 2010;19(7):734-41.

22. Kroenke K, Theobald D, Wu J, Loza JK, Carpenter JS, Tu W. The association of depression and pain with health-related quality of life, disability, and health care use in cancer patients. Journal of pain and symptom management. 2010;40(3):327-41.

23. Edwards B, Clarke V. The psychological impact of a cancer diagnosis on families: the influence of family functioning and patients' illness characteristics on depression and anxiety. Psycho ‐ Oncology. 2004;13(8):562-76.

24. Wong F, Stewart DE, Dancey J, Meana M, McAndrews MP, Bunston T, et al. Men with prostate cancer: influence of psychological factors on informational needs and decision making. Journal of psychosomatic research. 2000;49(1):13-9.

25. Steginga SK, Occhipinti S, Gardiner RF, Yaxley J, Heathcote P. Prospective study of men's psychological and decision-related adjustment after treatment for localized prostate cancer. Urology. 2004;63(4):751-6.

26. DeHart E. Reflections of a prostate cancer patient. Urology. 1996;48(2):171-7.

27. Strull WM, Lo B, Charles G. Do patients want to participate in medical decision making? Jama. 1984;252(21):2990-4.

This article is protected by copyright. All rights reserved

28. Laws TA, Pinnock C, Moul JW, Esterman A. Differences in self-reported outcomes of open prostatectomy patients and robotic prostatectomy patients in an international web-based survey. European Journal of Oncology Nursing. 2013;17(6):775-80.

29. Steer AN, Aherne NJ, Gorzynska K, Hoffman M, Last A, Hill J, et al. Decision regret in men undergoing dose-escalated radiation therapy for prostate cancer. International Journal of Radiation Oncology* Biology* Physics. 2013;86(4):716-20.

30. Baumann FT, Zopf EM, Bloch W. Clinical exercise interventions in prostate cancer patients—a systematic review of randomized controlled trials. Supportive Care in Cancer. 2012;20(2):221-33.

31. Sykes J, Yates P, Langbecker D, editors. Evaluation of the implementation of the prostate cancer specialist nurse role. Cancer Forum; 2015: The Cancer Council Australia.

32. Shaw C, Williams KS, Assassa R. Patients' views of a new nurse - led continence service. Journal of Clinical Nursing. 2000;9(4):574-84.

33. Lamb BW, Allchorne P, Sevdalis N, Vincent C, Green JSA. The role of the urology clinical nurse specialist in the multidisciplinary team meeting. International Journal of Urological Nursing. 2011;5(2):59-64.

34. Lamb BW, Jalil RT, Shah S, Brown K, Allchorne P, Vincent C, et al. Cancer patients' perspectives on multidisciplinary team working: an exploratory focus group study. Urologic nursing. 2014;34(2):83-91, 102.

35. Kinnear N, Smith R, Hennessey DB, Bolton D, Sengupta S. Implementation rates of uro-oncology multidisciplinary meeting decisions. BJU Int. 2017;120 Suppl 3:15-20.

36. Palmer MH, Fogarty LA, Somerfield MR, Powel LL, editors. Incontinence after prostatectomy: coping with incontinence after prostate cancer surgery. Oncology nursing forum; 2003.

37. Shi M-J, Yang J, Meng X-Y, Li S, Liu T, Fang Z-H, et al. Comparison of functional outcomes after retropubic, laparoscopic and robot-assisted radical prostatectomy: A meta-analysis. World J Meta-Anal. 2014;2(3):107-26.

38. Ficarra V, Novara G, Rosen RC, Artibani W, Carroll PR, Costello A, et al. Systematic review and meta-analysis of studies reporting urinary continence recovery after robot-assisted radical prostatectomy. European urology. 2012;62(3):405-17.

Author Manuscript

This article is protected by copyright. All rights reserved

39. Choi EY, Jeong J, Kang DI, Johnson K, Jang T, Kim IY. Early assessment of patient satisfaction and health-related quality of life following robot-assisted radical prostatectomy. Journal of robotic surgery. 2010;4(4):221-7.

40. Haglind E, Carlsson S, Stranne J, Wallerstedt A, Wilderäng U, Thorsteinsdottir T, et al. Urinary incontinence and erectile dysfunction after robotic versus open radical prostatectomy: a prospective, controlled, nonrandomised trial. European urology. 2015;68(2):216-25.

41. El Douaihy Y, Mudaliar K, Peters D, Tan G, Srivastrava A, Lawlor A, et al. Assessing Satisfaction Following Robotic Radical Prostatectomy; Mitigating Unrealistic Expectations. The Journal of Urology. 2010;183(4):e785-e6.

Author Manuscript

This article is protected by copyright. All rights reserved

Table 1. Focus group question guide.

Firstly, I'd like you to reflect back before you had the procedure

1. When you think about all the information you received before the operation, did you feel like you well prepared and informed for the procedure?
    a. Are there any areas that you feel could have been addressed better?
2. Did any of you have any concerns before the operation?
    a. If yes, what were those concerns?
    b. Were they addressed well enough, in your opinion?
    c. What was done to respond to any of your concerns?

Let's talk a little about your time in hospital.

3. What were some of the good things and some of the not so pleasant things about your stay in hospital?
    a. Did you have any physical troubles
    b. Did you have trouble with pain, nausea, fatigue, or mobility?
4. Would anyone like to share some thoughts on their experiences of having undergone RARP as a procedure?
    a. When you think back over the process again, what comes to mind for you?

Now thinking a little about more recent experiences having undergone the procedure and recovering back at home….

5. Would you say that your return to normal function and quality of life been affected?
    a. How has it affected your quality of life?
    b. Is there anything that you are grappling with after the operation
    c. How did you manage this?
6. If you had to have the procedure done again knowing what you now know about it, is there anything that you think could be done differently?

Overall to finish off our discussion today….

7. If you were to improve the entire hospital experience of another man undergoing the operation, what would you like to be done differently?
    a. What would you include before and after the operation?
    b. What during your hospital experience was most helpful?

Author Manuscript

This article is protected by copyright. All rights reserved

Table 1. Focus group question guide.

Firstly, I'd like you to reflect back before you had the procedure

1. When you think about all the information you received before the operation, did you feel like you well prepared and informed for the procedure?
    a. Are there any areas that you feel could have been addressed better?
2. Did any of you have any concerns before the operation?
    a. If yes, what were those concerns?
    b. Were they addressed well enough, in your opinion?
    c. What was done to respond to any of your concerns?

Let's talk a little about your time in hospital.

3. What were some of the good things and some of the not so pleasant things about your stay in hospital?
    a. Did you have any physical troubles
    b. Did you have trouble with pain, nausea, fatigue, or mobility?
4. Would anyone like to share some thoughts on their experiences of having undergone RARP as a procedure?
    a. When you think back over the process again, what comes to mind for you?

Now thinking a little about more recent experiences having undergone the procedure and recovering back at home….

5. Would you say that your return to normal function and quality of life been affected?
    a. How has it affected your quality of life?
    b. Is there anything that you are grappling with after the operation
    c. How did you manage this?
6. If you had to have the procedure done again knowing what you now know about it, is there anything that you think could be done differently?

Overall to finish off our discussion today….

7. If you were to improve the entire hospital experience of another man undergoing the operation, what would you like to be done differently?
    a. What would you include before and after the operation?
    b. What during your hospital experience was most helpful?

Author Manuscript

This article is protected by copyright. All rights reserved

Table 2. Respondent characteristics (*n* = 214 Patients).

Gender	Frequency	Percent
Male	214	100.0
Age		
46-55 years	18	8.4
56-65 years	87	40.7
66 - 75 years	101	47.2
>75 years	8	3.7
Marital Status		
Never Married	3	1.4
Married /De Facto	197	92.1
Separated / Divorced	11	5.1
Widowed	3	1.4
Education Level		
Primary School	3	1.4
Some High School	23	10.7
School Certificate / Year 10	30	14.0
TEE / TAE / Leaving / Year 12 / 6th Form	19	8.9
TAFE Certificate	29	13.6
University or other Tertiary Institution	110	51.4
Employment Status		
Full-time	83	38.8
Part time	29	13.5
Studying	1	0.5
Looking for work / Government assistance	2	0.9
Retired	99	46.3

Author Manuscript

This article is protected by copyright. All rights reserved

Table 2. Respondent characteristics (*n* = 214 Patients).

Gender	Frequency	Percent
Male	214	100.0
Age		
46-55 years	18	8.4
56-65 years	87	40.7
66 - 75 years	101	47.2
>75 years	8	3.7
Marital Status		
Never Married	3	1.4
Married /De Facto	197	92.1
Separated / Divorced	11	5.1
Widowed	3	1.4
Education Level		
Primary School	3	1.4
Some High School	23	10.7
School Certificate / Year 10	30	14.0
TEE / TAE / Leaving / Year 12 / 6th Form	19	8.9
TAFE Certificate	29	13.6
University or other Tertiary Institution	110	51.4
Employment Status		
Full-time	83	38.8
Part time	29	13.5
Studying	1	0.5
Looking for work / Government assistance	2	0.9
Retired	99	46.3

Author Manuscript

This article is protected by copyright. All rights reserved

Table 3. Qualitative themes and quotes.

	Example quotes
1. Prior to surgery	
a. Psychological impact	*"When you are first told about having prostate cancer, it feels like a death sentence… A lot goes through your mind and it's terrifying"*
b. Treatment Decision	*"The stress over which modality drives you mad… There is not enough information on how to make that decision. It psychological. I went through 4-5 months of hardship making the decision… I wanted the doctor to make a recommendation for me"*
c. Educational resources	*"There is a degree of fear associated with prostate cancer, partly because we don't know what it means… I was concerned about the information I had access to over the internet… Great explanation of procedure from surgeon with models and watching the surgery on YouTube"*
d. Pelvic Floor Exercises / Physiotherapy	*"The pelvic floor exercises were the saviour for me… The incontinence physio was also very informative and prepared me well… She was great, and the ultrasound showing that we were doing them correctly…. This was a concern, so this motivated me to strengthen the area"*
e. Continence Nurse / Specialist	*"The continence nurse was fantastic and a terrific resource for me and gave me a great deal of confidence and relieved a lot of my fears… Helpful to know every possible scenario, but this caused a lot of fear… This should have happened earlier. Not the day before surgery"*
2. Recovery in hospital	
a. Multi-disciplinary Team	*"Positive environment. Positive staff, anaesthetist. Good attitudes make a big difference. Good nurses. Secretary was great (answering any question when I called)… Benefit of a multi-disciplinary team with a men's health focus. The team aspects are critical"*
b. Hospital Nursing Staff	*"What I did like was the aftercare at home from the nurses. All of this was fantastic. You could ask them questions too and they knew what they were doing… Found nurses unresponsive. Had to wait long times for nurses to respond. Felt helpless… Night nursing staff varied between nights and had some trouble with agency nurses working in that discipline"*
c. Hospital Facilities	*"I was glad to go home. It wasn't an unpleasant situation. The food was good. The nurses were lovely. Everything ticked all the boxes… The food was not great, like all hospitals"*
3. Recovery at home	
a. Early recovery	*"In hospital for 1-2 days. Back to normal activities within a few weeks. Which is important. And has a huge psychological benefit… The key is the quick recovery time… I was back to walking around within a week… I was ready to return to work after 2 weeks"*
b. Urinary Continence	*"What your level of expectation is before your surgery definitely helps… Incontinence and impotency was a high concern. I don't know how I'd survive with being incontinent… Once catheter was out, I had no issues with incontinency… Any surgery has issues. Stress incontinence still after 1 year, but expected. It gets better. And it's the price you pay"*
c. Sexual Function / Potency	*"I'm a work in progress, and I'm ok with that… Was worried about impotency. I started off with Viagra and Cialis (expensive) – everything here worked out well too, now no requirement for*

Author Manuscript

This article is protected by copyright. All rights reserved

	Example quotes
	medications. It's not the same as previously, but it's manageable. You can live with it… I'm sure a lot of people feel they are going to be less of a man for losing sexual function. This played on my mind a bit"
d. Quality of Life	*"Speed and recovery was the greatest benefit both physically and psychologically… to me, it was all about getting back to normal as quickly as possible… Depends on what your focus is. I was able to get back to regular exercise within a few weeks which is very important to me"*
4. Overall process	
a. RARP benefits	*"The key is the quick recovery time… The procedure (RARP) was a blessing, being less invasive that the open method… Better than the conventional open method where you are on your back for a week in hospital and I think this is a little demoralising. Followed by a long period of recovery… I opted for the RARP, because of the recovery time, less blood loss, it seemed to be logical way to go if you could afford to do It"*
b. Support groups	*"The information I got from other patients who had previously undergone the procedure was great, you could ask them anything… You could ask them all types of questions… Reassured about impotency with other treatment options. Shared similar stories of fears, but reassured them. This saved me a lot of other questions too… It's really important to talk to other blokes"*
c. Cancer free	*"This procedure saved my life, and I can't see any other reason why I can't live for another 15 years… Felt like I've dodged a bullet"*

Author Manuscript

This article is protected by copyright. All rights reserved

Table 3. Qualitative themes and quotes.

	Example quotes
1. Prior to surgery	
a. Psychological impact	*"When you are first told about having prostate cancer, it feels like a death sentence… A lot goes through your mind and it's terrifying"*
b. Treatment Decision	*"The stress over which modality drives you mad… There is not enough information on how to make that decision. It psychological. I went through 4-5 months of hardship making the decision… I wanted the doctor to make a recommendation for me"*
c. Educational resources	*"There is a degree of fear associated with prostate cancer, partly because we don't know what it means… I was concerned about the information I had access to over the internet… Great explanation of procedure from surgeon with models and watching the surgery on YouTube"*
d. Pelvic Floor Exercises / Physiotherapy	*"The pelvic floor exercises were the saviour for me… The incontinence physio was also very informative and prepared me well… She was great, and the ultrasound showing that we were doing them correctly…. This was a concern, so this motivated me to strengthen the area"*
e. Continence Nurse / Specialist	*"The continence nurse was fantastic and a terrific resource for me and gave me a great deal of confidence and relieved a lot of my fears… Helpful to know every possible scenario, but this caused a lot of fear… This should have happened earlier. Not the day before surgery"*
2. Recovery in hospital	
a. Multi-disciplinary Team	*"Positive environment. Positive staff, anaesthetist. Good attitudes make a big difference. Good nurses. Secretary was great (answering any question when I called)… Benefit of a multi-disciplinary team with a men's health focus. The team aspects are critical"*
b. Hospital Nursing Staff	*"What I did like was the aftercare at home from the nurses. All of this was fantastic. You could ask them questions too and they knew what they were doing… Found nurses unresponsive. Had to wait long times for nurses to respond. Felt helpless… Night nursing staff varied between nights and had some trouble with agency nurses working in that discipline"*
c. Hospital Facilities	*"I was glad to go home. It wasn't an unpleasant situation. The food was good. The nurses were lovely. Everything ticked all the boxes… The food was not great, like all hospitals"*
3. Recovery at home	
a. Early recovery	*"In hospital for 1-2 days. Back to normal activities within a few weeks. Which is important. And has a huge psychological benefit… The key is the quick recovery time… I was back to walking around within a week… I was ready to return to work after 2 weeks"*
b. Urinary Continence	*"What your level of expectation is before your surgery definitely helps… Incontinence and impotency was a high concern. I don't know how I'd survive with being incontinent… Once catheter was out, I had no issues with incontinency… Any surgery has issues. Stress incontinence still after 1 year, but expected. It gets better. And it's the price you pay"*
c. Sexual Function / Potency	*"I'm a work in progress, and I'm ok with that… Was worried about impotency. I started off with Viagra and Cialis (expensive) – everything here worked out well too, now no requirement for*

Author Manuscript

This article is protected by copyright. All rights reserved

	Example quotes
	medications. It's not the same as previously, but it's manageable. You can live with it… I'm sure a lot of people feel they are going to be less of a man for losing sexual function. This played on my mind a bit"
d. Quality of Life	*"Speed and recovery was the greatest benefit both physically and psychologically… to me, it was all about getting back to normal as quickly as possible… Depends on what your focus is. I was able to get back to regular exercise within a few weeks which is very important to me"*
4. Overall process	
a. RARP benefits	*"The key is the quick recovery time… The procedure (RARP) was a blessing, being less invasive that the open method… Better than the conventional open method where you are on your back for a week in hospital and I think this is a little demoralising. Followed by a long period of recovery… I opted for the RARP, because of the recovery time, less blood loss, it seemed to be logical way to go if you could afford to do It"*
b. Support groups	*"The information I got from other patients who had previously undergone the procedure was great, you could ask them anything… You could ask them all types of questions… Reassured about impotency with other treatment options. Shared similar stories of fears, but reassured them. This saved me a lot of other questions too… It's really important to talk to other blokes"*
c. Cancer free	*"This procedure saved my life, and I can't see any other reason why I can't live for another 15 years… Felt like I've dodged a bullet"*

Author Manuscript

This article is protected by copyright. All rights reserved

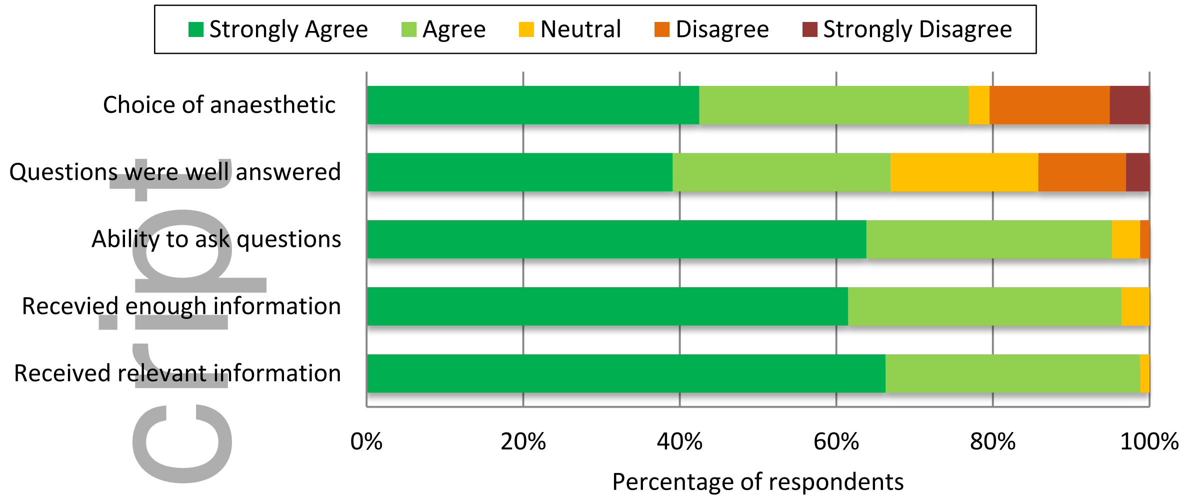

Fig. 1 - Patient perceptions and attitudes prior to surgery

Author Manuscript

This article is protected by copyright. All rights reserved

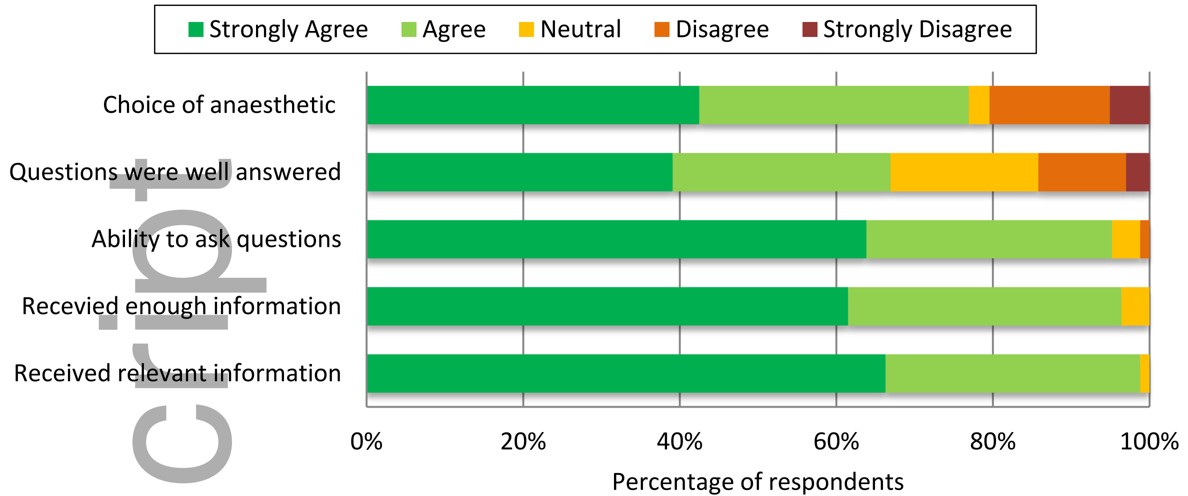

Fig. 1 - Patient perceptions and attitudes prior to surgery

Author Manuscript

This article is protected by copyright. All rights reserved

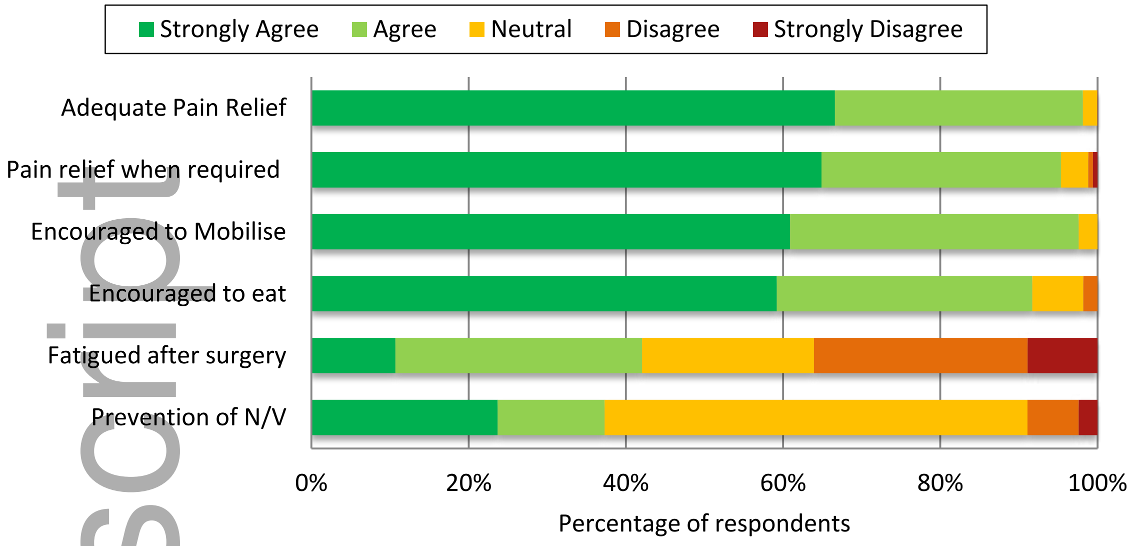

Fig. 2 - Patient perceptions and attitudes after surgery, whilst in hospital

Author Manuscript

This article is protected by copyright. All rights reserved

Author Manuscript

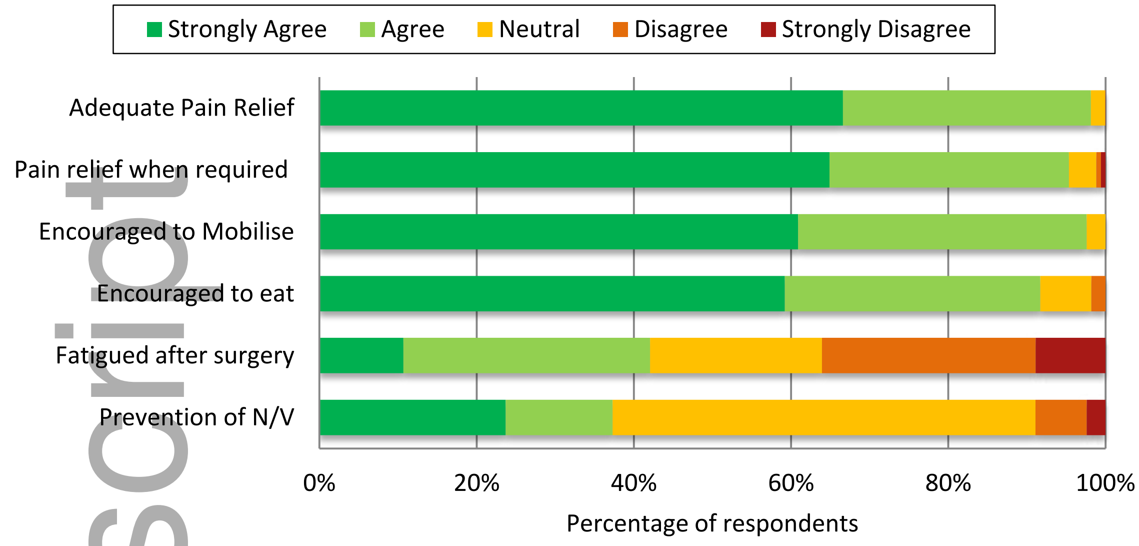

Fig. 2 - Patient perceptions and attitudes after surgery, whilst in hospital

This article is protected by copyright. All rights reserved

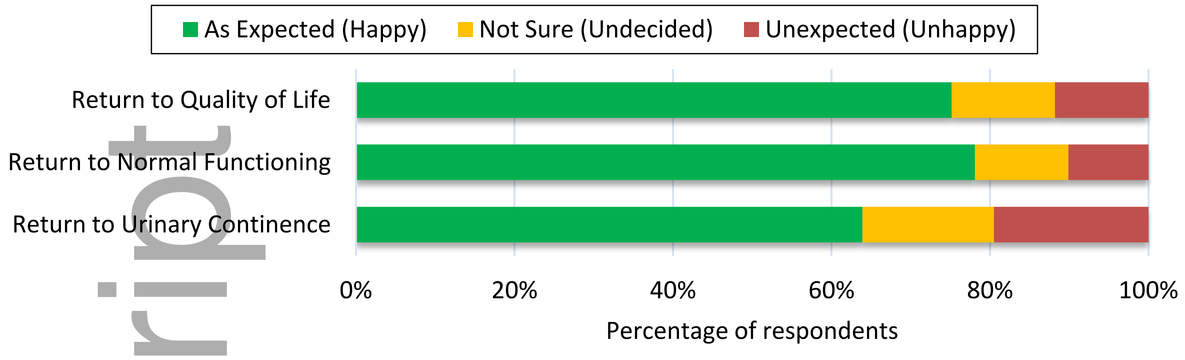

Fig. 3 - Patient perceptions and attitudes after surgery, whilst recovering at home

Author Manuscript

This article is protected by copyright. All rights reserved

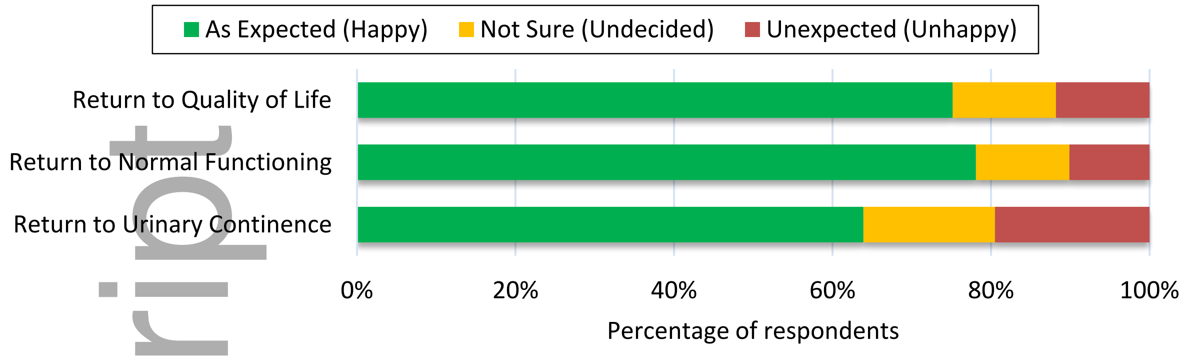

Fig. 3 - Patient perceptions and attitudes after surgery, whilst recovering at home

Author Manuscript

This article is protected by copyright. All rights reserved