

Peer Review File

Article information: <http://dx.doi.org/10.21037/tau-21-131>

Reviewer A

Comment 1: No substratification for prostate MRI vs prostate biopsy, since the former is not done by urologists

Reply 1: This is a very good point. For our clinical routine patients are seen initially and in follow ups only by urologist, so we concluded that the influence of gender of urologist outweighed that of radiologists

Comment 2: The conclusions were a bit strong for the kind of study done
-More powerful study would have been comparing a range of urological procedures or focusing on the prostate biopsy

Reply 2: The study was focused on a subset of gender questions in a prostate related questionnaire. So indeed, conclusion can only be drawn to a specific patient population, which has its disadvantages, but also the advantage to better characterize prostate patients. We revised the manuscript, pointing out that conclusions are limited to prostate patient (see page 8, line 202).

Comment 3: Timing of questionnaire gives way to confounding, which was cited as a weak point by authors as well

Reply 3: This is a weak point indeed. Unfortunately, we were not able to organize the timing of the questionnaires in a different way.

Comment 4: Overall good idea, but needs more work

Reply 4: Thank you very much. We are thankful for the reviewers' comments and we revise the manuscript in a way that your valuable comments are reflected.

Reviewer B: The authors conducted a survey among men undergoing MRI or biopsy to assess gender preference of their urologist.

Comment 1: In the title it is not clear in "their partners" implies the patient's partners or the urologists partners. I would reword as "acceptance of female urologists among senior patients and their patients' partners".

Reply 1: We agree very much and adjusted the title to:
"Acceptance of female urologists among patients with suspected prostate disease"
(see title page)

Comment 2: The group (m,f) is problematic in that people were forced to choose one over the other. I have many preferences in life but for most of them I really don't care. Thus, I think the group(np) is the more relevant survey. I would suggest removing the group(m,f) as I think the questionnaire is biased.

Reply 2: Thank you for this comment. During the planning of the study, we discussed this point among our study group. We are aware that many patients

might not care about the gender of the urologist. This is why we formed group (np). However, at our department of urology the patient can only be seen by a female or a male urologist. In order to reflect this situation we introduced group (m,f). We are aware that this can be regarded as provocative. This is also shown in our results, as many patients did not answer this question or commented on it.

Comment 3: The abstract contains little information. Was male preference associated with age? Cancer likelihood? Other features?

Reply 3: Male preference was associated with the duration of the patient's marriage, but it was not associated with the patient's age. Unfortunately, we were not able to calculate the likelihood of prostate cancer prior to the examinations, especially in patients prior to a prostate MRI as the result of the prostate MRI is an important factor when estimating the presence of clinically significant prostate cancer. As shown in table 1 none of the included variables apart from marriage duration and of course the received questionnaire was associated with a male preference.

Comment 4: I would show the partner's data in the abstract too.

Reply 4: Thank you for this comment. In order to keep the abstract as short as possible, we did not include this information. We now added the partners' information (please, see page 2 line 35-40)

Comment 5: When given a real choice, ~35% prefer male. This is the take home.

Reply 5: Yes, we agree. It is also noteworthy, that the patients' female partners prefer male doctors for the patients as well.

Comment 6: Line 60 says "wives" – all other places it is "partners". Which is it?

Reply 6: Thank you for highlighting this mistake. We corrected it to "partners" (See page 4, line 69)

Comment 7: The authors examined this as a randomized trial comparing the two groups. That is the wrong question. The question is what men prefer males over no preference. This really needs to be analyzed in more depth.

Reply 7: We agree. It would be desirable to understand why some participants showed a preference for a male urologist over "no preference". It would also be important to understand the motives for this choice. Unfortunately, our questionnaire was too short in order to capture answers to such a complex question. We therefore cannot provide a more detailed analysis due to the design of the study.

Comment 8: Only one factor was found – marriage duration – but the results are written in a statistical way that is not interpretable. Please reword this in English. Did longer marriage want more men or more no preference?

Reply 8: Thank you. This escaped our notice. The longer the marriage, the more

men chose male urologists (please see page 6 line 132 and page 9, line 191-192)

Comment 9: Were any of the variables co-linear? For example were age and years married highly correlated?

Reply 9: This is a very good point. No significant collinearity was found via multivariate variance inflation factor analysis. Furthermore, in contrast to marriage duration, patient age had no significant effect on male preference, suggesting a separate effect of the two variables. This has been clarified in the Materials and Methods section (see page 5, line 98-103).

Comment 10: Again, table 1 needs to be repeated only in the group (np).

Reply 10: We discussed the meaning and interpretability of this table in our study group. It was very important for us to find influencing factors for male preference for all patients, even if felt hard pressed on the decision. Because no matter which questionnaire type was used, we need to identify possible targets to work on better acceptance of female urologist.

Comment 11: Were any of the urologists that the men were seeing women? If so, how did that influence their answers.

Reply 11: Unfortunately, we did not gather information on the referring physician and on previous experiences that patients might have had with male or female doctors. Therefore, we cannot address this interesting issue.

Reviewer C: The authors report on a patient survey about patient's gender preference in regards to their urologist when awaiting a prostate MRI or prostate biopsy. They used two questionnaires, one in which patients had the option of 'no preference' in addition to 'male' or 'female' and one where they did not. The authors found that nearly 35% of patients preferred a male urologist and 61% chose 'no preference' in the first form of questionnaire while 52% chose 'male' urologist in the second form with many answers left blank. Notably, the number of 'female' votes were negligible in either questionnaire. The authors conclude that the acceptance of female urologists is low among patients.

This is an interesting and well-written study., However, there are some concerns:

Comment 1: Why were only prostate MRI and prostate biopsy patients used? This may have been an administrative choice as these patients may have been mailed an appointment and a questionnaire could be included but this should be clarified. This also poses a significant bias as patients with other problems may not have gender preference at all or an even firmer one (e.g. a patient with a recent cancer diagnosis may want to have surgery as soon as possible regardless of the gender of the surgeon while a patient with erectile dysfunction may feel more strongly about a male urologist). While the authors have included both an interventional group of patients (prostate biopsy) and a non-interventional one

(prostate MRI), they need to address this bias further as the validity of the results of their study and conclusions depend on it.

Reply 1: As you assumed, it was an administrative choice to include only patients prior to a prostate MRI and a prostate biopsy. We are aware that we cannot draw conclusions about urologic patients with other diseases such as erectile dysfunction. We recognize that this is a limitation of our study and mentioned it in the appropriate paragraph of the manuscript (please, see page 9, line 201 - 203). We also revised the conclusion and mentioned this limitation (please, see page 10 line 210).

Comment 2: Both partially completed and fully completed questionnaires were included. The authors believe that the fields that were left blank in questionnaire #2 were mostly due to the fact that there was no third option of gender choice such as 'no preference'. The authors should provide more evidence or at least reasoning why they believe this. Also, it would be good to include a sample questionnaire as supplementary data so that the reader can evaluate it.

Reply 2: This is a very good point. Indeed, questions on other items were left blank only sporadically, the question on gender preference were left blank strikingly often (21.2%). We concluded, that this effect is genuine related to gender preference. We elaborated this fact in the manuscript (See page 6, line 127-129 and page 7-8, line 155-162).

Comment 3: Lastly, while there is certainly some effort by the authors to explain the difference of 34% vs 52% male preference choices this should be further addressed. The data shows that if there is a 'no preference' option the rate of male choices decreases yet the number of 'female' answer choices is equally negligible. I agree with the author's assessment that most of the 'no preference' vote may in fact represent 'male' votes but the patients did not want to state this. I think this is the most interesting aspect of this manuscript and the authors may consider expanding on this.

Reply 3: We strongly agree and therefore revised the manuscript to strengthen this conclusion and introduced a short paragraph (It is of notice that there is no relevant difference between Group m,f and Group np in the number of patients that want to be seen by a female urologist. This might suggest that many of the "no preference" answers in Group np may represent "male urologist" answers. Please, see page 7-8, line 159-162).

Reviewer D

Comment 1: Although the survey was sent too patients and partners, it is unclear if a single survey was completed by both, or if each person had their own survey.

Reply 1: We modified the manuscript to clarify this point (See page 4, line 75)

Comment 2: This survey forces patients to choose, and it is possible that there is a nuance to this decision that is not captured in the current study format. The

current study, as it stands, is akin to asking a toddler whether she would like to wear the blue dress or the red dress. The yellow dress is not an option, and neither are trousers.

The presence of nuance is confirmed by the multiple write-in answers from your patients.

Reply 2: Yes, we agree with you. The presence of nuance is given by comments from patients and the patients' partners. We notice the importance of the written answers and reported them in our manuscript.

Comment 3: As almost half of the patients did not answer the second survey, how comprehensive and reliable are these data?

Reply 3: As found by Zha et. Al, questionnaires have an average response rate of 45% depending on survey topic, delivery method and question type. (Zha N, Alabousi M, Katz DS, Su J, Patlas M. Factors Affecting Response Rates in Medical Imaging Survey Studies. Acad Radiol. 2020 Mar;27(3):421-427. doi: 10.1016/j.acra.2019.06.005. Epub 2019 Jul 1. PMID: 31272815.) According to the rules of our ethics board patients cannot be telephone in order to rise the response rate. We are pleased with the return rate of 52% and believe that 196 filled out questionnaires are a solid for the statistical analysis.

Reviewer E: In general, this is a very well written manuscript that speaks to an important issue. I recommend a few considerations for revision before accepting for publication:

Comment 1: In the Introduction, please expand a bit more on the significance of this work and the knowledge gap surrounding patient preferences for male vs female urologists.

Reply 1: Thank you for mentioning this point. In order to keep the introduction short, we did not elaborate on this issue. We now added a paragraph highlighting the importance of our research topic (please, see page 3, line 63-66).

Comment 2: Please offer a hypothesis in the Introduction and address whether the results support acceptance of this hypothesis in the Discussion.

Reply 2: We added a hypothesis in the introduction (please, see page 4, line 67-69) and addressed it at the end of our discussion (page 9, line 207-208).

Comment 3: Were all partners married, or did some male patients have unmarried partners?

Reply 3: No, not all partners were married. We wrote "wives" in the introduction and exchanged with the word "partners".

Comment 4: Please be specific in the Introduction that this study specifically targets prostate cancer patients.

Reply 4: We revised the manuscript to outline prostate disease population (See

page 4, line 68)

Comment 5: The following statement is too bold: "We conclude that a large number of male patients and their partners still prefer male urologists when hard-pressed on a choice between a male or female doctor." Because this study targets prostate cancer patients only, it is too great a leap to assume that male patients in general prefer male urologists. Please be specific that this study targeted prostate cancer patients only and that we do not know yet whether male patients seeking other urologic treatments would prefer male over female urologists.

Reply 5: We agree, that we cannot draw conclusion about gender preference in urological patients in general. We therefore rephrased the conclusion (See page 10, line 210)

Comment 6: Limitations should also include a single-institution experience, which reduces generalizability.

Reply 6: We included this important limitation into our manuscript (See page 9, line 205-206)

Reviewer F: I commend the authors for taking on this important topic. I do have major concerns, which I will outline below. My biggest question is what do you hope to gain? I don't know that your survey included enough granularity, which you outline somewhat in your weaknesses, to draw conclusions. I am also not convinced at the scientific merit of forcing respondents to a choice. Please see below for more details.

Introduction

Comment 1: Please include your hypothesis.

Reply 1: We added a hypothesis in the introduction (please, see page 4, line 67-69) and addressed it at the end of our discussion (page 9, line 207-208).

Comment 2: You did ultimately present in the data that all partners were spouses, but in the intro, you say "wives." If your survey was worded such that it seemed gender-specific, that could have impacted your responses. Here at least, since it seems you intended to include all partner-relationships, I would say "urologic patients and their wives."

Reply 2: Thank you. We noticed that the vast majority of patients were married a few were not. We therefore chose the word partners instead of wives. (See page 4, line 69)

Comment 3: You did not limit the study to seniors; it was all patients who underwent a prostate MRI or biopsy. This isn't really a study of "senior urology patients" but of "patients undergoing prostate MRI or biopsy."

Reply 3: We agree very much and adjusted the title to:

"Acceptance of female urologists among patients with suspected prostate disease"

(see title page)

Methods

Comment 4: What was the indication for the MRI or biopsy? If it was for elevated PSA or abnormal prostate exam, then a better title may be "Acceptance of female urologists among patients with concern for prostate cancer and their partners."

Reply 4: Very true. See also reply 3

Comment 5: I would put the ethics approval at the beginning of your methods.

Reply 5: We added the ethics approval at the beginning of the methods section.

Comment 6: At some point you mention that all partners were female. Was that a question on the survey?

Reply 6: No, this was not a question. In questionnaire was in german. In german there is a gender specific form for a female partner ("Partnerin"). The questionnaire addressed female partners as we were interested in the relation between a female patient's partner and a female urologist.

Results

Comment 7: What is the age range of the patients?

Reply 7: The average age of participating men was 65.6 years with a standard deviation of ± 7.3 years

Comment 8: I'm not sure what the second to last sentence of the results means, that "the strongest predictor was the questionnaire type."

Reply 8: The strongest predictor for a patient to choose a male urologist was the type of questionnaire he received. A patient with the questionnaire for Group m,f had a higher preference than a patient with the questionnaire for Group np.

Comment 9: Because sometime you reference seniors or older males, I would define what you mean by older males.

Reply 9: We cancelled the words "older males" and "seniors" from our manuscript. Although most of our patients are over 65 years old, we examined patients with suspected prostate disease (see your comment No. 10)

Discussion

Comment 10: I disagree with you that it examines gender preference among older male urologic patients. Prostate cancer is a very specific diagnosis. For example, a male patient with a kidney stone may have no preference at all. For a man with prostate cancer in particular, the man or his partner may feel, however incorrectly, that a male doctor would take the concern of potential ED or incontinence more seriously. I would say this is a study of gender preference among men with concern for prostate ca.

Reply 10: We agree strongly, and revised the sentences as follows: "This study

examines gender preferences among patients with prostate disease.” (See page 7, line 141-142)

Comment 11: You are referencing "me, too." incorrectly. The "me, too" movement more appropriately refers to sexual abuse and harassment, not equity in the work place.

Reply 11: You are right. #metoo refers to sexual abuse and harassment. In our opinion, it rose awareness for gender inequality in general. We deleted the reference to #metoo from our manuscript, as it could be misleading.

Comment 12: You reference gender preference among emergency room patients and orthopedic patients, but you don't give the age range of the patients nor the conditions. I think you are potentially comparing apples and oranges.

Reply 12: This may be very true. Unfortunately, data on gender preferences are very limited for a comparable patient population. Nolen HA et al. do not state an average age of the patients. The colleagues found that older patients tend to have a preference for a male doctor. The average age of patients in the study by Abghari MS et al. was 40.8 years.

Comment 13: I think that your blanket statement that "women should know better" is highly inappropriate. Women are subject to the same gender stereotypes/socialization that men are. Plenty of women are sexist! Further, you do not know that they prefer a male doctor because they think they are better doctors or surgeons. You point out that women sometimes prefer female doctors, often thought because they feel more comfortable with females. As you yourselves point out, that might be why they prefer a male doctor for their partner.

Reply 13: We apologize for the inconsiderate statement. Thank you for pointing it out. We corrected the paragraph. "Of course, women are subject to gender stereotypes as well as men. It is also known that female patients prefer same gender urologist. This could be a reason why women wanted a male urologist for their partner." (Page 8, line 182-183).

Comment 14: What is the relevance of the partner being younger?

Reply 14: No, this fact is not of relevance for this study. We removed the sentence from our manuscript.

Comment 15: As a female urologist, I still don't get the point behind forcing someone to choose male or female as a hard choice. You don't know for sure that it isn't a coin toss. You don't know that it is a patient that would refuse the care of a female surgeon or would be less likely to adhere to her plan.

Reply 15: Thank you for this comment. During the planning of the study, we discussed this point among our study group. We are aware that many patients might not care about the gender of the urologist. This is why we formed group (np). However, at our department of urology the patient can only be seen by a female or

a male urologist. In order to reflect this situation we introduced group (m,f). We are aware that this can be regarded as provocative. This is also shown in our results, as many patients did not answer this question or commented on it.

Reviewer G: This is a cross-sectional study examining preference for urologist gender among men being investigated for prostate cancer, and their partners. The study found great concordance between the men and their partners, with 30% preferring a male urologist. It is an interesting study but would benefit from clarification of a number of areas.

Two separate surveys were used, one where the option for “no preference” was not presented (Group MF), and one where it was (Group NP). It is not clear why this was done except perhaps to examine the effect of bias. If so, this would be a secondary aim of the study. Respondents who did the Group MF survey were found to have a higher male preference but the fact this was not borne out in the other survey indicates its inferiority as a tool to measure gender preference. Very little was made of the fact that these surveys were given to men with suspected or known prostate cancer, a gendered diagnosis in itself, and at a time of potential stress when they were awaiting the results of investigations. Others have looked at the effects of urgent and sensitive diagnoses on preference for doctor gender. This would be another source of bias.

Comment 1: The authors have used the term “senior” but have not defined it. Given that the average age of their patients was 65.6 years old, I would suggest the term “senior” not be used. It is conventionally accepted that the age group over 64 is considered elderly so the cohort in this study is not easily defined. Perhaps, the authors could focus on the fact that these men were, in fact, patients with known or suspected prostate cancer.

Reply 1: Thank you for pointing this out. We deleted the terms “senior” and “older” from our manuscript.

Comment 2: The authors might consider using MeSH terms as Keywords.

Reply 2: - done.

Comment 3: Line 60: consider replacing “wives” with “partners” in recognition of LGBTIQ+ communities.

Reply 3: - done.

Comment 4: Lines 83 and 87 refer to Types A and B. Is this referring to the questionnaires Group NP and Group MF? If so, the references should be consistent.

Reply 4: Thank you for noticing. We corrected it.

Comment 5: The authors have used a test, resulting in a B value, to test for the effect of multiple factors on male preference. As this is not a commonly used tool, it would be helpful to provide more information in the Methods.

Reply 5: The B-value represents the unstandardized beta, i.e. the slope of the line between predictor and dependent variable. This has been clarified in the manuscript. Thank you for the suggestion. (see page 5, line 102-103)

Comment 6: Given that the questionnaires included comments by respondents and that more comments were given in the Group MF, the comments should be included in the Results section.

Reply 6: This is a very good point. We included a representative selection of comments into result section (see page 6, line 127-129)

Comment 7: Line 115: Marriage duration was found to be a significant predictor of male preference but the authors need to state whether longer or shorter marriage duration was a predictor.

Reply 7: - done.

Comment 8: Lines 128-130: This paragraph should be in the Results section.

Reply 8: Thanks for this comment; we shifted this sentence into result section (see Page 6, line 124-125)

Comment 9: Line 143: The authors mention the #metoo movement suggesting it is the singular factor influencing difference in patient preference for doctor gender. It would be helpful to include results from other studies and to acknowledge the effects of other factors such as religion, media, education levels and community attitudes, in addition to culture, in the area of gender stereotypes.

Reply 9: Reviewer F pointed out that the reference to #metoo might be misleading. We therefore cancelled it from our manuscript.

Comment 10: Line 153: The comment that women should know better that competence is not gender-specific is opinion and should be reworded or removed.

Reply 10: You are right. We removed it.

Comment 11: It appears that the authors have chosen to use the number of previous biopsies as a surrogate for previous contact with the urology profession. This should be stated clearly in the Methods and Results sections, or removed.

Reply 11: We integrated the use of previous examinations into the Methods and Results sections (please, see page 5, lines 100-101 and page 7, lines 152-153)

Comment 12: Line 166: It is not correct that the type of questionnaire had an impact on male preference. The authors have demonstrated that one survey was inferior as it allowed for bias.

Reply 12: It is true, that the type of questionnaire has no impact on preference for male or female urologists, but it had impact on how people chose different answers. We rewrote the sentence to clarify (See page 9, line 194-195)

Comment 13: Lines 168-169: This comment on partner age is not useful in the Discussion. It can be placed in the Results section but, as it was not part of the aim of this study, can be eliminated.

Reply 13: We deleted it from our manuscript

Comment 14: The Conclusion should be reconsidered. Given that the Group MF survey was inferior, one could conclude that in a cohort of men investigated for prostate cancer, most prefer a male urologist even when given the option of no preference. However, the authors may choose to come to their own conclusion once the paper is revised.

Reply 14: We conclude that a large number of male patients with suspicion of prostate disease and their partners still prefer male urologists when given the option to choose between “male”, “female” and “no preference”. When hard-pressed on a choice between a male or female doctor the preference for male urologists increases further.

Comment 15: The references have not included a number of relevant papers on this topic. While it is not necessary for these to be all included, the paper would benefit from some to be considered.

o Tempest HV, Vowler S, Simpson A. Patients' preference for gender of urologist. *Int J Clin Pract.* 2005; 59: 526–8. doi:10.1111/j.1368-5031.2005.00465.x

o Ficko Z, Li Z, Hyams ES. Urology is a Sensitive Area: Assessing Patient Preferences for Male or Female Urologists. *Urology Practice.* 2018; 5: 139-42.

o Kim SO, Kang TW, Kwon D. Gender Preferences for Urologists: Women Prefer Female Urologists. *Urol J.* 2017; 14: 3018–22.

o Lafta RK. Practitioner gender preference among gynecologic patients in Iraq. *Health Care Women Int.* 2006; 27: 125–30. doi:10.1080/07399330500457903

o Alyahya G, Almohanna H, Alyahya A, et al. Does physicians' gender have any influence on patients' choice of their treating physicians? *Journal of Nature and Science of Medicine.* 2019; 2: 29-34.

Reply 15: Thank you for the interesting literature suggestions. Unfortunately, some of the mentioned references escaped our notice during research for our manuscript. We integrated them in to our discussion.