

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Retirement, job satisfaction and attitudes towards mandatory accreditation - A Danish survey study in general practice
AUTHORS	Kousgaard Andersen, Merethe; Pedersen, Line Bjornskov; Waldorff, Frans

VERSION 1 – REVIEW

REVIEWER	Mark Linzer MD Hennepin County Medical Center, Minneapolis Minnesota USA
REVIEW RETURNED	08-Feb-2018

GENERAL COMMENTS	<p>A very thoughtful paper. Excellent response rates (56%) for a national physician survey. The finding that satisfaction is key to retention (in this case, to retirement) resonates with a recent publication in Health Affairs (Linzer M, et al. Joy in medical practice: clinician satisfaction in the Healthy Work Place trial. Health Affairs; 2017;36:1808-14). That was a longitudinal study, lending further support to the authors' findings.</p> <p>The authors found little impact of the accreditation program on retirement, but the program started in 2016, so perhaps the impact would be felt more over time?</p> <p>The questionnaire was developed by the authors; it would be helpful to know how they derived their questions, in particular their satisfaction measure? Pilot testing in 9 physicians would be a good test of feasibility but any psychometric properties of the instrument that the authors could provide would be valuable.</p> <p>Their adjusted logistic regressions appear to be well done and very helpful.</p> <p>The limitations section is comprehensive and thoughtful.</p> <p>I agree with the authors that the next step is a longitudinal study - if satisfaction can be improved, will retirement diminish? if so, this would be a particularly powerful finding, especially if we can identify interventions that improve satisfaction.</p>
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REVIEWER	Chanaka Wijeratne Prince of Wales Hospital, NSW, Australia
REVIEW RETURNED	14-Feb-2018

GENERAL COMMENTS	The main strength of this paper is its examination of the association between GP's attitude to a mandatory accreditation scheme (which arouses strong emotions in doctors around the world), and
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	<p>subsequent retirement. The main weakness is that the analysis is limited to a small number of variables, and there is no data on other practice and psychosocial factors that may have been associated with actual retirement. As the authors note, many other studies have examined intention to retire; the response rate is good, both overall and in those who retired.</p> <p>Specific points</p> <ol style="list-style-type: none"> 1 The title can be improved to highlight that the study took place in Denmark and the most interesting aspect of it, ie. whether attitudes to a mandatory accreditation scheme is associated with retirement behaviour. 2. The first paragraph of the discussion could be deleted; I would prefer a little more background about the authors' previous study of GPs' attitudes to the mandatory accreditation scheme 3. The survey is short but is not reproduced to allow further comment. 4. Please explain methodology more fully, especially what the four different measures of attitudes and expectations towards accreditation were used as the independent variables in the logistic regression analysis. 4. Results - was age, gender and practice type entered into the logistic regression, and was this done step-wise or by block design? 5. The discussion should be expanded to include the following areas <ul style="list-style-type: none"> - other possible reasons why there was a transient increase in retirement when the mandatory accreditation scheme was introduced - why did fewer females retire; was this related to age - why was there a regional variation in attitudes to the scheme 6. There are a number of grammatical and semantic errors <ul style="list-style-type: none"> - page 4: "post gradually" refers to postgraduate study - page 5: the last sentence of the first paragraph makes little sense - Table 1 "single handed practice" is usually referred to as sole practitioner or solo practice
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VERSION 1 – AUTHOR RESPONSE

Response to reviewers

Reviewer: 1

Reviewer Name: Mark Linzer MD

Institution and Country: Hennepin County Medical Center, Minneapolis Minnesota USA

Please state any competing interests or state 'None declared': none

Please leave your comments for the authors below

A very thoughtful paper. Excellent response rates (56%) for a national physician survey. The finding that satisfaction is key to retention (in this case, to retirement) resonates with a recent publication in Health Affairs (Linzer M, et al. Joy in medical practice: clinician satisfaction in the Healthy Work Place trial. Health Affairs; 2017;36:1808-14). That was a longitudinal study, lending further support to the authors' findings.

Response: Thank you for the very positive comment and the reference to the recently published paper, which we have now cited in the discussion section.

The authors found little impact of the accreditation program on retirement, but the program started in 2016, so perhaps the impact would be felt more over time?

Response: We agree that the overall effect of the accreditation program on retirement may be underestimated in our study. Therefore, we will follow the development in the coming years. We have included a note on this in the limitation section.

The questionnaire was developed by the authors; it would be helpful to know how they derived their questions, in particular their satisfaction measure? Pilot testing in 9 physicians would be a good test of feasibility but any psychometric properties of the instrument that the authors could provide would be valuable.

Response: We agree, that the development of the questions could have been described more thorough. We used a measurement for job satisfaction, which has been used in several GP surveys in Denmark. It has been tested more extensively in other surveys, e.g. in a survey on associations between degree of task delegation and job satisfaction of GPs and their staff¹. This reference has now been added to the manuscript. Moreover, a study exploring the usefulness of different measurements of job satisfaction concluded that 1–5 global rating of overall job satisfaction may be a more inclusive measure of overall job satisfaction than summation of many facet responses.²

Their adjusted logistic regressions appear to be well done and very helpful.

Response: We thank you for your positive response.

The limitations section is comprehensive and thoughtful.

Response: We thank you for your positive response.

I agree with the authors that the next step is a longitudinal study - if satisfaction can be improved, will retirement diminish? if so, this would be a particularly powerful finding, especially if we can identify interventions that improve satisfaction.

Response: As your study showed, it seems that retirement will diminish if satisfaction is improved. We will most certainly address different aspects of job satisfaction in our future research as we are in major shortage of GPs these years.

Reviewer: 2

Reviewer Name: Chanaka Wijeratne

Institution and Country: Prince of Wales Hospital, NSW, Australia

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

The main strength of this paper is its examination of the association between GP's attitude to a mandatory accreditation scheme (which arouses strong emotions in doctors around the world), and subsequent retirement. The main weakness is that the analysis is limited to a small number of variables, and there is no data on other practice and psychosocial factors that may have been associated with actual retirement. As the authors note, many other studies have examined intention to retire; the response rate is good, both overall and in those who retired.

Response: Thank you for your positive assessment of the overall theme for this paper. We agree that a number of practice and psychosocial factors associated with retirement are not addressed in this paper. Therefore, we intend to plan a qualitative study on GPs reasons for retirement.

Specific points

1 The title can be improved to highlight that the study took place in Denmark and the most interesting aspect of it, ie. whether attitudes to a mandatory accreditation scheme is associated with retirement behaviour.

Response: Thank you for your very constructive comments. We have now changed the title to: General practitioner's retirement is associated with job dissatisfaction but not with attitudes towards mandatory accreditation - A Danish survey study

2. The first paragraph of the discussion could be deleted; I would prefer a little more background about the authors' previous study of GPs' attitudes to the mandatory accreditation scheme

Response: The first paragraph of the discussion is omitted in the new version of the paper and a few paragraphs now describe our previous study of GPs' attitudes to the mandatory accreditation scheme.

3. The survey is short but is not reproduced to allow further comment.

Response: We have inserted a section on "Survey design" including the questions on attitudes towards accreditation and job satisfaction and the related response categories.

4. Please explain methodology more fully, especially what the four different measures of attitudes and expectations towards accreditation were used as the independent variables in the logistic regression analysis.

Response: We agree that the methodology ought to be explained more fully. Therefore, we have inserted a section on "Survey design" including the measures on attitudes towards accreditation and job satisfaction and the related response categories. We now refer to this section and our dichotomization of the variables (in table 3) in the section on statistical analyses. We hope this makes the methodology more clear.

4. Results - was age, gender and practice type entered into the logistic regression, and was this done step-wise or by block design?

Response: The control variables for age, gender, practice type and region were included together in the adjusted logistic regression analyses. A test for collinearity was conducted prior to the analyses.

5. The discussion should be expanded to include the following areas

- other possible reasons why there was a transient increase in retirement when the mandatory accreditation scheme was introduced

Response: Thank you for the opportunity to address alternative reasons. It is a fact that Danish general practice has experienced some turbulent years with external as well as internal disagreements. However, we dare not to draw conclusions on to what extent this explains the transient increase in retirement rate in January 2016. This has been included in the manuscript.

- why did fewer females retire; was this related to age

Response: Yes, this might very well be the explanation as there are far more older men than women in general practice.

- why was there a regional variation in attitudes to the scheme

Response: Thank you for the opportunity to address this essential finding that adds to the discourse of GP shortage. This finding relates to our baseline study on GPs attitudes towards accreditation 3 and hence might seem inappropriate to address in the discussion in the present paper as we observe no statistical differences between retiring GPs and remaining GPs (table 1) .

6. There are a number of grammatical and semantic errors

- page 4: "post gradually" refers to postgraduate study

Response: Thank you for the hint. We have changed the wording in the current version of the paper.

- page 5: the last sentence of the first paragraph makes little sense

Response: We agree that this sentence was unnecessary and has therefore been deleted from the new version of the paper.

- Table 1 "single handed practice" is usually referred to as sole practitioner or solo practice

Response: Thank you, this has been corrected in the revised version of the paper.

References

1. Riisgaard H, Sondergaard J, Munch M, et al. Associations between degrees of task delegation and job satisfaction of general practitioners and their staff: a cross-sectional study. BMC health services research 2017;17(1):44. doi: 10.1186/s12913-017-1984-y
2. Scarpello V, Campbell JP. Job satisfaction: Are all the parts there? Personnel Psychology 1983;36: 577–600. doi: doi:10.1111/j.1744-6570.1983.tb02236.x
3. Waldorff FB, Nicolaisdottir DR, Kousgaard MB, et al. Almost half of the Danish general practitioners have negative a priori attitudes towards a mandatory accreditation programme. Danish medical journal 2016;63(9)

VERSION 2 – REVIEW

REVIEWER	Chanaka Wijeratne Prince of Wales Hospital, NSW, Australia
REVIEW RETURNED	14-Mar-2018
GENERAL COMMENTS	The suggestions made in the initial review have been followed on the whole. It remains important that the whole survey is available to readers - the authors have included 5/13 items in the methodology, It would seem best to have a hyperlink to the whole survey when published online
REVIEWER	Mark Linzer Hennepin County Medical Center, Minneapolis MN USA
REVIEW RETURNED	23-Mar-2018
GENERAL COMMENTS	Excellent revision, very responsive to concerns. Thank you! One final point: the authors might modify last sentence of results which says no association between any variable having to do with the

	<p>accreditation program and retirement; for association between the program and future dissatisfaction, adjusted odds ratio is 1.40, CIs 1.00-1.95, $p = 0.051$. It is true that this is not an association since $p > 0.05$, but it is quite close. If the program had a 40% odds of lower job satisfaction (1.4 vs 1.0), and since satisfaction in their study is associated with intent to retire, the program could readily lead to an increase of retirement as the authors continue their ongoing monitoring. Another place to include this discussion would be in the limitations paragraphs. The 0.051 does not allow one to conclude an association, but is not strong proof of lack of an association. We will need to watch over time to see if the program leads to a drop in satisfaction which would then lead to increased numbers of physicians retiring.</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 2

Reviewer Name: Chanaka Wijeratne

Institution and Country: Prince of Wales Hospital, NSW, Australia

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

The suggestions made in the initial review have been followed on the whole. It remains important that the whole survey is available to readers - the authors have included 5/13 items in the methodology, It would seem best to have a hyperlink to the whole survey when published online

Response: Thank you for your kind comments and for this reminder. We have inserted a reference with a hyperlink to the complete survey in the main document under data collection. The survey will be translated into English by a native speaking research assistant within a short time and uploaded to the project homepage: <http://www.akiap.dk>

Reviewer: 1

Reviewer Name: Mark Linzer

Institution and Country: Hennepin County Medical Center, Minneapolis MN USA

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

Excellent revision, very responsive to concerns. Thank you! One final point: the authors might modify

last sentence of results which says no association between any variable having to do with the accreditation program and retirement; for association between the program and future dissatisfaction, adjusted odds ratio is 1.40, CIs 1.00-1.95, $p = 0.051$. It is true that this is not an association since $p > 0.05$, but it is quite close. If the program had a 40% odds of lower job satisfaction (1.4 vs 1.0), and since satisfaction in their study is associated with intent to retire, the program could readily lead to an increase of retirement as the authors continue their ongoing monitoring. Another place to include this discussion would be in the limitations paragraphs. The 0.051 does not allow one to conclude an association, but is not strong proof of lack of an association. We will need to watch over time to see if the program leads to a drop in satisfaction which would then lead to increased numbers of physicians retiring.

Response: Thank you for your very kind comments and for providing us the opportunity to underline this very important point. We have now modified the last sentence of the results and inserted your suggestions in the limitation section.