PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Depersonalised doctors: a cross-sectional study of 564 doctors, 760 consultations, and 1876 patient reports in UK general practice.
AUTHORS	Peter Orton, Christopher Orton and Denis Pereira Gray

VERSION 1 - REVIEW

REVIEWER	Olaf Gjerløw Aasland MD MHA Director, The Research Institute Norwegian Medical Association Professor, Department of Health Management and Health Economics Institute of Health and Society University of Oslo
REVIEW RETURNED	24/08/2011

THE STUDY	There is no clearly defined research question other than "the MBI responses of general practitioners in Essex, UK..". The authors state in the introduction that "Particular emphasis is placed on the MBI 'depersonalisation' component as this is the aspect of burnout most likely to affect patient care since it includes the doctor having "callous feelings" towards patients." Indeed, the very title of the article begins with "Depersonalised doctors . . ". However, no evidence is presented on how depersonalised doctors may affect patient care, and the findings in the present study suggest that it does not. What does "callous feelings" really mean (as opposed to being callous)? In my opinion, the reason for this unfortunate point of departure of this otherwise excellent study is a too narrow and instrumental understanding and use of the MBI. The callousness and depersonalisation may well be an almost normal coping strategy, and not necessarily an undesired endpoint, which is the major premise of this article. It could even be that male doctors are more prone to using this coping strategy than female doctors. Also, the fact that older doctors seem less bothered than younger may indicate that "a bit of callousness" may be a necessary component in a transitional period before finding the potimal personal balance. Generally, the emotional exhaustion component should be a better measure of possible doctor dysfunctionality, and should in my opinion be the main measure throughout the study. The data set is really unique! The problem is the limited use and interpretation of the MBI-findings. There is no discussion on whether the applied cut-points make sense in this particular setting. See e.g. Schaufeli WB, Van Dierendonck D. A cautionary note about the cross-national and clinical validity of cut-off points for the Maslach Burnout Inventory. Psychol Rep. 1995 Jun;76(3 Pt 2):1083-90, or

	Schaufeli WB, Bakker AB, Hoogduin K, Schaap C, Kladler A. On the clinical validity of the Maslach Burnout Measure. Psychology and health 2001;16: 565-82 There is very little discussion on the phenomenon of burnout in general, and burnout among doctors in particular. Also, a discussion on the understanding of the word "callous" could be in place. Observe that the original MBI-wording (p. 10) is "I've become more callous toward people since I took the job", there is no mention of patients here . . . The authors state dramatically (p. 16): "Whatever the reasons, a significant group of doctors is in trouble and may be more likely to leave the profession." I can see no empirical support for this apocalyptic statement in the present data. Did you include a question on whether the doctors were considering leaving the profession? The gender and family issues could be better exploited. There is a brief and interesting discussion on full-time vs parttime work on page 15, with reference to studies that show associations between worktime an stress. What I miss, however, is more information on what constitutes a normal work-week for UK GPs. May be our article on GPs working hours in Norway may be of help: Aasland OG, Rosta J. The working hours onf general practitioners. J Norw Med Ass. 2011, 131:1076-9. http://tidsskriftet.no/lts-pdf/pdf2011/1076-80eng.pdf How does this fit in with a "normal" family life? An increasing number of burnout studies are concerned with the balance between work and private life, not only the situation at work alone See e.g. Innstrand ST, Langballe EM, Espnes GA, Falkum E, Aasland OG. Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations. Work & Stress 2008; 22 (1): 1-15. (or other publications from this group). Do you have data on family situation, number of children etc.?
RESULTS & CONCLUSIONS	On a more detailed level: - when parametric measures (means and SD's) of MBI-scales are used, we need to know whether the distributions are (close to) normal - is the difference between group and single-handed practices contriolled for age? - is it OK to use one MBI-dimension to predict another in a regression (p. 10, bottom)?
GENERAL COMMENTS	I suggest that you include a psychologist with experience with the MBI in your team

REVIEWER	Professor Eric GALAM Université Paris Diderot FRANCE no competiting interests
REVIEW RETURNED	26/09/2011

THE STUDY	Method - gender was obtainded from the NHS general practioner database date of registration with GMC was obtained from Medical Register does this mean that the postal survey was not anonymous ?

	- You should explain exactly what do you mean by « surgery visits » - Why did you choose the scores for emotional exhaustion and not the score of depersonalisation to choose the sub sample of explored doctors ? Even if depersonalisation il the aspect most likely to affect patient care and if the three sub scales were significantly correlated, you could choose the sub sample by the scores of depersonalisation. Can you explain your choice ? - At which period of year did you make your study ? - what was the time between the postal survey and the sub sample study ? - was there a link between the audio taped consultations and the patient who completed DISQ (ie the same patients ?) - the patients who completed DISQ made it after the consultation, so you ask them immediatly after ? - did you get the 20 consultations and the fifty patients the same day for each doctor ? You could have add three others references : - Zantinge EM, Verhaak PFM, de Bakker DH, Meer K, Bensing JM: The workload of general practitioners does not affect their awareness of patients' psychological problems. Patient Educ Couns 2007, 67:93-99), whose design is close from your study and who shoes results about depersonalisation and patient care. - Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med.2002;136(5):358–67) - Fahrenkopf ‘s study (Fahrenkopf AM, Sectish TC, Barger LK, Sharek PJ, Lewin D, Chiang VW, et al. Rates of medication errors among depressed and burnt out residents: prospective cohort study. BMJ. 2008; 336(7642):488–91) that showed that burnt out residents and non-burnt out residents made similar rates of errors per resident month
RESULTS & CONCLUSIONS	- Two doctor-level factors and two practice-level factors were associated with higher levels of depersonalisation. Did you explore other factors or only these ones ? Did you explore the corelation of theese factors with emotional exhaustion and with low personal acomplishment ? - Even if there is no difference between the two groups results for DISQ and Kendall tau, it would be interesting to get these results (scores on the scale of 0-100, …).
GENERAL COMMENTS	Introduction - You say MBI conceptualises burnout as an imbalance between demands and resources. This is one way to conceptualise it but you can also use others, for exemple the Demand-control Karasek model

VERSION 1 – AUTHOR RESPONSE

(A) COMMENTS FROM PROFESSOR OLAF G ASLAND

There is no clearly defined research question other than “the MBI response of general practitioners in Essex, UK ...”

We agree the research questions should be stated and have incorporated these in our revised manuscript. To confirm, the research questions were: (i) How many general practitioners working in Essex, UK report high scores for depersonalisation, as measured by the Maslach Burnout Inventory?; (ii) What doctor and/or practice factors are associated with high scores for depersonalisation?; and (iii) What impact, if any, does depersonalisation have on doctors' consultations with patients?

The authors state in the introduction that "Particular emphasis is placed on the MBI 'depersonalisation' component as this is the aspect of burnout most likely to affect patient care since it includes the doctor having "callous feelings" towards patients". Indeed, the very title of the article begins with "Depersonalised doctors...". However, no evidence is presented on how depersonalised doctors may affect patient care, and the findings in the present study suggest that it does not.

We agree. This was not one of our research questions and we did not investigate it directly.

In my opinion, the reason for this unfortunate point of departure of this otherwise excellent study is a too narrow and instrumental understanding and use of the MBI ... Generally, the emotional exhaustion component should be a better measure of possible doctor dysfunctionality, and should in my opinion be the main measure throughout the study.

Since the Reviewer suggests our understanding of the Maslach Burnout Inventory (MBI) might be narrow and instrumental, we briefly state our position.

1. Our choice of the instrument is fully in line with leading authorities. The MBI has been used in Australia, Europe, and the USA. Schaufeli et al (2001) state "The MBI is by far the most popular instrument to assess burnout".... and it is used in over 90% of journal articles and dissertations on the subject.

2. Whilst it has been repeatedly shown that the three domains of the Maslach are significantly correlated (as is the case in our own data), it is accepted that the third domain of personal accomplishment is somewhat different, so much so that some authorities advise excluding it or regard it as having an "outsider" position (Green et al., 1991; Leiter, 1993). In line with this argument, we have concentrated on the other two domains of the Inventory.

3. We acknowledge that researchers vary in their use of the MBI in one respect, namely whether to use the thirds approach (as developed by Maslach) or whether to use the absolute scores. We used the "most depersonalised" and "least depersonalised" approach. We respect colleagues who take the other view. However, Shanefelt et al. (2002) from the Mayo Clinic in the USA defined burnout as "scores in the high range for medical professionals on the depersonalisation or emotional exhaustion subscales" just as we did. They also reported that: "only a high score for depersonalisation was associated with self-reported sub-optimal patient care practices (a dose-response relationship). As both techniques are in use in the literature, we believe our approach is reasonable.

4. We have noted the so-called healthy worker point (i.e. people who are off sick may be much more burnt out). However, since our research question was to study working doctors, this group was the focus of our research.

5. We do not claim be experts in the field of burnout, but we do believe we have used the most appropriate instrument in a recognised way and in full accordance with the use reported in international medical journals including the Annals of Internal Medicine.

What does “callous feelings” really mean (as opposed to being callous)?

We agree that the issue of how doctors cope is important and that the words “callous feelings” need careful thought. The Maslach Burnout Inventory uses the word “callous” so we were required to use it. The key issue is what the 564 general practitioners in Essex, England thought the words meant when they completed the MBI. Neither we nor the Reviewer can be certain! In these circumstances, it is logical when doctors in England are reading a word in English, to rely on the authoritative source on meaning of words in English, i.e. The Oxford Dictionary. The Shorter Oxford English Dictionary defines ‘callous’ as ‘hardened in feeling’, ‘insensitive’, ‘unfeeling’.

The callousness and depersonalisation may well be an almost normal coping strategy and not necessarily an undesired endpoint, which is the major premise of this article.

We agree with the Reviewer that doctors need to develop defences in the face of the large amount of suffering that they encounter in their work, but it does not follow that they need to develop callous feelings and most of them do not. Our data show that the majority of doctors did not develop depersonalisation and the associated callous feelings.

This is a challenging comment, which we have considered carefully. It cannot be resolved by the data we have gathered. The policy of general practice training in the UK is to develop skills in general practitioners in training that enable them to cope and retain sensitivity (A System of Training for General Practice, 1979) which we believe is both possible and desirable. Patient groups complain of some doctors’ insensitivity and contrast this with good doctors who conduct clinical practice with sensitivity. Numerous articles describe the domain of depersonalisation as indicating “insensitivity” and “lack of feeling, ” so the great majority of articles so far published on the MBI do regard callousness as an undesired endpoint. We hope you will publish this article and allow those sharing the Reviewer’s view to make their points in your correspondence columns.

It could even be that male doctors are more prone to using this coping strategy than female doctors. Also, the fact that older doctors seem less bothered than younger may indicate that “a bit of callousness” may be a necessary component in a transitional period before finding the optimal personal balance.

Our data showed that older doctors are less depersonalised; however, we also show that male doctors are more depersonalised than female doctors. This may be relevant to the fact that male doctors have a seven-fold higher chance of being referred as problem doctors for external clinical assessment by the National Clinical Assessment Authority in the UK. It seems unlikely that “a bit of callousness” is desirable from the patient’s perspective.

The data set is really unique!

We thank the Reviewer and agree.

The problem is the limited use and interpretation of the MBI findings. There is no discussion on whether the applied cut-off points make sense in this particular setting. See e.g. Schaufeli WB, van Dierendonck D. A cautionary note about the cross-national and clinical validity of cut-off points for the Maslach Burnout Inventory. Psychol Rep 1995; Jun; 76(3 Pt 2): 1083-90, or Schaufel WB, Bakker AB, Hoogduin K. Schaap C, Klader A. On the clinical validity of the Maslach Burnout Measure. Psychology and Health 2001; 16: 565-582.

We are grateful to the Reviewer for the references he has supplied, which we have studied. The practice of dividing scores in each domain into high and low was introduced by Maslach. We are following leading researchers in using them – for example, Shanefelt et al. (2002). The use of the high group of depersonalised doctors, as defined by Maslach, was found to be associated with self-reported sub-optimal patient care practices (in a dose-response relationship). We used the same high group, defined in the same way; in our view, it made sense with the very large group of doctors were studying. The Maslach Burnout Inventory Manual (ref) gives different ranges for different professional groups. Since we were studying general practitioners we used the figures for the medical profession. We have added a sentence to this effect in our revised manuscript.

There is very little discussion on burnout in general and burnout in doctors in particular

In our revised text, we have expanded our comment on both points.

Also a discussion in the understanding of the word “callous” could be in place. Observe that the original MBI wording (p.10) is: “I’ve become more callous toward people since I took the job” There is no mention of patients here.

We are happy to discuss the word ‘callous’ in our revised text, as above. We have expanded our understanding of this and how we think the general practitioners who completed the research are likely to have understood the words in England. We agree with the Reviewer that patients are not specifically mentioned and that, for example, the words can also be taken to include a practitioner’s colleagues at work. However, one feature of UK general practice is the high number of consultations with patients which general practitioners in the UK NHS provide. These number 7,000 consultations a year, and are by far the greatest number of “people” who general practitioners actually see over a year. Therefore, it is reasonable to work on the assumption that patients, although not mentioned specifically, are the biggest number of people with whom GPs meet. In addition, the exact words in the Maslach include “.....I took the job” We think this makes it likely that responding doctors would think of their role as general practitioners, and so to think of patients.

The authors state dramatically (p.16): “Whatever the reasons, a significant group of doctors is in trouble and may be more likely to leave the profession”. I can see no empirical support for this apocalyptic statement in the present data. Did you include a question on whether the doctors were considering leaving the profession?

We thank the Reviewer and agree. In our revised text, we have removed the sentence.

The gender and family issues could be better exploited. There is a brief and interesting discussion on full-time vs. part-time work on page 15 with reference to studies that show associations between work time and stress. What I miss however, is more information on what constitutes a normal work-week for UK GPs. May be our article on GPs working hours in Norway may be of help: Aasland OG, Rosta J. The working hours of general practitioners. J Norw Med Ass 2011; 131: 1076-9....

We agree the working conditions of general practitioners are of interest. However, there are great difficulties in establishing the “normal working week” for UK GPs. The new NHS contract is with the Practice as an organisation. GPs can agree amongst themselves who does what and when. GPs are most commonly in English law “independent contractors” i.e. are self-employed. They are not required to report their detailed working arrangements to any NHS

authority. Furthermore, we did not gather empirical data on respondents' working schedules. Therefore the available evidence is from surveys, which we cite. We are grateful to the Reviewer for the interesting article on working hours in Norway and have added this as a reference.

How does this fit with "normal" family life? An increasing number of burnout studies are concerned with the balance between work and private life, not only the situation at work alone. See e.g. Innstrand ST, Langballe EM, Espnes GA, Falkum E, Aasland OG. Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations. Work and Stress 2008; 22(1): 1-15 (or other publications from this group). Do you have data on family situation, number of children, etc.?

We agree with the Reviewer's comment that factors in the doctors' family life (whether normal or not) could have affected the degree of burnout. However, given the amount of information we were already requesting (i.e. asking all respondents to complete the MBI, and visiting a selected sub-group in the workplace to conduct a patient survey and audio-recording consultations in real time), we did not feel we could press our responding doctors for detailed information about their family life as well. To have done so might have seriously affected our response rates. However, we have added the point to our suggestions for future research.

On a more detailed level: when parametric measures (means and SDs) of MBI-scales are used, we need to know whether the distributions are (close to) normal.

We agree such measures should be applied to normally distributed data. We were advised that this was the case by a Statistician at the Department of Public Health and General Practice of the University of Cambridge, whose help we have acknowledged.

Is the difference between group and single-handed practices controlled for age?

We are most grateful to the Reviewer for this comment. In our original manuscript, we had shown less depersonalisation in single-handed doctors and those registered for over 20 years, but had not gone further. We have now conducted additional analyses and, as the Reviewer suspected, there is indeed a significant finding. In our revised text, we have added text and a table to report this. The analysis revealed that low scores for depersonalisation were concentrated amongst the doctors who were both registered for over 20 years and working single-handedly (ANOVA: $P = 0.004$)

Is it OK to use one MBI-dimension to predict another in a regression (p. 10, bottom)?

With regard to the regression modelling, we accept that there is ambiguity and have removed these sections from our revised manuscript. However, the correlations found between the three dimensions of the MBI (and reported in our original submission) have been retained in the Results section (page 10, bottom paragraph in our revised manuscript).

I suggest that you include a psychologist with experience of the MBI in your team.

We respect the expertise of psychologists but of course we are reporting research already carried without one. We will be pleased to consider this for future work.

(B) COMMENTS FROM PROFESSOR E GALAM, PARIS

Gender was obtained from the NHS general practitioner database and date of registration was obtained from the Medical Register. Does this mean the postal survey was not anonymous?

Yes, the NHS supplied names and addresses of all general practitioners working in Essex. The researchers wrote to each doctor on the list. Therefore the survey process was not anonymous but completely open and transparent. The Medical Register in the UK is publically accessible and published and names and work addresses of general practitioners working for the NHS in any given geographical area are available online via the NHS website. We would note that the Ethics Committee and the local Trust Research and Development Office approved this (non-anonymised) survey approach. Furthermore, the researchers needed to be able to link MBI responses to a named doctor so that they could re-approach doctors selected for the second phase of the study on the basis of their MBI scores.

You should explain exactly what you mean by 'Surgery visits'

We apologise that this term may not be clear to colleagues outside the UK. The premises of general practitioners in the UK have, for generations, been called 'surgeries'. We have redrafted the text to make it clear that these were not visits to the patients' homes, but our researcher visiting doctors in their general practices.

Why did you choose the scores for emotional exhaustion and not the scores for depersonalisation to choose the sub-sample of explored doctors? Even if depersonalisation is the aspect most likely to affect patient care and if the three sub-scales were significantly correlated, you could choose the sub-sample by the scores of depersonalisation. Can you explain your choice?

We selected MBI scores for emotional exhaustion, because this is the most widely-used sub-scale of the MBI and the one to which doctors themselves relate, as it captures the most important feeling of loss of energy. In the main study, we did not have any information about patients' perceptions of their doctors. However, in the second phase, there was an opportunity for the first time to relate doctors' feelings of depersonalisation (which is the sub-scale most likely to affect patients), with the patients' and an independent professional observer's contemporaneous ratings of the doctors interpersonal skills.

Although we were not examining doctor performance or error directly, we were aware of research linking depersonalisation (not emotional exhaustion) with sub-optimal performance by doctors. There are good theoretical reasons for this since the "external, attitude" issues towards other people are concentrated in the MBI in the domain of depersonalisation. We judged this topic would emerge as a key topic for future research, as it is doing already (Wallace et al., 2009). We therefore hoped that we could illuminate this in general practice by relating doctors' depersonalisation scores to patient ratings of their consultation skills. In the event, patients did not detect the doctors' depersonalisation (at least on the DISQ instrument) but the finding that doctors are able to cope even when depersonalised is new and justifies the decision to use depersonalisation scores.

At which period of the year did you make the study?

The main study was conducted between March and June.

What was the time between the postal survey and the sub-sample study?

The time difference was seven months so the sub-sample study took place in the following February.

Was there a link between the audio-taped consultations and the patients who completed the DISQ – i.e. the same patients?

Yes. The patients were invited by a researcher to complete the DISQ at the same time on the same day that the consultations with the doctor were audio-taped.

The patients who completed DISQ made it after the consultation, so you ask them immediately after?

Yes. We have tightened the text in our revised manuscript to make this clearer.

Did you get the 20 consultations and the 50 patients the same day for each doctor?

No, on some occasions the researcher had to return to the practice to obtain the necessary number of audio-recorded consultations and distributed patient questionnaires at the same time.

You could have added three other references: Zantinge et al (2007), Shanefelt et al (2002), and Fahrenkopf et al (2008).

We thank the Reviewer for suggesting these additional references. We were aware of these conflicting findings and have included these references and adapted our text accordingly.

Two doctor-level factors and two practice-level factors were associated with higher levels of depersonalisation. Did you explore other factors or only these ones? Did you explore the correlation of these factors with emotional exhaustion and with low personal accomplishment?

We confirm that we did explore other doctor and patient factors. In addition to practice size and years since registration (as a proxy for age), these included the gender of the doctors, and their membership of the Royal College of General Practitioners. Patient factors included whether the patients considered they were or were not seeing the doctor they regarded as their usual doctor, and the length of the consultation. However, the size of the group of doctors visited in their practices meant that sub-group analyses were limited. Data on consultation length are currently being analysed and we hope to submit to a general practice journal in the future.

Even if there is no difference between the two group results for the DISQ and Kendall tau, it would be interesting to get these results (Scores on the scale of 0-100...)

We thank the Reviewer for this suggestion. In our revised manuscript we have added the median DISQ scores for each group – i.e. for the 'low depersonalisation group (median=83) and for the 'high depersonalisation' group (median=87).

You say the MBI conceptualises burnout as an imbalance between demands and resources. This is one way to conceptualise it, but you can use others, for example the Demand-Control Karasek model.

We thank the Reviewer and agree. In our revised text, we have added this point.

(C) CONSEQUENTIAL CHANGES

Number of doctors completing the Maslach Burnout Inventory

Many of the other published reports refer only to much smaller samples of doctors (n=115 in Shanefelt et al., 2002; n=123 in Fahrenkopf et al., 2008). We therefore hope that, in reporting the largest number of British doctors ever (n=564) to complete the Maslach in a defined geographical area, our research will assist in determining the norms and range of Maslach scores for British doctors.

One Reviewer has drawn our attention to Zantinge et al. (2007) published in Patient Education and Counselling

We are grateful to this Reviewer. One of our new conclusions is that large numbers of British general practitioners, despite having depersonalisation scores classified as high, nevertheless are able to practise so that their patients' opinions, as measured by the DISQ, do not detect lower quality consultation skills. Zantinge et al (2007) indirectly support our finding by demonstrating that the workload of general practitioners does not affect their awareness of patients' psychological problems. Of course, workload is different from depersonalisation, but this 2007 research provides evidence that general practitioners are able to maintain a professional approach in the face of substantial variation in the pressures they face in their job. In our revised manuscript, we have added text to make this point.

To ensure that the manuscript text remains within the Journal word limits, whilst still addressing the Reviewers' comments, we have made a number of minor editorial changes throughout the text. These changes are also highlighted in red font.

We trust that we have addressed the comments raised by the Reviewers and hope that you are now able to accept the manuscript for publication.

Yours faithfully

Dr Peter Orton, MMedSci, FRCGP
Dr Christopher Orton, MB BS
Professor Sir Denis Pereira Gray, OBE, Hon DSc, FRCP, FRCGP, FMedSci

References

Aasland OG, Rosta J. The working hours of general practitioners 2000-2008. Tidsskr Nor Laegeforen 2011; 131 (11): 1076-1080.

Fahrenkopf AM, Sectish TC, Barger LK, et al. Rates of medication errors among depressed and burnt out residents: prospective cohort study. BMJ 2008: 336 (7642): 488-491. doi:10.1136/bmk.39469.763218.BE

Green DE, Walkey FH,Taylor AJW. The three-factor structure of the Maslach Burnout Inventory. J Soc Behav Pers 1991; 6: 453-472

Leiter MP. Burnout as a developmental process: consideration of models. In WB Schaufeli, C Maslach, Marek T (Eds) Professional Burnout: Recent Developments in Theory and Research. Philadelphia, USA: Taylor and Francis, 1993 (pp 237-250).

Maslach C, Jackson S, Leiter MP. MBI: The Maslach Burnout Inventory Manual. Palo Alto, California: Consulting Psychologists Press, 1996

Schaufeli WB, Bakker AB, Hoogduin K, Schaap C, Kladler A. On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. Psychol Health 2001; 16 (5): 565-682.

Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self reported patient care in an internal medicine residency program. Ann Int Med 2002; 136 (5): 358-367.

Wallace JE, Lemaire JB, Ghali WA. Physician wellness: a missing quality indicator. Lancet 2009; 374 (9702): 1714-1721.

Zantinge EM, Verhaak PF, de Bakker DH, Kerssens JJ, van der Meer K, Bensing JM. The workload of general practitioners does not affect their awareness of patients' psychological problems. Patient Educ Couns 2007; 67 (1-2): 93-99.

(B)

VERSION 2 – REVIEW

REVIEWER	Olaf Gjerløw Aasland MD MHA Director, The Research Institute Norwegian Medical Association Professor, Department of Health Management and Health Economics Institute of Health and Society University of Oslo
REVIEW RETURNED	21/11/2011

GENERAL COMMENTS	The authors have observed very well the input from the referees and hav done necessry adjustments and amendments. The maintain depersonalisation as their prime response variable, but argue sufficiently for why they do this. Even if we might have conducted this study slightly differently, they have exploited this unique data set in a good way.

REVIEWER	Professor Eric GALAM Département of General Practice Paris Diderot University FRANCE no competing interests
REVIEW RETURNED	20/11/2011

GENERAL COMMENTS	I thank the authors for their work and taking in account our suggestions. A few little modifications could help the paper being better - We could discuss about the link between profesionalism and the fact that the feelings of doctors are detected by patients and observers. This question could be touched in the discussion. Nevertheless, I suggest in the abstract to take out "doctors maintain

	their professionalism so that in their consultations," and the sentence could be : despite reporting substantial depersonalisation, their feelings of burnout were not detected by patients or independent observers. - To facilitate the reading, I suggest you to put always the results in the same direction i.e. more or less. Exemple 1 : (results section) Female doctors were significantly more likely than male doctors to return a complete MBI…..Doctors registred more than 20 years were less likely …to respond to the survey Exemple 2 (discussion section) Two doctor-related factors and two practice-related fectors wera sociated with higher levels of depersonalisation. Female doctors….less likely - MBI responses you state the correlation between the three subscales. High levels of depersonalisation and high levels of emotional exhaustion and low levels of personal accomplishment High levels of emotional exhaustion with low levels of personal accomplishment : what about personal accomplishment ? On the six questions comprising the MBI subscales for depersonalisation, the question with the highest correlation with the total depersonalisation score was " I've become more callous toward people since I took the job" : It is quite interesting : you should mention this in the abstract or at least in the discussion section Discussion section pessimistic : it is intersting but you could reduce this point and speak a litte about social aspects. You can see in Soler study (ref 13) obvious differences between countries showing that the design of medical practice is important. You can also touch the cultural aspects i.e expectations of the population about the doctor's action and results

VERSION 2 – AUTHOR RESPONSE

We are grateful to both assessors for considering the resubmitted version of the article. One assessor has suggested six final revisions and we appreciate your decision that these are optional for us.

We have now examined the six points. We are happy to accept four of the six suggestions and we respond to each in turn:

1. Use of the word professionalism

We thank the Assessor for the point and think his suggested revised wording is marginally more precise than ours, so we are happy to accept the suggested words. We have revised the text accordingly (all revisions highlighted by 'track changes').

2. Sequence of our findings

We thank the Assessor for this point and agree. It is more logical to report all our findings in a consistent format, e.g. reporting the factors that are associated with higher depersonalisation throughout the article. We have revised the text accordingly.

3. Correlations between the three dimensions of the Maslach Burnout Inventory (MBI)

The correlations between the three dimensions of the BMI have been reported previously in the literature. We repeated them as a matter of good practice and thoroughness, and we state this in our article. We do not see any value in repeating a finding that is well known and therefore do not propose to act on this suggestion.

4. Single item in the depersonalisation dimension of the MBI which correlates most strongly with the total depersonalisation score

We agree with the Assessor that our finding that the item on callous feelings is the one which correlates most strongly with the total depersonalisation score is extremely interesting. We also think this is new. We appreciate the suggestion that its importance merits inclusion in our summary/abstract.

However, the 250 word limit for Abstracts in BMJ Open is very tight and we consider that our responsibility is to use these words to report our main findings, based on our research questions, rather than an interesting development in the method.

The abstract was repeatedly honed to make the best use of the available words and inserting any new material must mean us losing other points. This finding was in our original submission and we do of course continue to make this finding clear in the main body of our revised text.

As far as adding the point to our Discussion section is concerned, we would be happy to add a few sentences as follows:

“The finding that the item referring to callous feelings had the strongest association with the overall depersonalisation score is, as far as we know, new. It underlines how negative feelings towards others are concentrated in the depersonalisation dimension. This feature of the MBI is likely to be of increasing interest in future research on the patient’s perspective when receiving care in general practice”.

We have inserted this paragraph in the Discussion of the attached revision of the article.

5. Pessimistic and optimistic states

The Assessor finds the comment on pessimistic and optimistic states interesting and so do we. This is a fast-emerging topic in the social sciences. We do not have any data on it ourselves and therefore do not feel we are in a position to alter that section of the Discussion.

6. Inter-country differences and cultural expectations

We agree with the Assessor that there are important inter-country differences, as indeed we have noted. We have added a sentence underlining this.

The Assessor also suggests commenting on the expectations of the population about the doctors’ action and results but, as we have no data on this, we would prefer not to go further than our existing text.

Correction

Orton P, Orton C, Pereira Gray D. Depersonalised doctors: a cross-sectional study of 564 doctors, 760 consultations and 1876 patient reports in UK general practice. *BMJ Open* 2011;**1**:e000274.

Further to the existing Acknowledgements, Dr Peter Orton was very grateful, and remains grateful, to Dr Martin and colleagues in the Laindon Health Centre Research Team, Essex, for encouragement and substantial support with his research, including: some preliminary data evaluation, sponsorship, support in employing research staff, help in obtaining research governance approvals, advice, and document storage. He acknowledges help and support from all members of the Laindon Health Centre Research Team.

After receiving information supplied after publication, Laindon Health Centre Research Fund should be added to the list of funders.

Christopher Orton's contribution to the paper spanned time spent at Laindon Health Centre and at St George's Medical School, London.

BMJ Open 2012;**2**:e000274corr1. doi:10.1136/bmjopen-2011-000274corr1