BMJ open accessible medical research

Workplace bullying in the UK NHS: a questionnaire and interview study on prevalence, impact and barriers to reporting

Madeline Carter,[1] Neill Thompson,[2] Paul Crampton,[1] Gill Morrow,[1] Bryan Burford,[1] Christopher Gray,[3] Jan Illing[1]

To cite: Carter M, Thompson N, Crampton P, *et al*. Workplace bullying in the UK NHS: a questionnaire and interview study on prevalence, impact and barriers to reporting. *BMJ Open* 2013;**3**:e002628. doi:10.1136/bmjopen-2013-002628

▸ Prepublication history and additional material for this paper are available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2013-002628).

Received 23 January 2013
Revised 3 April 2013
Accepted 3 April 2013

[1]Centre for Medical Education Research, School of Medicine, Pharmacy and Health, Durham University, Durham, UK
[2]Department of Psychology, Faculty of Health and Life Sciences, Northumbria University, Newcastle-upon-Tyne, England, UK
[3]Northern Deanery, Newcastle-upon-Tyne, England, UK

Correspondence to
Dr Madeline Carter; madeline.carter@durham.ac.uk

ABSTRACT

Objectives: To examine the prevalence and impact of bullying behaviours between staff in the National Health Service (NHS) workplace, and to explore the barriers to reporting bullying.

Design: Cross-sectional questionnaire and semi-structured interview.

Setting: 7 NHS trusts in the North East of England.

Participants: 2950 NHS staff, of whom 43 took part in a telephone interview.

Main outcome measures: Prevalence of bullying was measured by the revised Negative Acts Questionnaire (NAQ-R) and the impact of bullying was measured using indicators of psychological distress (General Health Questionnaire, GHQ-12), intentions to leave work, job satisfaction and self-reported sickness absence. Barriers to reporting bullying and sources of bullying were also examined.

Results: Overall, 20% of staff reported having been bullied by other staff to some degree and 43% reported having witnessed bullying in the last 6 months. Male staff and staff with disabilities reported higher levels of bullying. There were no overall differences due to ethnicity, but some differences were detected on several negative behaviours. Bullying and witnessing bullying were associated with lower levels of psychological health and job satisfaction, and higher levels of intention to leave work. Managers were the most common source of bullying. Main barriers to reporting bullying were the perception that nothing would change, not wanting to be seen as a trouble-maker, the seniority of the bully and uncertainty over how policies would be implemented and bullying cases managed. Data from qualitative interviews supported these findings and identified workload pressures and organisational culture as factors contributing to workplace bullying.

Conclusions: Bullying is a persistent problem in healthcare organisations which has significant negative outcomes for individuals and organisations.

ARTICLE SUMMARY

Article focus

- Workplace bullying is a persistent problem in healthcare organisations.
- This cross-sectional study investigated the prevalence and impact of bullying among UK National Health Service (NHS) staff, sources of bullying and barriers to reporting bullying using quantitative and qualitative approaches.

Key messages

- Workplace bullying is a significant but under-reported problem in the NHS. Many staff have directly experienced or witnessed bullying between staff members. Staff with disabilities reported higher levels of negative behaviours than staff without disabilities.
- Exposure to bullying as a target or witness was associated with negative outcomes: poorer psychological health, lower job satisfaction and increased intentions to leave work.
- There were significant barriers to reporting bullying, including the concern that nothing would change and that targets would be labelled as trouble-makers. Managers, peers and workplace culture were the most common sources of bullying.

Strengths and limitations of this study

- This study focused on the prevalence of specific negative behaviours, as well as measuring overall bullying rates. Knowledge of the most prevalent behaviours should inform the development of interventions targeted at the most problematic behaviours. The mixed method design enabled triangulation across quantitative and qualitative data, providing a deeper understanding of the problem of workplace bullying.
- Limitations include the response rate and the cross-sectional design.

INTRODUCTION

Workplace bullying is a significant and persistent problem in healthcare organisations.[1–8] For individuals, being exposed to bullying can have serious implications for mental and physical health including depression, helplessness, anxiety and despair[9];

suicide ideation[10]; psychosomatic and musculo-skeletal complaints[11]; and the risk of cardiovascular disease.[12]

Critically for healthcare, doctors who were bullied were more likely to have committed one or more serious, or potentially serious, medical errors,[13] and 80% of healthcare staff believe that the state of their health affects patient care.[14] Furthermore, research with nurses has demonstrated a link between increased stress and poorer job performance (eg, lower levels of consideration, tolerance, concentration and perseverance), which could have a detrimental effect on patient care.[15–17]

At an organisational level, the cost of bullying can also be substantial: taking into account absenteeism, turnover and productivity; it has been estimated that the annual cost of bullying to organisations in the UK is £13.75 billion.[18] Beyond financial costs, a bullying culture has been identified as a significant issue in UK investigations into poor practice and patient care at NHS Lothian[19] and Mid-Staffordshire NHS Foundation Trust.[20] These costs and risks, coupled with the higher prevalence of workplace bullying in the healthcare sector,[21] make tackling bullying a key priority for healthcare organisations.

A range of bullying definitions exists. Definitions typically centre on the perceptions of the target, but vary with respect to duration, frequency, intent to harm and behaviours included.[22] In the current study, Einarsen *et al*'s[23] definition was used, which characterises bullying as "a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions. We will not refer to a one-off incident as bullying."

The absence of a universal definition has led to a range of measurement methods. As a result, the prevalence rates vary considerably across studies, depending on how questions are phrased and which definition of bullying is provided, if any. A review of 88 prevalence studies across 20 European countries found that, depending on the question and definition used, 0.3–86.5% of a sample reported bullying or negative acts at work.[21]

In UK healthcare, bullying between staff has been a persistent problem and the annual NHS staff survey results have varied little between 2005 and 2011, ranging from 15% to 18%.[1–5] However, the 2012 survey results suggest that there has been a sharp increase in bullying, with 24% of NHS staff reporting that they had been bullied or harassed by other staff in the previous 12 months.[i 6] Other surveys in the healthcare sector report even higher levels of bullying. In a large-scale study of senior medical students in the USA, 42% reported that they had been harassed and 84% reported that they had been belittled during medical school.[24] Similarly, Quine found that 37% of junior doctors in the UK reported being bullied in the previous year and 84% had experienced at least one bullying behaviour.[25] In a study of healthcare staff in the UK, 38% reported that they had experienced at least one bullying behaviour in the previous year.[8]

Management of bullying relies on staff feeling able to report issues to authority figures, but in the current economic climate, staff may be increasingly reluctant to report problems. Budget cuts, restructuring and organisational change are associated with higher rates of workplace bullying,[26] and bullying is already under-reported in the NHS.[27] Under increasingly pressurised working conditions and with fewer staff, it is critically important to understand and address workplace bullying. This study sought to examine the prevalence and impact of bullying behaviours across a range of providers of NHS healthcare and to better understand the barriers to reporting bullying.

METHODS

Participants

Samples of staff were drawn from seven NHS organisations, representing acute care, primary care and mental healthcare provision. In large organisations (>3000 staff), a random sample of 850 staff was selected, whereas in smaller organisations (up to 600 staff), all staff were invited to participate, following the guidance for the NHS Staff Survey.[28] Questionnaire distribution methods were dictated by the preference of the organisation. Staff in five organisations were sent an anonymous paper questionnaire with a prepaid return envelope and they received a reminder after approximately 3 weeks. Staff in the remaining two organisations were sent an email with a link to an anonymous online questionnaire and reminder emails were sent after approximately 2 weeks and 4 weeks.

All staff in the questionnaire sample were also invited to participate in a telephone interview. Staff who volunteered were sent a screening questionnaire to ensure the study included a range of responses from staff who had been bullied, had witnessed bullying or been accused of bullying.

Questionnaire

A 73-item questionnaire was developed to measure the prevalence and impact of bullying, incorporating existing scales and measures designed for this questionnaire.

The current study adopted best practice and measured the prevalence of (1) specific negative behaviours, offering a more objective approach, and also of (2) self-labelled bullying using a definition.[29] The anonymous questionnaire included the 23-item revised Negative Acts Questionnaire (NAQ-R),[23] which was used to measure the prevalence of a range of 22 potentially bullying behaviours (see table 3) as well as overall bullying. NAQ-R was empirically developed and validated and has

[i]The response format for this question changed from a yes/no in 2011 and previous years to a frequency scale (never, 1–2, 3–5, 6–10, more than 10 times) in 2012. Although not directly comparable, the 2012 frequency scale can be collapsed into a yes (1–2, 3–5, 6–10, more than 10 times)/no (never) format for use as a tentative indicator of change over time.

been widely used in many countries.[30–32] Respondents were asked to rate how often they had experienced each negative behaviour from other staff in the last 6 months using a five-point frequency scale (never, now and then, monthly, weekly, daily). NAQ-R provides prevalence data for each of the 22 negative behaviours as well as an overall mean score. The overall NAQ-R mean score can range from 22 (meaning that the respondent 'never' experienced any of the 22 negative behaviours) to a maximum of 110 (meaning that the respondent experienced all of the 22 negative behaviours on a daily basis).

NAQ-R focuses on specific behaviours rather than subjective perceptions of bullying, but it also includes an overall measure of perceived workplace bullying. Participants were provided with a definition of bullying (as described in Introduction section), asked "have you been bullied by other staff at work over the last six months?" and responded using a five-point scale (no; yes, but only rarely; yes, now and then; yes, several times per week; and yes, almost daily).

To assess the impact of bullying on mental health, the 12-item General Health Questionnaire (GHQ-12)[33] was included as an indicator of psychological distress. Results were evaluated against the recommended cut-off score of ≥3,[33] as well as the more conservative cut-off of ≥4 sometimes used in healthcare research.[34] High scores (above the cut-off) indicate that respondents are experiencing symptoms of psychological distress. GHQ data may also be scored as a Likert scale,[35–37] and this continuous score was used to calculate correlations.

Using 33 items developed and piloted for this questionnaire, the participants were asked about barriers to reporting bullying, sources of bullying, the frequency with which they witnessed the bullying of other staff at work and whether they had reported any exposure to the 22 negative behaviours in NAQ-R to an authority figure. Participants were also asked about their job satisfaction, intentions to leave work (thinking about leaving their job, thinking about leaving because of bullying and looking for another job) and self-reported sickness absence. Finally, the participants were asked to provide demographic information (occupational group, gender, age, ethnicity, and disability status; 5 items). The questionnaire was analysed using SPSS V.17.

Interviews

Semi-structured telephone interviews were conducted to investigate experiences of bullying in greater depth.[38] Questionnaire respondents were invited to participate in a semi-structured interview and interviewees were volunteers drawn from this sample. With consent, the interviews were recorded and transcribed verbatim. The transcripts were analysed at a semantic level in accordance with inductive thematic analysis[39] across the key stages of thematic map development: data coding, confirmation of coding, and refinement of themes and the thematic map. This procedure involved coding line by line (phase 1: familiarising yourself with the data), identifying the focus of coding from frequent occurrences across the data set (phase 2: generating initial codes), and the recognition of general data trends to form main themes (phase 3: searching for themes). Initially, three interviewer–researchers independently coded two interview transcripts (phase 1). A thematic map was produced to display key themes in relation to the research questions (phase 2). Additional interview transcripts were analysed and the thematic map was refined further (phase 3). Consensus across the interviewer–researchers was achieved through detailed discussion and further verification was obtained from researchers who did not collect or analyse data (phase 4: reviewing themes). A final thematic map was agreed between the interviewer–researchers (phase 5: defining and naming themes). The analytical process was managed through NVivo V.8. Interview data were used to triangulate and elaborate on survey findings. Findings reported here focus on barriers to reporting bullying, the impact of bullying and the source of bullying.

RESULTS

Participants

Questionnaires were returned by 2950 staff members with an estimated overall response rate of 46%.[ii] Most respondents were female (72.3%, n=2133), and all age groups were represented (18–24 years: 3.2% of participants, n=94; 25–34 years: 26.7%, n=787; 35–44 years: 26.6%, n=784; 45–54 years: 26.9%, n=793; 55+ years: 11.6%, n=342; not disclosed: 5.1% n=150). The majority of participants defined themselves as White-British (81.7%, n=2410), followed by Asian-Indian (5.3%, n=157), although a number of ethnic groups were represented. Disability was reported by 2.7% (n=81) and a further 5.1% (n=149) did not disclose their disability status.

A range of occupational groups were represented (see table 1) and the largest groups were the wider healthcare team (including admin, central/corporate services, maintenance and facilities), medical and dental staff and registered nurses.

Of the 155 staff who volunteered to participate in a telephone interview, interviews were conducted with 43 participants.

Overall prevalence of bullying and witnessed bullying

Across the whole sample, 19.9% (n=575) of healthcare staff had been bullied to some degree (ie, from rarely to daily) by other staff in the last 6 months, including 2.7% (n=79) who had been bullied several times a week or almost daily. This varied across occupational groups,

[ii]Questionnaire distribution in some organisations relied on an email cascade system or on email distribution lists that we later found included out of date email addresses, therefore the true response rate is difficult to calculate. The current figure assumes that emails reached all of the intended recipients, but we do not know whether this definitely happened as emails may not have been cascaded to all teams and some email addresses may have been out of date. Therefore, our stated response rate is likely to be an underestimate.

Table 1 Occupational groups represented by questionnaire participants

Occupational group	Frequency	Percentage of respondents (%)
Registered nurses—adult	479	16.2
Registered nurses—children	35	1.2
Registered nurses—other (eg, mental health, health visitor)	124	4.2
Midwives	52	1.8
Nursing/healthcare assistants	308	10.4
Medical/dental—consultant	83	2.8
Medical/dental—in training	640	21.7
Medical/dental—other (eg, staff and associate specialists/non-consultant career grade)	44	1.5
Allied health professionals	270	9.2
Healthcare scientists/technicians (eg, microbiology)	78	2.6
Wider healthcare team (eg, admin, central/corporate services, maintenance, facilities)	654	22.2
General management	72	2.4
Other	72	2.4
Not Specified	39	1.3

with medical/dental staff reporting the highest levels of bullying to some degree (see table 2). Many more healthcare staff had witnessed colleagues being bullied at work: 43.4% (n=1212) reported that they had witnessed bullying at least now and then in the last 6 months, and 5.3% had witnessed it daily or weekly (n=148; table 2). The prevalence of witnessing bullying also varied across occupational groups (see table 2).

Prevalence of negative behaviours

Table 3 shows the prevalence of 22 negative behaviours among healthcare staff. The most prevalent behaviours included work-related behaviours (eg, unmanageable workload and someone withholding information that affects an individual's performance), being humiliated over work, socially isolating behaviours (eg, being ignored) and being shouted at or being the target of spontaneous anger.

The majority (69.2%) had experienced at least one negative behaviour occasionally over the last 6 months and 18.3% had experienced at least one negative behaviour on a daily or weekly basis. One-third (33.8%) had experienced five or more negative behaviours to some degree over the last 6 months and 3.7% had experienced five or more negative behaviours on a daily or weekly basis.

Source of bullying

The most common source of bullying was a supervisor or manager (51.1% of those bullied, n=294), followed by peers (31.1% of those bullied, n=179). Workplace culture was also highlighted as a source of bullying by 18.3% of bullied staff (n=105) and this theme emerged in the interviews

> Certain departments have an ethos of being rude, unpleasant and occasionally verbally aggressive. When you have day to day contact with these people it can be exhausting and severely undermines confidence in your abilities. (L204)

Table 2 Frequency and percentage of healthcare staff experiencing and witnessing bullying by occupational group

	Experienced bullying from other staff			Witnessed bullying of other staff		
Occupational group	No (%)	Yes, to some degree (%)	Yes, daily/ weekly (%)	No (%)	Yes, to some degree (%)	Yes, daily/ weekly (%)
Registered nurses	500 (79.6)	128 (20.4)	19 (3.0)	341 (56.4)	264 (43.6)	37 (6.1)
Midwives	45 (88.2)	6 (11.8)	0 (0.0)	21 (42.0)	29 (58.0)	2 (4.0)
Nursing/healthcare assistants	243 (81.5)	55 (18.5)	7 (2.3)	188 (66.0)	97 (34.0)	16 (5.6)
Medical/dental	586 (77.0)	175 (23.0)	23 (3.0)	380 (51.4)	359 (48.6)	30 (4.1)
Allied health professionals	216 (82.1)	47 (17.9)	3 (1.1)	149 (58.0)	108 (42.0)	14 (5.4)
Healthcare scientists/ technicians	64 (83.1)	13 (16.9)	4 (5.2)	32 (44.4)	40 (55.6)	8 (11.1)
Wider healthcare team and general management	583 (81.9)	129 (18.1)	17 (2.4)	416 (60.8)	268 (39.2)	33 (4.8)
Other	55 (79.7)	14 (20.3)	3 (4.3)	37 (56.1)	29 (43.9)	6 (9.1)
Total (including where occupational group not specified)	2321 (80.1)	575 (19.9)	79 (2.7)	1581 (56.6)	1212 (43.4)	148 (5.3)

Table 3 Frequency and percentage of staff experiencing negative behaviours at work over the last 6 months (NAQ-R)

	Never		Now and then		Monthly		Weekly		Daily		Yes, to some degree*		Yes, daily or weekly		Mean score (out of 5)
Negative behaviour	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	
Having your opinions and views ignored†	1838	63.2	825	28.4	100	3.4	89	3.1	57	2.0	1071	36.9	146	5.1	1.52
Being exposed to an unmanageable workload†‡	1909	65.8	702	24.2	100	3.4	105	3.6	86	3.0	993	34.2	191	6.6	1.54
Someone withholding information which affects your performance†‡	1972	67.9	734	25.3	73	2.5	84	2.9	40	1.4	931	32.1	124	4.3	1.45
Being ordered to do work below your level of competence¶	2016	70.1	615	21.4	69	2.4	110	3.8	66	2.3	860	29.9	176	6.1	1.47
Being given tasks with unreasonable or impossible targets or deadlines†‡	2185	75.2	542	18.7	69	2.4	66	2.3	44	1.5	721	24.9	110	3.8	1.36
Being humiliated or ridiculed in connection with your work†§¶	2225	76.6	525	18.1	58	2.0	68	2.3	27	0.9	678	23.3	95	3.2	1.33
Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks¶	2259	77.9	460	15.9	65	2.2	72	2.5	43	1.5	640	22.1	115	4.0	1.34
Being ignored or facing a hostile reaction when you approach†	2272	77.9	485	16.6	57	2.0	55	1.9	48	1.6	645	22.1	103	3.5	1.33
Being shouted at or being the target of spontaneous anger (or rage)	2296	78.7	509	17.4	59	2.0	38	1.3	16	0.5	622	21.2	54	1.8	1.28
Spreading of gossip and rumours about you†¶	2340	80.7	453	15.6	39	1.3	40	1.4	28	1.0	560	19.3	68	2.4	1.26
Being ignored, excluded or being 'sent to Coventry'	2372	81.8	382	13.2	49	1.7	55	1.9	43	1.5	529	18.3	98	3.4	1.28
Repeated reminders of your errors or mistakes†¶	2415	83.1	372	12.8	50	1.7	42	1.4	27	0.9	491	16.8	69	2.3	1.24
Pressure not to claim something which by right you are entitled to (eg, sick leave, holiday entitlement, travel expenses)†¶	2434	83.7	367	12.6	55	1.9	30	1.0	21	0.7	473	16.2	51	1.7	1.22

Continued

Table 3 Continued

Negative behaviour	Never		Now and then		Monthly		Weekly		Daily		Yes, to some degree*		Yes, daily or weekly		Mean score (out of 5)
	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent	
Persistent criticism of your work and effort†¶	2456	84.3	320	11.0	57	2.0	57	2.0	25	0.9	459	15.9	82	2.9	1.24
Excessive monitoring of your work†¶	2488	85.6	264	9.1	64	2.2	40	1.4	51	1.8	419	14.5	91	3.2	1.25
Having insulting or offensive remarks made about your person (ie, habits and background), your attitudes or your private life†¶	2540	87.2	289	9.9	38	1.3	30	1.0	15	0.5	372	12.7	45	1.5	1.18
Having allegations made against you†¶	2626	90.4	229	7.9	22	0.8	18	0.6	11	0.4	280	9.7	29	1.0	1.13
Intimidating behaviour such as finger-pointing, invasion of personal space, shoving, blocking/ barring the way†¶	2662	91.3	204	7.0	23	0.8	16	0.5	11	0.4	254	8.7	27	0.9	1.12
Being the subject of excessive teasing and sarcasm¶	2689	92.5	162	5.6	22	0.8	20	0.7	14	0.5	218	7.6	34	1.2	1.11
Hints or signals from others that you should quit your job†	2716	93.6	145	5.0	17	0.6	13	0.4	10	0.3	185	6.3	23	0.7	1.09
Practical jokes carried out by people you don't get on with¶	2789	96.1	89	3.1	9	0.3	10	0.3	4	0.1	112	3.8	14	0.4	1.05
Threats of violence or physical abuse or actual abuse¶	2843	97.8	53	1.8	4	0.1	1	0.0	5	0.2	63	2.1	6	0.2	1.03

*Collapsed across categories: now and then, monthly, weekly and daily. Total frequencies vary slightly due to missing data. Percentage totals may include rounding error.
†Behaviours with a significantly higher prevalence rate compared to staff without disabilities.
‡Behaviours with a significantly higher prevalence rate for White staff compared to BME staff.
§Behaviours with a significantly higher prevalence rate for BME staff compared to White staff.
¶Behaviours with a significantly higher prevalence rate for male staff compared to female staff.

> I think sometimes people can create a very negative culture where it's not about a specific incident of bullying,…you wouldn't be able to put your finger on certain things but just that there would be a culture that you worked under where you never felt comfortable…it's just how people are generally made to feel. (T120)

Several interviewees reported that workload pressures, particularly managerial workload, were partially to blame for bullying behaviours

> Quite often the people doing the bullying are actually stressed…if they are trying to get something done, they're stressed, the people in front of them aren't performing or doing the things they think they should be doing, then they sort of demonstrate that…with certain bullying behaviours…which can verge on being abusive at times. (T65)

> they are under more pressure because obviously all managers are under pressure and…the more aggressive it might get in how they approach and manage people. (T128)

Negative behaviours, disability, ethnicity and gender

NAQ-R demonstrated high internal consistency reliability (Cronbach's α=0.93). The overall NAQ-R mean score, based on the responses of staff who completed all 22 items in the scale (n=2689), was 27.5.

Group differences were first tested on the overall NAQ-R mean score using t tests. Multivariate analysis of variance (MANOVA) was then used to test for differences across the 22 negative behaviours, followed by univariate analyses comparing responses for each behaviour.

Staff with disabilities experienced higher levels of negative behaviours overall (mean NAQ-R total score 31.4) than staff without disabilities (27.2); $t(76.6)=3.22$, $p=0.002$. The MANOVA test across all 22 behaviours also found a significant difference in the incidence reported by staff with and without disabilities, Wilks' $\lambda=0.97$, $F(22, 2541)=3.52$, $p<0.0001$. Investigation of specific behaviours revealed that staff with disabilities experienced higher prevalence of 15 out of the 22 negative behaviours (denoted with † in table 3).

Although there was no significant difference on the overall NAQ-R mean score between White (27.3) and Black or Ethnic Minority (BME) staff (27.5), $t(2546)=0.26$, $p=0.80$, the MANOVA indicated that there were some differences across the 22 negative behaviours, Wilks' $\lambda=0.96$, $F(22, 2525)=4.56$, $p<0.0001$. Univariate analyses detected that White staff experienced significantly higher levels of three behaviours (denoted with ‡in table 3) and BME staff experienced significantly higher levels of one behaviour (denoted with § in table 3).

The overall NAQ-R mean score was significantly higher for male staff (28.3) than female staff (27.0), $t(925.4)=3.15$, $p=0.002$. The MANOVA test across all 22 behaviours also found a significant difference in the incidence reported by male and female staff, Wilks' $\lambda=0.97$, $F(22, 2557)=4.09$, $p<0.0001$. Univariate analyses found that male staff experienced higher levels of 14 behaviours (denoted with ¶ in table 3).

Reporting of bullying

Of the staff who experienced bullying behaviours to some degree, between 2.7% and 14.3% reported it to someone in authority, depending on the behaviour. The highest reporting rates were found for having allegations made against you (14.3%), threats or actual physical violence or abuse (14.3%) and being shouted at or being the target of spontaneous anger (12.9%). The lowest reporting rates were found for practical jokes carried out by people you do not get on with (2.7%), being ordered to do work below your level of competence (3%), having your opinions ignored (3.1%) and being the subject of excessive teasing and sarcasm (3.2%).

When asked why bullying behaviours were not reported, 14.9% of participants (45.7% of those who experienced negative behaviours to some degree) believed that nothing would change, 13.9% (45.4% of bullied) did not want to be seen as a trouble-maker, 11.7% (45.2% of bullied) stated that the seniority of the bully would act as a barrier to reporting, 11.3% (35.3% of bullied) believed that management would not take action and 10.5% (38.4% of bullied) were concerned that the situation might deteriorate further.

Interview data supported these findings, and offered a more detailed analysis of the barriers to reporting bullying. Similar themes emerged in the qualitative data, indicating that managers often failed to act when staff reported bullying, resulting in no change or a worsening of the situation:

> I went to the next manager up who listened to me, or appeared to listen, but [they] did nothing it appeared (T18)

> I think it was the lack of action that made it spiral (T76)

Several interviewees observed that challenging the behaviour of a senior was particularly difficult and could result in adverse outcomes, including being labelled as a trouble-maker. Workplace cultures in which bullying behaviours remained unchecked were also described, which relayed the message that bullying was acceptable.

> Everyone knows who the bullies are and ignores it. It's far too much trouble to go up against seniors who are bullies. Some degree of bullying seems to be tolerated [in] our NHS society (L411)

> A lot of the staff have the attitude of keeping their heads down and not creating a fuss because I think if you accuse anybody of bullying, especially any of the management, your card is marked so to speak and they will really keep a close eye on you. (T105)

> This is the first time in my professional life that I've felt I've been in an organisation of lies and bullying, where people are frightened about what to do and what to say. (T36)

> Bullying is a part of the NHS culture (L222)

Furthermore, bullied staff were typically signposted to use the organisation's bullying policy, but there was uncertainty over how it would be implemented

> The reason why I wouldn't report it would be I don't know what the consequences could be for me, I really don't know how the organisation would deal with it, whether they would be very supportive, that's the whole problem…Some people say there is a fine line between management and bullying and harassment. (T128)

> It's great having a policy and talking about it but unless somebody is going to follow things through, it means nothing (T76)

Impact of bullying and negative behaviours

To assess the impact of bullying behaviours, a range of key outcomes were measured. Using the recommended cut-off score of ≥3, results from the GHQ-12 found that 29.9% of staff (n=852) had a high score, indicating that they were experiencing symptoms of psychological distress. Across occupational groups, this ranged from 25.5% for medical staff to 35.7% for nurses. Using the more conservative cut-off of ≥4, 24.9% of staff (n=711) had a high score, ranging from 21.0% for medical staff to 29.6% for nurses.

Correlations between the frequency of experiencing or witnessing bullying behaviours and key outcomes are presented in table 4. Being directly exposed to higher levels of bullying behaviours in the workplace (NAQ-R score) was associated with higher levels of psychological distress, increased intentions to leave (ie, thinking about quitting job, looking for another job and thinking about quitting due to bullying), higher rates of self-reported sickness absence and lower levels of job satisfaction. Similarly, *witnessing* higher levels of bullying behaviours was associated with higher levels of psychological distress, intentions to leave and self-reported sickness absence, and lower levels of job satisfaction. A similar pattern of results is observed when these same outcomes are correlated with an overall assessment of bullying frequency (ie, "How often have you been bullied by other staff over the last sixth months?").

Interview data supported these findings and offered a richer insight into the impact of bullying on individuals

> the stuff that happened to me was really quite trivial and petty but it's like a drip drip drip effect…it's like a constant worry…you are living in fear all the time and it's ridiculous for something as trivial as that to make you feel so scared… (T22)

> I couldn't sleep…I burst into tears at work…I just couldn't think straight (T18)

Interviewed staff reported behavioural, emotional and physical effects on themselves as a result of bullying. Although the data presented here are cross-sectional and rely on participants' perceptions, they suggest that bullying is perceived to have a causal role

> it affected me physically … symptoms which I realise now [were] psychosomatic because of the stress you were under and they've gone away since I came away from that (T143)

> It has been the most dreadful experience, I used to feel really keen about my job and I used to think my employers were quite good … they've just been horrible (T155)

> I would say I'm a very confident person, at the time I was starting to question myself – have I done something wrong – which I knew I hadn't (T125)

The impact on patient care and performance was not directly measured although references to performance impairment, such as the inability to think straight described above, were common

> if someone feels they are being repeatedly bullied … who then get themselves so worked up about things or so under confident that they actually are too nervous and they can't concentrate on the procedure they are actually doing (T64)

Bullying also had an effect on performance and communication at the group level

Table 4 Correlations between bullying measures and individual and organisational outcomes

	NAQ-R score	Overall bullying freq	Freq witnessed bullying
Psychological distress (GHQ-12 total score)	0.52	0.45	0.33
Number of times off sick	0.20	0.22	0.18
Job satisfaction	−0.43	−0.35	−0.25
Looking for another job	0.39	0.31	0.29
Thinking about quitting	0.45	0.37	0.31
Thinking about quitting due to bullying	0.68	0.66	0.48

All correlations are statistically significant at p<0.001.

> the other thing that it does is it stifles general discussion of support and help … you just basically get an environment where everyone sits quiet because they don't want to ask a question because they think they are going to get attacked (T13)

Although the impact on patient care was not directly measured in this study, the reported performance impairments at the individual level and the constraints on freedom of communication at the group level suggest that patient care may suffer as a result of workplace bullying.

DISCUSSION

Over a decade on from Quine's studies on bullying in UK healthcare,[8 25 40] workplace bullying remains a significant issue with far-reaching consequences for the healthcare workforce. The importance of research on workplace bullying in healthcare has been brought into sharp focus by the recent Francis Inquiry and review of NHS Lothian,[19–20] both highlighting that a bullying culture, poor leadership and a fear of reporting problems can result in poor practice and may have tragic consequences for patient care.

This mixed-methods study investigated the prevalence, sources and impact of bullying in the NHS and highlighted the most common negative behaviours experienced by staff. It extended previous research in healthcare by investigating the barriers to reporting bullying and explored these issues using qualitative interviews. Exposure to bullying and negative behaviours—either from personal experience or witnessing others being bullied—was associated with higher levels of psychological distress, increased intentions to leave, lower job satisfaction and higher sickness absence. Qualitative data also indicated that bullying was associated with performance impairments and communication problems that could affect patient care. Given that such a large proportion of staff are exposed to bullying, and that being a target or even a witness is associated with serious negative consequences, tackling bullying should be a priority for healthcare delivery organisations.

The analyses reported here are based on cross-sectional data, therefore causal relationships cannot be assumed. Reported outcomes may be a consequence of exposure to bullying; or it is possible that individuals with higher levels of psychological distress, increased intentions to leave, lower job satisfaction and higher sickness absence are more likely to be bullied or that they are more likely to perceive behaviour to be bullying (as a target or a witness). Although some research has investigated personality traits that may indicate a sensitivity to bullying, the evidence is mixed.[41–46] Longitudinal research is needed to establish the causal relationship between bullying and psychological distress, but qualitative findings indicate that targets perceive bullying to precede negative outcomes and other longitudinal research suggests that bullying is a cause, rather than a consequence, of lower job satisfaction and work engagement[47] and the use of psychotropic medication.[48]

Bullying behaviours were under-reported and understanding the barriers to reporting bullying is a critical component of tackling the problem. In order to promote safe working practice and quality patient care, healthcare staff have a duty to report problems with undermining or bullying behaviours. The revised NHS Constitution 2012 highlights the duty of staff to raise concerns and the importance of whistleblowing, as well as emphasising the rights of staff to an environment free from harassment, bullying or violence.[49] However, this study identified staff scepticism regarding whether the situation would improve, uncertainty over the value of a policy and concerns that they would be labelled as a trouble-maker as key barriers to reporting bullying. Bullying policies must be seen as effective, and reports of bullying must be treated seriously and result in real change in order to build staff confidence and minimise barriers to reporting bullying. Healthcare organisations could also publicise successful bullying interventions and highlight any positive changes that occur in order to increase staff confidence that they are proactive in preventing and dealing with bullying.

The most common source of bullying was a supervisor or manager in the same work group, followed by peers in the same work group. This has implications for bullying policies and organisational support structures. Bullied individuals are often advised to approach their manager with issues related to bullying and harassment; but, if their manager is the perpetrator, then it is important for staff to have access to advice and assistance from outside their work group. This finding also informs the development of interventions to tackle bullying: if managers are the primary perpetrators of bullying, then interventions should be targeted at managers as a priority. Research suggests that supportive managers can reduce the negative effects of high workload on employee stress,[50] and action can be taken to promote supportive behaviours among managers (eg, via behavioural level training, multisource feedback or awards for supportive managers).

Workplace culture was also identified as a source of bullying. Interviewees described cultures in which verbal abuse was common and staff were frightened to speak up for fear of being targeted themselves. Cultures in which bullying behaviours are not challenged can send a powerful message to staff that such behaviours are acceptable or even condoned. Leaders and managers are strongly implicated in shaping the work environment as they define acceptable behaviours, often implicitly, by role-modelling, rewarding, ignoring and punishing certain behaviours.[51 52] Healthcare organisations should ensure that leaders and managers understand the consequences of failing to address bullying behaviours, and that they possess the skills and willingness to challenge inappropriate behaviours.[51 53] Workload pressures and poor work

design may also exacerbate negative behaviours and organisations should proactively identify and minimise conflict triggers in the workplace.[53]

Prevalence rates reported in the current study are somewhat higher than meta-analytic findings, which found a prevalence rate of 11.3% in studies that used the measurement method adopted in this study (ie, self-labelling with a bullying definition).[54] A recent review of European prevalence studies from the past 20 years reported that 3–4% of employees may be subject to serious bullying, between 9% and 15% may experience occasional bullying and between 10% and 20% (or more) may occasionally experience negative behaviours that would not necessarily fall within a strict definition of bullying.[21] However, bullying rates are often higher in healthcare,[1–6 55] and the 20% prevalence rate found in the current study includes occasional bullying, therefore the slightly higher prevalence rate is not surprising. The percentage of staff witnessing the bullying of colleagues was comparable to levels reported in other studies on healthcare staff,[8 26 40 56] as was the proportion of staff with GHQ scores that are suggestive of psychological distress.[34 57–59]

Examination of demographic group differences revealed higher levels of negative behaviours experienced by healthcare staff with disabilities, corroborating findings across other sectors.[60] This difference was evident across the majority of negative behaviours, with the exceptions perhaps representing more overt bullying. Healthcare organisations should consider raising awareness of negative behaviours experienced by staff with disabilities, and offer targeted support services. Male staff also reported higher levels of most negative behaviours, with the exception of some socially excluding and more covert work-related behaviours.

The study has several limitations. The questionnaire data were cross-sectional and do not provide causal evidence that bullying has a negative impact on healthcare staff. However, the qualitative data suggest that targets perceive bullying experiences to be the cause of poorer psychological well-being and performance impairments. In addition, other longitudinal research has indicated that bullying is a causal factor in lower job satisfaction and work engagement[47] and use of psychotropic medication.[48] Prospective studies would be beneficial to clarify the direction of these relationships. The data were collected within one region of the UK, although a range of NHS organisations and occupational groups were included in the sample and the results are consistent with the findings reported elsewhere.[8 40] The 46% estimated response rate carries the risk of a self-selection bias, with bullied staff perhaps being more likely to respond. However, this estimate represents a minimum value[ii] and both the response rate and findings are comparable with other questionnaires distributed in the NHS that do not focus exclusively on workplace bullying.[1–6] Although the questionnaire gathered important data on the prevalence, reporting and impact of bullying, it did not capture the details on whether and how the bullying was challenged (by the target or by witnesses), the outcomes of formal or informal reporting of bullying, or whether there was any union involvement. Future research on these issues would be informative for the effective prevention and management of bullying.

In conclusion, despite increased awareness, the introduction of policies, and a greater range of training and organisational interventions, the problem of workplace bullying persists and there are considerable barriers preventing staff from reporting issues. Given current economic challenges in healthcare organisation and delivery, levels of bullying may be set to increase as research indicates that bullying rates are typically higher during times of organisational change, budget cuts and restructuring[26] and there are some early indications that rates are indeed increasing.[6]

These findings have implications for healthcare staff, managers and policy-makers. Knowledge of the most prevalent behaviours should inform the development of interventions targeted at the most problematic negative behaviours. Questionnaire tools such as NAQ-R[23] could be used to monitor the prevalence of negative behaviours as part of ongoing organisational development. A large number of staff witnessed the bullying of colleagues, and interventions could be designed to encourage bystanders to intervene and to provide the necessary skills to challenge negative behaviours. There are very few studies on the efficacy of workplace bullying interventions,[61] and there is a clear need for further research to identify evidence-based interventions.

This research highlighted the persistence of bullying and negative behaviours in healthcare; demonstrated a link between experiencing and witnessing negative behaviours and the health, well-being and organisational commitment of staff; and identified key barriers to reporting bullying. Removing these barriers and evaluating interventions to reduce negative behaviours in the workplace are important avenues for investment in the well-being of the healthcare workforce.

Acknowledgements We are grateful to Charlotte Rothwell for contributing to the design of the study, Adetayo Kasim for statistical advice and the NHS staff who facilitated this research. We would also like to thank the questionnaire respondents and interview participants.

Contributors JI was the principal investigator for this study. This study was designed by MC, NT, JI, GM and BB. MC, NT and PC conducted the study and analysed the data, CG provided additional analysis and interpretation. The manuscript was drafted and revised by all authors. MC, NT and JI are the guarantors.

Funding This project was funded by the North East Strategic Health Authority and the Northern Deanery in the UK. The funding organisations had no role in the study design or analysis of raw data. CG (Postgraduate Dean of the Northern Deanery) contributed to data interpretation and the final manuscript.

Competing interests None.

Ethics approval This research has been reviewed and approved by County Durham & Tees Valley 2 NHS Research Ethics Committee (REC Ref No: 09/H0908/46).

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data are available.

REFERENCES

1. National NHS Staff Survey 2007. Commission for Healthcare Audit and Inspection, 2008.
2. NHS Staff Survey (2008). http://www.nhsstaffsurveys.com/cms/
3. NHS Staff Survey (2009). http://www.nhsstaffsurveys.com/cms/
4. NHS Staff Survey (2010). http://www.nhsstaffsurveys.com/cms/
5. NHS Staff Survey (2011). http://www.nhsstaffsurveys.com/cms/
6. NHS Staff Survey (2012). http://www.nhsstaffsurveys.com/cms/
7. Kivimaki M, Elovainio M, Vahtera J. Workplace bullying and sickness absence in hospital staff. *Occup Environ Med* 2000;57:656–60.
8. Quine L. Workplace bullying in NHS community trust: staff questionnaire study. *BMJ* 1999;318:228–32.
9. Leymann H. Mobbing and psychological terror at workplaces. *Violence Vict* 1990;5:119–26.
10. Brousse G, Fontana L, Ouchchane L, *et al*. Psychopathological features of a patient population of targets of workplace bullying. *Occup Med* 2008;58:122–8.
11. Einarsen S, Raknes BI, Matthiesen SB, *et al*. Bullying at work and its relationships with health complaints—moderating effects of social support and personality. *Nordisk Psykol* 1996;48:116–37. Cited in: Einarsen S, Hoel H, Zapf D, Cooper CL eds. Bullying and emotional abuse in the workplace: international perspectives in research and practice, 127–144. London: Taylor & Francis.
12. Kivimaki M, Virtanen M, Vartia M, *et al*. Workplace bullying and the risk of cardiovascular disease and depression. *Occup Environ Med* 2003;60:779–83.
13. Paice E, Smith D. Bullying of trainee doctors is a patient safety issue. *Clin Teach* 2009;6:13–17.
14. Boorman S. NHS Health and Well-being: Final Report. 2009. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108799
15. Mojoyinola JK. Effects of job stress on health, personal and work behaviour of nurses in public hospitals in Ibadan Metropolis, Nigeria. *Ethno-Med* 2008;2:143–8.
16. Motowidlo SJ, Packard JS, Manning MR. Occupational stress: its causes and consequences for job performance. *J Appl Psychol* 1986;71:618–29.
17. Randle J. Bullying in the nursing profession. *J Adv Nurs* 2003;43:395–401.
18. Giga SI, Hoel H, Lewis D. *The costs of workplace bullying*. University of Manchester Institute of Science and Technology, 2008.
19. Bowles DJ. Investigation into management culture in NHS Lothian. Report to the Cabinet Secretary. 2012. http://www.nhslothian.scot.nhs.uk/MediaCentre/PressReleases/2012/Documents/Lothian_report_for_Cab_Sec_10th_May.pdf
20. Francis R. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. 2013. http://www.midstaffsinquiry.com/report
21. Zapf D, Escartin J, Einarsen S, *et al*. Empirical findings on prevalence and risk groups of bullying in the workplace. In: Einarsen S, Hoel H, Zapf D, Cooper CL, eds *Bullying and harassment in the workplace: developments in theory, research, and practice*. Boca Raton, FL: CRC Press, 2011, 75–105.
22. Einarsen S, Hoel H, Zapf D, *et al*. The concept of bullying and harassment at work: the European tradition. In: Einarsen S, Hoel H, Zapf D, Cooper CL, eds. *Bullying and harassment in the workplace: developments in theory, research, and practice*. Boca Raton, FL: CRC Press, 2011, 3–39.
23. Einarsen S, Raknes BI, Matthiesen SB, *et al. Mobbing og harde personkonflicter. [Harassment and serious interpersonal conflicts at work.]* Bergen, Norway: Sigma Forlag, 1994.
24. Frank E, Carrera JS, Stratton T, *et al*. Experiences of belittlement and harassment and their correlates among medical students in the United States: longitudinal survey. *BMJ* 2006;333:682.
25. Quine L. Workplace bullying in junior doctors: Questionnaire Survey. *BMJ* 2002;324:878–9.
26. Hoel H, Cooper C. *Destructive conflict and bullying at work*. Manchester: UMIST, 2000.
27. NHS Employers. Bullying and harassment guidance. 2006. http://www.nhsemployers.org/Aboutus/Publications/Pages/BullyingAndHarassment.aspx
28. NHS Staff Survey Guidance Notes, Care Quality Commission. 2009.
29. Nielsen MB, Notelaers G, Einarsen S. Measuring exposure to workplace bullying. In: Einarsen S, Hoel H, Zapf D, Cooper CL, eds. *Bullying and harassment in the workplace: developments in theory, research, and practice*. Boca Raton, FL: CRC Press, 2011, 149–74.
30. Hogh A, Hansen AM, Mikkelsen EG, *et al*. Exposure to negative acts at work, psychological stress reactions and physiological stress response. *J Psychosom Res* 2012;73:47–52.
31. Jiminez BM, Munoz AR, Gamarra MM, *et al*. Assessing workplace bullying: Spanish validation of a reduced version of the Negative Acts Questionnaire. *Span J Psychol* 2007;10:449–57.
32. Salin D. Prevalence and forms of bullying among business professionals: a comparison of two different strategies for measuring bullying. *Eur J Work Organ Psy* 2001;10:425–41.
33. Goldberg DP. *Manual of the general health questionnaire*. NFER Publishing, 1978.
34. Weinberg A, Creed F. Stress and psychiatric disorder in healthcare professionals and hospital staff. *Lancet* 2000;355:533–7.
35. Goldberg D, Williams P. *A user's guide to the general health questionnaire*. GL Assessment, 1988.
36. Politi PL, Piccinelli M, Wilkinson G. Reliability, validity and factor structure of the 12-item General Health Questionnaire among young males in Italy. *Acta Psychiatr Scand* 1994;90:432–7.
37. Toyabe S, Shioiri T, Kuwabara H, *et al*. Impaired psychological recovery in the elderly after the Niigata-Chuetsu earthquake in Japan: a population based study. *BMC Public Health* 2006;6:230.
38. Holt A. Using the telephone for narrative interviewing: a research note. *Qual Res* 2010;10:113–21.
39. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.
40. Quine L. Workplace bullying in nurses. *J Health Psychol* 2001;6:73–84.
41. Coyne I, Seigne E, Randall P. Predicting workplace victim status from personality. *Eur J Work Organ Psychol* 2000;9:335–49.
42. Glaso L, Matthiesen SB, Nielsen MB, *et al*. Do targets of workplace bullying portray a general victim personality profile? *Scand J Psychol* 2007;48:313–19.
43. Rammsayer T, Stahl J, Schmiga K. Basic personality dimensions and stress-related coping strategies in victims of workplace bullying. *Z Personalpsychol* 5:41–52. In Persson R, Hogh A, Hansen AM, Nordander C, *et al*. (2009). Personality trait scores among occupationally active bullied persons and witnesses to bullying. *Motivation and Emotion* 2006;**33**:387–399.
44. Persson R, Hogh A, Hansen AM, *et al*. Personality trait scores among occupationally active bullied persons and witnesses to bullying. *Motiv Emotion* 2009;33:387–99.
45. Seigne E, Coyne I, Randall P. Personality traits of the victims of workplace bullying: an Irish sample, Ninth European Congress of Work and Organizational Psychology, 12–15 May, Espoo, Finland. In: Kemshall H, Pritchard J.eds *Good practice in working with victims of violence*, 1999:101–18.
46. Matthiesen SB, Einarsen S. MMPI-2 configurations among victims of bullying at work. *Eur J Work Organ Psychol* 2001;10:467–84.
47. Rodriguez-Munoz A, Baillien E, De Witte H, *et al*. Cross-lagged relationships between workplace bullying, job satisfaction and engagement: two longitudinal studies. *Work Stress* 2009;23:225–43.
48. Lallukka T, Haukka J, Partonen T, *et al*. Workplace bullying and subsequent psychotropic medication: a cohort study with register linkages. *BMJ Open* 2012;2:e001660.
49. Department of Health (2012). The NHS Constitution for England. Downloaded from:http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132961
50. Kirmeyer SL, Dougherty TW. Work load, tension, and coping: moderating effects of supervisor support. *Pers Psychol* 1988;41:125–39.
51. Rayner C, McIvor K. Research report on the dignity at work project. Report prepared for Amicus and DTI, 2008.
52. Resch M, Schubinski M. Mobbing-prevention and management in organizations. *Eur J Work Organ Psychol* 1996;5:295–307.
53. Illing JC, Carter M, Thompson NJ, *et al. Evidence synthesis on the occurrence, causes, consequences, prevention and management of bullying and harassing behaviours to inform decision making in the NHS*. NIHR Service Delivery and Organisation programme; 2013, Final report.
54. Nielsen MB, Matthiesen SB, Einarsen S. The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. *J Occup Organ Psych* 2010;83:955–79.
55. Zapf D, Einarsen S, Hoel H, *et al*. Empirical findings on bullying in the workplace. In: Einarsen S, Hoel H, Zapf D, Cooper CL, eds. *Bullying and emotional abuse in the workplace: international perspectives in research and practice*. London: Taylor & Francis, 2003, 103–26.
56. Steadman L, Quine L, Jack K, *et al*. Experience of workplace bullying behaviours in postgraduate hospital dentists: Questionnaire study. *Br Denl J* 2009;207:379–80.

57. Coomber S, Todd C, Park G, *et al*. Stress in UK intensive care unit doctors. *Br J Anaesth* 2002;89:873–81.
58. Firth-Cozens J. Levels and sources of stress in medical students. *BMJ* 1986;292:1177–80.
59. Firth-Cozens J. Emotional distress in junior house officers. *BMJ* 1987;295:533–6.
60. Fevre R, Robinson A, Jones T, *et al*. Work fit for all—disability, health and the experience of negative treatment in the British workplace. Insight Report No.1, Equality and Human Rights Commission, 2008.
61. Vartia M, Leka S. Interventions for the prevention and management of bullying at work. In: Einarsen S, Hoel H, Zapf D, Cooper CL, eds. *Bullying and harassment in the workplace: developments in theory, research, and practice*. Boca Raton, FL: CRC Press, 2011, 359–79.

Workplace bullying in the UK NHS: a questionnaire and interview study on prevalence, impact and barriers to reporting

Madeline Carter, Neill Thompson, Paul Crampton, et al.

BMJ Open 2013 3:
doi: 10.1136/bmjopen-2013-002628