Preventing work-related stress among staff working in children’s cancer Principal Treatment Centres in the UK: a brief survey of staff support systems and practices

B. Beresford PhD, Research Director | F. Gibson PhD, Clinical Professor of Children’s and Young People’s Cancer Care (Great Ormond Street Hospital for Children NHS Foundation Trust & the University of Surrey) | J. Bayliss BSc (Hons), MSc, Nurse Consultant Palliative Care & Cancer Lead Nurse | S. Mukherjee PhD, Senior Research Fellow

1 Social Policy Research Unit, University of York, York, UK
2 Centre for Nursing and Allied Health Research and Evidence Based Practice, Great Ormond Street Hospital, London, UK
3 The Louis Dundas Centre, Oncology Outreach and Palliative Care, Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK

Correspondence
Bryony Beresford, Social Policy Research Unit, University of York, York, UK.
Email: bryony.beresford@york.ac.uk

Growing evidence of the association between health professionals’ well-being and patient and organisational outcomes points to the need for effective staff support. This paper reports a brief survey of the UK’s children’s cancer Principal Treatment Centres (PTCs) regarding staff support systems and practices. A short on-line questionnaire, administered in 2012–2013, collected information about the availability of staff support interventions which seek to prevent work-related stress among different members of the multi-disciplinary team (MDT). It was completed by a member of staff with, where required, assistance from colleagues. All PTCs (n = 19) participated. Debriefs following a patient death was the most frequently reported staff support practice. Support groups were infrequently mentioned. There was wide variability between PTCs, and between professional groups, regarding the number and type of interventions available. Doctors appear to be least likely to have access to support. A few Centres routinely addressed work-related stress in wider staff management strategies. Two Centres had developed a bespoke intervention. Very few Centres were reported to actively raise awareness of support available from their hospital’s Occupational Health department. A minority of PTCs had expert input regarding staff support from clinical psychology/liaison psychiatry.

KEYWORDS
children’s cancer, preventive staff support, staff-wellbeing, workforce

1 INTRODUCTION

There is a compelling argument for ensuring health professionals are adequately supported in their work. As well as impacting on their own well-being (Eurofound, 2012; Health and Safety Executive, 2013), health professionals’ abilities to cope with or manage work-related stress have been shown to be associated with patient outcomes and experiences (Francis, 2013; Franco, Bennet, & Kanfer, 2002; Firth-Cozens & Cornwell, 2009; Maben et al., 2012; Udipi, McCarthy Veach, Kao, & LeRoy, 2008; Wallace, Lemaire, & Ghali, 2009; West & Dawson, 2011). There are also negative impacts on other members of the team, both in terms of workload and well-being (Westman & Bakker, 2008). Finally, the costs to healthcare institutions arising from sickness absence and presenteeism are significant (Department of Health, 2010; Knapp & Iemmi, 2014; West & Dawson, 2011). Furthermore, within the UK, as is the case for any
employer, the National Health Service (NHS) has a duty of care to its employees (NICE, 2009).

Interventions to manage work-related stress can be conceived as falling into one of three categories (Cartwright & Cooper, 1997). Primary interventions eliminate or minimise sources of stress. Secondary interventions seek to equip individuals to manage and respond adaptively to stressors. Finally, tertiary interventions address the impact of stress on individuals in order to enable or support recovery. Primary and secondary interventions can both be conceived as preventing work-related stress, whereas tertiary interventions are responding to mental health difficulties.

In the UK to date the main focus of the NHS’s attention to this issue—both in terms of policy directives and resources—has been on tertiary interventions (Boorman, 2009). For example, counseling services are now routinely available to NHS staff (Greenwood, 2006). In 2008 a confidential, NHS treatment service for doctors (and dentists) with health or addiction concerns, who by the nature of their role are unable to access confidential care through mainstream NHS routes, was set up (http://php.nhs.uk). However, as many have argued, staff support strategies also need to include interventions which prevent or equip staff to manage work-related stress (Bruce, Conaglen, & Conaglen, 2005; Department of Health, 2008), including those working in oncology (Le Blanc, Taris, & Peeters, 2007; Taylor & Ramirez, 2010).

Building on earlier UK studies on work-related stressors and rewards experienced by staff in children’s cancer care (Mukherjee, Beresford, Glaser, & Sloper, 2009; Mukherjee, Beresford, & Tennant, 2014), this paper reports a brief national survey of staff support systems and practices within the UK’s children’s cancer Principal Treatment Centre (PTCs) carried out in late 2012 and early 2013. Its focus was on preventative staff support systems and practices which PTCs have initiated and implemented themselves. This focus was deliberate. Some work-related stressors are located in organisation-level factors or practices (e.g. prescribed resource/staffing levels, governance and monitoring processes) and/or, indeed, the demands exerted from external bodies such as government departments. In addition, however, are work-related stressors which arise from the more immediate work setting, including the demands and responsibilities of a particular role and difficulties with colleagues or tensions within the multidisciplinary team (MDT) (Gulati, Dix, & Klassen, 2014; Mukherjee et al., 2014). This represents another tier at which stress/burnout prevention strategies and practices should be targeted (Awa, Plaumann, & Walter, 2010; Moody et al., 2013). Indeed, although institutional or external sources of stress may be difficult to reduce or change, intervening at this level may be more feasible, and has the potential to be responsive to the particular needs of staff (Audit Commission, 2011; Mukherjee et al., 2009).

The purpose of the survey was to provide a preliminary picture of staff support systems and practices in UK PTCs, with a view to this informing future research on intervention effectiveness. It was concerned with all staff groups within the MDT: doctors, nurses, other health professionals and non-clinical staff. All UK PTCs participated in the survey. This paper describes the findings.

2 METHODS

The data collection instrument was developed in consultation, and piloted, with two senior staff working in a children’s cancer PTC. It was designed to: (1) capture a high level picture of the range of primary and secondary preventive staff support systems and practices (Cartwright & Cooper, 1997) for the different professional groups who work in a PTC, and (2) to collect descriptive information on instances of innovative practice.

There are 19 PTCs in the UK. They are responsible for all children (0–15 years) diagnosed with cancer though, for individual patients, specific aspects of care may be delivered by a district general hospital closer to the child’s home (known as Paediatric Oncology Shared Care Unit). As in other developed countries (Cantrell & Ruble, 2011), paediatric oncology services in the UK are delivered by a multidisciplinary team (NICE, 2005). We were interested in staff support systems and practices across the MDT with respect to the following staff group categories: nurses, doctors, other health professionals in the MDT (e.g. radiologist, pharmacist) and non-clinical staff (i.e. social worker, play specialist, youth worker).

We were mindful of minimising respondent burden and its possible impact on response rate. The survey was therefore brief, comprising 12 questions and fixed-response response formats were used. Questions covered:

- for each staff group (and based on the authors’ existing understanding of staff support practices in PTCs): availability of/access to: a support group\(^1\); training/information sessions on managing or reducing work-related stressors; debriefing following a patient death; one-to-one supervision/clinical reflection; group supervision/clinical reflection; mentoring.
- access to, and involvement of, clinical psychology and/or liaison psychiatry in providing staff support;
- use of rotation of staff around roles/settings and/or flexible work-time/shift patterns to prevent staff stress/burnout;
- promotion of support available from the hospital’s Occupational Health (OH) department;
- any additional practices/strategies in place to help staff manage and/or reduce the demands or stressors associated with working in a children’s cancer PTC (a “free-text” box allowed respondents to provide details);
- interest in participating in research on staff support interventions.

The survey instrument was designed to be completed on-line using SurveyMonkey (https://www.surveymonkey.com).

All UK PTCs are members of the Childhood Cancer and Leukaemia Group.\(^2\) An email was sent to the individual in each PTC acting as the CCLG representative, and copied to the named link nurse of the CCLG/Royal College of Nursing Group. The email provided information about the audit and the web address by which the survey could be accessed. Email recipients were instructed to complete the survey or pass it on to a colleague who they judged to be an appropriate respondent. If a respondent was only able to complete the survey with respect to a particular staff group(s), it was requested that they ask a
relevant colleague(s) to complete the survey for other staff group(s). Where two or more individuals provided data on different staff groups for a PTC (n = 4/19), it was merged at data entry and treated as a single response. Email reminders were used to boost response rate. A 100% response rate was achieved although coverage of all staff groups was only achieved in 12/19 Centres (1/19 PTCs responded with respect to doctors and nurses only, 3/19: doctors only and 3/19: nurses only). In terms of respondents reporting with respect to doctors and nurses only, this figure increases to 16/19 Centres.

3 | RESULTS

3.1 | Availability of support to different staff groups

Respondents were asked whether six staff support practices were available in their Centre: staff support groups; training and information sessions; debriefs following a patient death; one-to-one supervision/clinical reflection; group supervision/clinical reflection; and mentoring. Twelve of the 19 Centres provided information about the availability of these forms of support for all staff groups, see Table 1.

In these Centres, each staff group was reported to have access to at least one form of support. Overall, doctors and other non-nursing health professionals in the team appeared to have less support available to them compared to nurses and non-clinical staff.

In terms of the different types of staff support, debriefs following the death of a patient were the most frequently reported practice. Mentoring was typically confined to nurses and non-clinical staff. Support groups were infrequently mentioned but were found across all staff groups. Doctors appear to be least likely to have access to one-to-one or group delivered clinical reflection/supervision compared to other staff groups.

Availability of support for non-clinical staff appeared to be on a par with the rest of the MDT. However, it is important to note that non-clinical posts in the UK are often funded by charitable organisations (e.g. CLIC Sargent) which line manage and provide support and supervision to staff in posts they fund. Thus, the routes by which non-clinical staff are supported may differ to those of other members of the MDT.

3.2 | Differences in availability of support to doctors and nurses

Restricting our analysis to PTCs where data on doctors and nurses were available increased the number of PTCs with complete data sets to 16/19 PTCs. We used this data set to compare the availability of the different types of support to doctors and nurses, see Table 2.

Our data suggest that, across PTCs, doctors are less likely than nurses to have access to all the different types of staff support covered by the survey. The greatest difference related to access to clinical reflection/supervision. Over two-thirds of centres reported nurses had access to supervision/clinical reflection via one-to-one and/or group sessions. In contrast, less than half of centres reported that this form of support was available to doctors.

3.3 | Support available in centres & between professional groups

One way of categorising staff support practices is whether they are “one-off” or “ongoing” interventions. Debriefing and training/information sessions can be conceived as “one-off” interventions focussing on pre-determined and specific topics or issues. In contrast, supervision/clinical reflection, mentoring and staff support groups are “ongoing” interventions which are less topic-focused and more holistic and responsive to issues staff are currently facing.

### Table 1 Availability of staff support by professional group

| Type of support                                | Number of PTCs where support is available |
|------------------------------------------------|------------------------------------------|
|                                                | Available to at least one staff group | Nurses | Doctors | Other health professionals | Non-clinical staff |
| Debrief after patient death                    | 12                                       | 12     | 10      | 11                         | 10                  |
| 1:1 supervision/clinical reflection            | 11                                       | 6      | 3       | 4                          | 9                   |
| Group supervision/clinical reflection          | 10                                       | 8      | 3       | 4                          | 5                   |
| Training/information sessions (e.g. dealing with stress) | 10                                       | 7      | 5       | 4                          | 4                   |
| Support group                                 | 8                                        | 4      | 3       | 3                          | 4                   |
| Mentoring                                     | 8                                        | 5      | 1       | 1                          | 4                   |

*Data presented pertains to PTCs where data provided for all staff groups (n = 12/19 PTCs).

### Table 2 Staff support available to doctors and nurses

| Type of support                                | Staff group |
|------------------------------------------------|-------------|
|                                                | Doctors (n=16) | Nurses (n=16) |
| Debriefing                                    | 13          | 15          |
| One-to-one supervision/clinical reflection     | 6           | 10          |
| Training/information sessions                 | 6           | 8           |
| Group supervision/clinical reflection         | 5           | 10          |
| Mentoring                                     | 4           | 9           |
| Staff support group                            | 3           | 5           |

*Data available from 16/19 PTCs.*
We compared provision of these two modes between professional groups across Centres. Nurses and non-clinical staff emerged as more likely to have access to both "one-off" and "ongoing" modes compared to doctors and other health professionals, see Table 3. Doctors and other health professionals in the MDT were most likely to only have access to one mode of support, and this was predominantly the "one-off" interventions.

Finally, across all staff groups, if a Centre only had one mode of delivering staff support, it was more likely to be a "one-off" rather than "ongoing" intervention.

3.4 | Involvement of clinical psychology or liaison psychiatry

Twelve of the 19 Centres reported some sort of input from their Trust’s clinical psychology (n = 11) or liaison psychiatry (n = 1) teams/department. This included: 1:1 work with staff (n = 8/19 Centres); group work (n = 6/19); and training/information sessions (n = 5/19). Typically, respondents reported that staff support was not a formal part of the clinical psychologist/liaison psychiatrist’s role in the Centre. Some respondents reported their Centre used these professionals on an ad hoc basis; in others, they were described as delivering support to staff routinely.

3.5 | Further staff support practices

Respondents were also asked if their Centre had instigated any other staff support practices. Three distinct areas of activity were described.

3.5.1 | Rotation around role/settings and flexible work patterns

A third of respondents (6/19 PTCs) reported their Centre used rotation of staff around roles or settings as a strategy to prevent staff stress or burnout. Two thirds of respondents (12/19 PTCs) said flexible working/shift patterns was also used for this purpose.

3.5.2 | Addressing work-related stressors within staff management practices

Three Centres reported that raising issues around work-related stress was routinely addressed within other staff management practices. These were:

- personal development and appraisal processes covering work-related demands and stressors (n = 2/3);
- work-related stress routinely raised following sickness absence episodes (n = 1/3);
- referral to OH routinely made following repeat episodes of sickness absence (n = 1/3).

3.5.3 | Specifically developed interventions

Two Centres had developed a specific intervention related to managing work-related demands and stressors:

- One PTC had a group, comprised of members of the MDT, to which staff can confidentially "refer" an issue related to work-related stress. The group considers and then develops and implements an action plan. Issues referred to the group include managing parents and difficult deaths. This system had been in place for a number of years.
- A second PTC was piloting a monthly, six session intervention for senior doctors and nurses. Based on principles of reflective practice, it was focusing on work-related stressors reported by the group.

Two further Centres reported plans to develop or implement an intervention.

A few respondents noted that support groups or other staff support initiatives had been set up in their Centre, but had " petered out." Two noted that their Centres were looking at how to embed such approaches into routine practice. Finally, one PTC reported using activities such as social events, away days, team coffee times and lunches to foster supportive relationships within the team.

3.6 | Staff support as a secondary outcome

Occasionally respondents reported that a particular activity or way of working had the secondary outcome of supporting staff. For example, "integrated care meetings" set up to support a holistic approach to the management and care of patients had proved to be a supportive environment for staff.

3.7 | Promotion of OH

Respondents’ knowledge of the support available from OH was variable. Two thirds of respondents did not believe their Centre actively raised awareness of support available from their Trust’s OH dept.

### Table 3

| Modes of support available in a centre | Professional group (Number of PTCs providing information) |
|---------------------------------------|--------------------------------------------------------|
|                                       | Nurses (n = 16) | Doctors (n = 16) | Other health professionals (n = 12) | Non-clinical staff (n = 12) |
| "One-off" support only                 | 2              | 6               | 6                         | 2                          |
| "Ongoing" support only                 | 1              | 1               | 0                         | 1                          |
| "One-off" and "ongoing" support        | 13             | 9               | 6                         | 9                          |

*a*Data presented drawn from responses from all PTCs; 7/19 PTCs did not provide information for one or more staff groups.
3.8 Interest in future research

Almost two-thirds of respondents indicated that their Centre would be interested in participating in research on staff support interventions.

4 DISCUSSION

This brief audit sought to provide preliminary information on patterns of staff support systems and practices in UK children's cancer PTCs in order to inform the design, and approach, of research to evaluate staff support interventions. Rates of stress and burnout are rising across the UK workforce, but particularly so within the public sector (Chandola, 2010). The significant human, organisational and societal costs of burnout (Audit Commission, 2011; Henderson & Madan, 2013), and the current dearth of robust evidence on the effectiveness of preventive interventions (Ruotsalainen, Verbeek, Mariné, & Serra, 2015; van Wyk & Pillay-Van Wyk, 2010) make this a priority topic. Oncology is no exception, with high levels of burnout and other mental health difficulties reported among staff working in both adult and children's services (Roth et al., 2011; Trufelli et al., 2008; Turner, Kelly, & Girgis, 2011).

The data obtained are rudimentary but, we believe, useful to share with a wider audience because of the dearth of any information on how the UK's children's cancer services are supporting their staff. Indeed, to our knowledge, work to map staff support practices in other countries is also very limited. We have only been able to identify one (international, and not representative) survey of physicians, which collected any data on this topic by including a question about the provision of a “forum for debriefing” (Roth et al., 2011). Thirty-six per cent of respondents reported their institution had such a forum; no breakdown by country was reported.

The primary purpose of Roth et al.'s survey was to investigate levels of burnout among children's cancer physicians and to identify factors associated with levels of burnout. A finding relevant to this study was that working in an institution which had a “forum for debriefing” (p. 1169) was associated with significantly lower rates of high burnout. Although the survey did not identify whether respondents had used these forums, the authors note that the presence of a debriefing forum may reflect a wider culture or practices of an organisation in terms of supporting its staff, and it was this, rather than debriefing forums, which influenced levels of burnout. These findings do point to the importance of understanding how organisations (in this case, children's cancer treatment centres) are, and should, be supporting their staff.

There are three key findings from the brief audit reported here:

- differences between professional groups in terms of the types of staff support available;
- differences between PTCs in terms of the range of staff support systems/practices available for different professional groups;
- “one-off” as opposed to “ongoing” support interventions being more likely to be available.

We will discuss each of these findings in turn, referring, where available, to existing literature.

Looking across PTCs, fewer staff support interventions appear to be available for doctors compared to nurses and non-clinical staff (e.g. play therapists; social workers). This is an important issue because there is no indication from current evidence that, compared to other members of the MDT, paediatric oncologists are less likely to develop problems with stress-related illnesses or burnout (Demirci et al., 2010; Liakopoulou et al., 2008), and/or that they report less exposure to work-related stressors (Bowden et al., 2015). The existing literature points to a number of possible explanations for this. First are the apparent differences between professional groups in terms of how supervision/support and management of work-related stressors are addressed, or even acknowledged. For example, unlike medicine and to a lesser extent nursing, supervision is a core element of social work training and practice (Carpenter, Webb, Bostock, & Coomber, 2012). Further, the significantly higher volume of research on support interventions for nurses compared to doctors (van Wyk & Pillay-Van Wyk, 2010) suggests differences between these professions in terms of engagement with the issue of staff support. Second, and related to the “cultural” differences between professions already noted, there are differences between professions in terms of the stigma attached to expressing the need for support, with medicine appearing to be less “accepting” of this compared to nursing or non-clinical disciplines (Brooks, Gereda, & Chalder, 2011; Department of Health, 2008; Gerada, 2014; Turner et al., 2011; Wallace et al., 2009). This may influence decisions around perceived need and take-up of support. A third, and related explanation, are the gender imbalances within nursing, medicine and non-clinical roles (NHS Employers, 2013) and its potential impact on the recognition of, and/or acceptance of the need for, staff support (McCann et al., 2013).

A number of differences were observed between PTCs in terms of staff support systems and practices. First, there was variability in the extent to which Centres were able to draw on expert support from their Trust’s Clinical Psychology/Psychiatric Liaison service, and whether this support was routine or ad hoc. The type of support provided by these professionals also varied between Centres. Certainly, the availability of external/expert facilitators may influence whether some staff support interventions (such as supervision, support groups) are available (Lynch, Hancox, Happell, & Parker, 2008). Second, use of workforce organisation strategies (i.e. rotation of staff around roles/settings; offering flexible work/shift patterns) was not employed across all PTCs. Similarly, only a minority reported incorporating a dialogue around work-related stress into routine staff management practices such as appraisals and return-to-work discussions. Third, the extent to which Centres were perceived as promoting the support available from, or through, their Trust’s OH department varied. Fourth, not all Centres offered both “one-off” staff support interventions (i.e. debriefs following a death; training/information sessions) and ongoing support interventions (e.g. support groups, clinical reflection/supervision) to its staff, we return to this issue in the next paragraph. Overall, these differences between Centres are concerning, although perhaps to be expected, and chime with existing (very limited) evidence (Roth et al., 2011). It certainly appears that “organisational culture” at an
institutional and department/team level, play a role in workforce well-being (Boorman, 2009; McCann et al., 2013). At a team/department level, this includes managers and other senior staff "buying-into," and having skills to oversee, a strategy which seeks to prevent staff stress and burnout (Boorman, 2009).

The audit was concerned with both "ongoing" staff support interventions (support groups; clinical reflection/supervision) and "one-off" interventions (training/information sessions; debriefs) which might comprise a single "event" or a fixed number of sessions. "One-off" interventions can be conceived as focussing on a pre-determined issue(s). In contrast, "ongoing" interventions, such as supervision/clinical reflection, mentoring and staff support groups, are more able to be responsive to issues which staff are currently facing and offer continuity of support. Overall, we found that "one-off" interventions were more likely to be available in PTCs compared to "ongoing" support interventions. A recent Cochrane review of preventive staff-support interventions for health workers (van Wyk & Pillay-Van Wyk, 2010) was unable to offer definitive recommendations due to the lack of high quality evidence. However, they draw a tentative conclusion that, for stress management interventions to be effective, they need to be offered over the longer term, with refresher or booster sessions. A similar conclusion was reached by Awa, Plaumann, and Walter’s (2010) systematic review of interventions to prevent burnout. Thus, current evidence suggests that any positive gains from time-limited stress management interventions are not sustained. In relation to "one-off" interventions, debriefing following the death of a patient was the most commonly reported staff support intervention. This indicates a widespread acceptance of the suitability of debriefs as a staff support intervention. However, it is important to note that debriefs may fulfil a number of different functions (clinical review, training/learning, psychosocial support). Equally, there is no single approach to how they are conducted, or by whom. It is crucial therefore that interpretation of existing evidence on the impact of debriefs on staff well-being is mindful of these potential differences. Certainly it would appear that, at the moment, there is no robust evidence regarding the impact of debriefs following a patient death on staff well-being (Carton & Hupcey, 2014; van Wyk & Pillay-Van Wyk, 2010).

Although all PTCs in the UK and Ireland participated in this audit, it is important to consider the limitations of the data collected. (At the outset it is, perhaps, helpful to note that this work was not funded and there were not the resources to use data collection methods which would have generated more comprehensive and rich data.) For each PTC, we relied on the responses of one or two individuals and cannot be sure they had a complete understanding of all the staff support systems and practices available across the MDT. However, we would note there is evidence that (at least some) respondents had noticed and adhered to the instruction to only complete the survey for those professional groups whom they felt able to provide data. In addition, data from some Centres were submitted by two respondents—both providing information about different staff groups. For the purposes of this piece of work, a balance also had to be struck between securing a total response and the depth of information gathered. We would argue that this strategy paid off, evidenced by the fact that at least a partial overview of approaches to staff support was secured for all PTCs. That said, the fact that only 12 of the 19 PTCs provided data on all members of the MDT is a limitation, although in terms of data on doctors and nurses only, this figure increases to 16 of the 19 Centres.

Finally, it is important to note that the terms used for different types of staff support are not necessarily universally understood. For example, the terms mentoring and supervision may be confused and used interchangeably (Bush, 2005). This reiterates the value of, for some of the analyses, grouping the interventions studied in terms of their underlying objectives (responsive and ongoing vs. isolated and topic-specific). Despite these limitations, it is fair to argue, and particularly in the light of the dearth of existing evidence, that this piece of work paves the way for a more detailed study of staff support practices. It could certainly be repeated and extended to collect more detailed data on staff support as well as factors such as workplace culture/environment (Cousins et al., 2004) and indicators of staff well-being.

A key purpose of the audit was to inform a future research agenda on staff support interventions within paediatric oncology. An understanding of how PTCs are currently approaching this issue is a crucial first step to helping to move this agenda forward. A couple of Centres reported bespoke staff support interventions and others had plans to develop something along these lines. This serves to reiterate the need for robust evaluative research so that changes or new initiatives put in place to support staff are evidence based, disseminated and shared widely.

ACKNOWLEDGEMENTS

Our thanks go to all staff in the UK’s children’s cancer PTC who participated in this audit. We also acknowledge the assistance of the UK’s Children’s Cancer and Leukaemia Group who assisted with the distribution of the survey.

ENDNOTES

1 Compared to group-delivered supervision/clinical reflection, a support group is a not led or facilitated by a qualified practitioner.
2 CCLG is a UK wide charity which supports and coordinates all research being conducted by UK PTCs.

REFERENCES

Audit Commission (2011). Managing sickness absence in the NHS. London: Author.
Awa, W., Plaumann, M., & Walter, W. (2010). Burnout prevention: A review of intervention programs. Patient Education and Counseling, 78, 184–190.
Boorman, S. (2009). NHS health and well-being: Final report. London: Department of Health.
Bowden, M., Mukherjee, S., Williams, L, DeGraves, S., Jackson, M., & McCarthy, M. (2015). Work-related stress and reward: An Australian study of multidisciplinary pediatric oncology healthcare providers. Psycho-Oncology, 24, 1432–1438.
Brooks, S., Gereda, C., & Chalder, T. (2011). Review of literature on the mental health of doctors: Are specialist services needed? Journal of Mental Health, 20, 146–156.
Bruce, S., Conaglen, H., & Conaglen, J. (2005). Burnout in physicians: A case for peer support. *Internal Medicine Journal, 35*, 272–278.

Bush, T. (2005). Overcoming the barriers to effective clinical supervision. *Nursing Times, 101*, 39–41.

Cantrell, M., & Ruble, K. (2011). Multidisciplinary care in paediatric oncology. *Journal of Multidisciplinary Healthcare, 4*, 171–181.

Carpenter, J., Webb, C., Bostock, L., & Coomber, C. (2012). Effective supervision in social work and social care. London: Social Care Institute for Excellence.

Carton, E., & Hupcey, J. (2014). The forgotten mourners: Addressing health care provider grief. A systematic review. *Journal of Hospice and Palliative Nursing, 16*, 291–303.

Cartwright, S., & Cooper, C. L. (1997). Managing workplace stress. London: Sage.

Chandola, T. (2010). Stress at work. London: The British Academy.

Cousins, R., Mackay, C., Clarke, S., Kelly, C., Kelly, P., & McCaig, R. (2004). ‘Management standards’ and work-related stress in the UK: Practical development. *Work and Stress, 18*, 113–136.

Demirci, S., Kuzeyli Yildirim, Y., Zeynep Ozsaran, Z., Uslu, R., Yalman, D., & Aras, A. (2010). Evaluation of burnout syndrome in oncology employees. *Medical Oncology, 2010*, 968–974.

Department of Health (2008). *Mental health and ill health in doctors*. London: Author.

Department of Health (2010). *Invisible patients. Report of the Working Group on the health of health professionals*. London: Department of Health.

Eurofound (2012). Fifth working conditions survey. Available from: www.eurofound.europa.eu/publications/htmlfiles/erf1182.htm. Luxembourg [last accessed 2 July 2015].

Firth-Cozens, J., & Cornwell, J. (2009). The point of care: Enabling compassionate care in acute hospital settings. London: The Kings Fund.

Francis, R. (2013). Report of the Mid-Staffordshire NHS Foundation Trust Public Inquiry. London: The Stationery Office.

Franco, L., Bennet, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: A conceptual framework. *Social Science and Medicine, 54*, 1255–1266.

Gerada, C. (2014). Mental health and work: Special care study – mental illness and health professionals. In N. Mehta (Ed.), *Annual report of the chief medical officer 2013. Public mental health priorities investing in the evidence*. London: Department of Health.

Greenwood, A. (2006). *Counselling for staff in health service settings. A guide for employers and managers*. London: Royal College of Nursing.

Gulati, S., Dix, D., & Klassen, A. (2014). Demands and rewards of working within multidisciplinary teams in pediatric oncology: The experiences of Canadian health care providers. The Qualitative Report, *19*, 1–15. Available from: http://www.nova.edu/ssss/QR/QR19/gulati36.pdf [last accessed ???? ???? ????].

Health and Safety Executive (2013). Stress and psychological disorders in Great Britain 2013. Available from: www.hse.gov.uk/statistics/causdis/stress/stress.pdf [last accessed 2 July 2015].

Henderson, M., & Madan, I. (2013). Mental health and work. In N. Mehta (Ed.), *Annual report of the chief medical officer. Public mental health priorities: Investing in the evidence*. London: Department of Health.

Knapp, M., & Lenni, V. (2014). The economic case for better mental health. In C. Davies (ed.), *Annual report of the chief medical officer, public mental health priorities: Investing in evidence* (pp. 147–176). London: Department of Health.

Le Blanc, P., Taris, T., & Peeters, M. (2007). Take care! The evaluation of a team-based burnout intervention program for oncology care providers. *Journal of Applied Psychology, 9*, 213–227.

Liakopoulou, M., Panaretaki, I., Papadakis, V., Katsika, A., Sarafidou, J., Laskari, H., ... & Haidas, S. (2008). Burnout, staff support, and coping in pediatric oncology. *Supportive Care in Cancer, 16*, 143–150.

Lynch, L., Hancock, K., Happell, B., & Parker, J. (2008). *Clinical supervision for nurses*. Oxford: Wiley Blackwell.

Maben, J., Pece, R., Adams, M., Robert, G., Richardson, A., Murrells, T., & Morrow, E. (2012). Patients’ experiences of care and the influence of staff motivation, affect and well-being. *Final report NIHR Service Delivery and Organisation programme. Available from: http://www.nets.nihr.ac.uk/_/data/assets/pdf_file/0007/85093/ES-08-1819-213.pdf [last accessed 8 June 2016].

McCann, C., Beddoe, E., McCormick, K., Huggard, P., Kedge, S., Adams, C., & Huggard, J. (2013). Resilience in the health professions: A review of recent literature. *International Journal of Wellbeing, 3*, 60–81.

Moody, K., Kramer, D., Santizo, R., Magro, L., Wysogrod, D., Ambrosio, J., ... & Stein, J. (2013). Helping the helpers: Mindfulness training for burnout in pediatric oncology-a pilot program. *Journal of Pediatric Oncology Nursing, 30*, 275–284.

Mukherjee, S., Beresford, B., Glaser, A., & Sloper, P. (2009). Burnout, psychiatric morbidity, and work-related sources of stress in paediatric oncology staff: A review of the literature. *Psycho-Oncology, 18*, 1019–1028.

Mukherjee, S., Beresford, B., & Tennant, A. (2014). Staff burnout in paediatric oncology: New tools to facilitate the development and evaluation of effective interventions. *European Journal of Cancer Care, 23*, 450–461.

NHS Employers (2013). Gender in the NHS. Available from: http://www.nhsemployers.org/~/media/Employers/Publications/Gender%20in%20the%20NHS.PDF.[last accessed 8 June 2016].

NICE (2005). *Guidance on cancer services: Improving outcomes in children and young people with cancer*. London: Author.

NICE (2009). *Promoting mental wellbeing through productive and healthy working conditions (PH22)*. London: Author.

Roth, M., Morrone, K., Moody, K., Kim, M., Wang, D., Moadel, A., & Levy, A. (2011). Career burnout among pediatric oncologists. *Pediatric Blood and Cancer, 57*, 1168–1173.

Ruotsalainen, J., Verbeek, J., Mariné, A., & Serra, C. (2015). Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev. 2015 Apr 7* (4): CD002892. Epub 2015 Apr 7.

Taylor, C., & Ramirez, A. (2010). Can we reduce burnout among cancer health professionals? *European Journal of Cancer, 46*, 2668–2670.

Truffelli, D., Bensi, C., García, J., Narahara, J., Abrão, M., Diniz, R., ... & Del Giglio, A. (2008). Burnout in cancer professionals: A systematic review and meta-analysis. *European Journal of Cancer Care, 17*, 524–531.

Turner, J., Kelly, B., & Girgis, A. (2011). Supporting oncology health professionals: A review. *Psycho-Oncology, 5*, 77–82.

Udipi, S., McCarthy Veach, P., Kao, J., & LeRoy, B. (2008). The psychic costs of empathic engagement: Personal and demographic predictors of genetic counsellor compassion fatigue. *Journal of Genetic Counseling, 17*, 459–471.

Wallace, J., Lemaire, J., & Ghali, W. (2009). Physician wellness: A missing dimension. *British Medical Journal, 339*, b5289. London: Department of Health.

West, M., & Dawson, J. (2011). *Employee engagement and NHS performance*. London: The Kings Fund.

Westman, M., & Bakker, A. (2008). Crossover of burnout among health care professionals. In J. Halbesleben (Ed.), *Handbook of stress and burnout in health care*. New York: Nova.

van Wyk, B., & Pillay-Van Wyk, V. (2010). Preventive staff-support interventions for health workers. *Cochrane Database for Systematic Reviews, 17*, CD003541.

How to cite this article: Beresford B, Gibson F, Bayliss J, Mukherjee S. Preventing work-related stress among staff working in children’s cancer. Principal Treatment Centres in the UK: a brief survey of staff support systems and practices. *Eur J Cancer Care*. 2018;27:e12535. [https://doi.org/10.1111/ecc.12535]