Fiddling while Rome burns? Conducting research with healthcare staff when the NHS is in crisis

<table>
<thead>
<tr>
<th>Journal:</th>
<th>Journal of Health Organization and Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscript ID:</td>
<td>JHOM-04-2019-0105.R1</td>
</tr>
<tr>
<td>Manuscript Type:</td>
<td>Original Article</td>
</tr>
<tr>
<td>Keywords:</td>
<td>Healthcare staff, National health service, Health research, Austerity</td>
</tr>
</tbody>
</table>

ABSTRACT

Purpose: Health research in the UK is being impeded by a stretched NHS system. This paper uses the Great Fire of Rome as an allegory to understand the difficulties encountered by health researchers when attempting to conduct research within a healthcare system that is currently in crisis.

Approach: We draw on both our own and other research teams’ experiences from the published literature in order to demonstrate that this difficulty is a widespread problem for the health research community in the UK.

Findings: Recruitment and engagement issues across different research studies and clinical environments are often ascribed as being related to individual contexts or settings. Rather, we propose that these problems are actually writ large across nearly the entire NHS. We offer ideas for what can be done to alleviate the worst of this situation – a change in culture and ways of working alongside employing more pragmatic, rapid methods to engage exceptionally busy healthcare staff.

Originality The paper offers a provocative viewpoint that instead of seeking to individualise recruitment and engagement issues in relation to the local context, the research community should publicly acknowledge the universality of this problem in order to bring about meaningful change.
BACKGROUND

In July 64 AD, a great fire consumed the city of Rome after burning for six days and seven nights. It was estimated that half the population of the city were made homeless and 70% of the city was destroyed. Emperor Nero is said to have been thirty five miles away from Rome at the time and rumour has it that throughout the spread of the devastating fire, he played his fiddle (violin) whilst seemingly ignoring the ongoing catastrophe. The phrase “fiddling while Rome burns” has since become synonymous with the idea of focusing on low priority activities whilst a large impending crisis looms or occurs.

The modern day NHS is said to be in crisis. Many hospitals are struggling to meet demand from both a growing and ageing population [1]. Whilst demand has risen significantly in the past 15 years, since 2010 it has been coupled with a prolonged squeeze on funding which has seen the system groaning under the strain of trying to meet increased demand with less resource [2]. The winters of 2016/2017 and 2017/2018 saw the perfect storm emerge of under-funded social care and hospitals overwhelmed with trying to care for a vast number of acutely unwell patients. The Red Cross declared a ‘humanitarian crisis’ in the NHS during the first week of January 2017 after some patients waited on trolleys for days in corridors across a number of hospitals in the UK [3]. A worrying trend is the decline in the nursing workforce with the numbers of nurses working in the NHS not keeping pace with population growth. Reasons for this are multi-faceted but the number of EU nurses joining the UK register has seen a 96% reduction after the Brexit vote [4], alongside the removal of the nursing bursary in England which saw applications for nursing degrees slump by 23% [5]. Recruitment and retention problems are equally
applicable to medical staff with 30% of specialty training vacancies unfilled in 2017, with general practice accounting for more than half the unfilled vacancies [6]. Primary care has had its funding cut from 11% of the NHS budget in 2006 to 8.5% in 2016 [7]. Stress amongst general practitioners is said to be at its highest since 1998 with a workload of 60 patients a day said to be not uncommon [7]. GPs are said to be leaving the profession at increasingly alarming rates, with a national vacancy rate now running at 12% [8].

The UK is not alone in having a health system under severe pressure. Many countries across Europe and across the world have suffered economic shocks due to the continued fall out of the financial crisis of 2008. This has impacted on health systems in a number of ways dependent on whether a policy of fiscal austerity or fiscal stimulus was adopted, post 2008. Karanikolos et al (2013) [9] looked at the effect of the financial crisis and austerity policies on health systems, stating that previous research in this area has concentrated on the effect on health outcomes rather than the effect on systems themselves. They found countries which adopted strict austerity measures (or were strongly encouraged to adopt them by the Trokia), such as Greece, Spain and Portugal, found their economies continued to recede and placed a growing strain on their health systems. Budget cuts meant that citizens had restricted access to health care. In Greece, 40% cuts were made to hospital budgets accompanied by widespread shortages of staff, medical supplies and corruption [9]. Conversely, countries that chose a programme of fiscal stimulus and rejected austerity, such as Germany and Iceland, have economies which have recovered more quickly and more resilient health systems. The effect of the financial crisis on the Icelandic health system was said to be almost imperceptible [9]. Karanikolos and
colleagues have called for more attention to be paid to the impact on health systems following cuts to health spending across Europe. Whilst their original focus was the ability of health systems to provide and deliver healthcare under differing macro-economic conditions, here we narrow our focus and turn our attention to how austerity in the context of the UK health system has impacted on health research.

OUR EXPERIENCE

Over the past five or so years, we have become increasingly aware of the monumental pressures that are being placed on clinical and support staff in the NHS. This is through our experience of undertaking health services research studies using a range of quantitative and qualitative methods across North of England, mostly in secondary care although also primary and community care. Nearly all our projects involve an element of staff buy in for the study to be successfully delivered (even if the study is primarily patient focused) and many of our studies need have clinicians themselves as a participant, in order to answer the research questions. We have noticed is that medical/ nursing staff are so stretched currently that they have little ability to be able to take part in research, despite usually always showing a willingness and interest in the topics of our studies. In some instances, it seemed that ward staff were inherently enthusiastic regarding the idea of the study and welcomed the research team, in principle. Yet the crunch point came when ward staff needed to give their time to research activities with problems ensuing and engagement sometimes floundering. Tacit knowledge and data from field notes from several recent and current studies carried out in the secondary care setting by our team demonstrate the practical reasons for low staff engagement despite an overt interest regarding the study in question. These are:
- Too busy to take part in research, given heavy clinical workload.
- No staff available to be released from direct patient care to meet with researchers, even for as little as 30 minutes.
- Staff vacancies so severe that managerial staff are undertaking full clinical workloads (up to 50% nursing posts vacant on some wards).
- Planned research activities being cancelled or postponed up to four or five times due to unpredicted urgent patient care rightfully taking a higher priority.
- Monetary incentives to provide backfill/locum cover to release staff for research activities having no appeal as locum staff cannot be found to cover.
- Overtime payments to take part in research having minimal appeal after a busy 13 hour shift.
- Ward staff prohibited from taking part in any research activities as all non-clinical activities have been cancelled centrally by the Trust.

Few researchers working in health research will be surprised by the above information and many will have noted the intense difficulties in working with healthcare staff on research due to the current pressures in the NHS. It can be said that this is one of the most pressing issues facing health services researchers currently if any amount of staff participation is required to ensure a study functions. Consequently, an increasing amount of our time and effort is spent trying to provide solutions to the intractable problem of ward staff being too busy and having minimal time to work with us. As outsiders looking in, there is the ever present sense of how perilously close some healthcare staff are to burn out and the challenging circumstances that ward staff are working in. Our close and long lasting relationships with a number of wards locally means we are uniquely placed to have witnessed this
deterioration over a number of years. As researchers, we are helpless to assist or prevent it but are acutely aware of the intense pressure staff are under in their daily clinical roles. Conducting research with healthcare staff in the NHS can sometimes feel like “fiddling while Rome burns”.

**WHY THIS ISSUE MATTERS**

Every day, the health of millions of people around the world may be improved in some manner due to the results of prior research. Evidence suggests that engagement of clinicians in research can improve healthcare performance [10]. Moreover, taking part in research itself is said to have a positive impact on healthcare staff through the fostering of collaborative relationships [11] improved processes of care and knowledge generation [12]. However, Kislov et al (2018) [13] conducted a systematic review of evaluations of a major UK health services research partnership. They found a lack of data pertaining to the impact of the partnership funded research activities on health care delivery or outcomes. The importance of health services research appears to be a contested but yet significantly under-researched area.

Despite this contestation, there is a growing awareness that the inability for healthcare staff to take part fully in research or large scale programmes is problematic. This is increasingly being mentioned in the published literature as a factor which hinders the uptake of interventions being tested, the conduct of clinical trials, recruitment to qualitative studies or implementation science being undertaken. Varily, this is said to be related to contextual factors, resource constraints and continual re-organisation. The specific issues mooted lately tend to concentrate on:
- The inadequacy of staffing levels to be able to simultaneously deliver patient care and for staff to take part in discrete research activities [14 - 17]
- Sheer lack of time as one of the most important factors [14, 15, 17-19]
- High staff turnover or staff mobility around the NHS estate [14, 16, 17]
- Competing priorities, targets and metrics set by senior healthcare management, which implicitly serve to de-prioritise input and engagement with local research studies [17 - 19]
- A concentration on service re-organisation or re-structuring which makes taking part in research difficult [14, 20]

A recent high profile example of some of the above issues relates to the trial of a quality improvement intervention to reduce mortality after emergency abdominal surgery, which was rolled out at 93 hospitals across the UK [19]. The process evaluation of the trial found that the intervention was well received by quality improvement leads but these people were attempting to deliver it in what the authors of the study term “challenging contexts”. The major factors which thwarted delivery of the intervention were said to be limited time and organizational resource.

More generally, healthcare sites with staffing issues and poor resources are often typologised as those who have low engagement with interventions [21] in comparison to those which are not weighed down due to firefighting their everyday clinical work. Furthermore, ownership of an intervention becomes fraught if it is handed between multiple cohorts of healthcare staff within a short to medium term period, even on the same ward with the same patient population [17]. In a 15 month
trial of a patient safety intervention, several hospital wards changed almost their entire personnel between the start and end dates of the study, with the intervention being unprepared for this dramatic level of change [17].

A CONTEXT OF CRISIS
Why do all of the above factors matter? It is of interest that most authors point to the ‘context sensitive’ elements of their findings and reiterate the importance of the immediate, local setting that healthcare staff are working in. Equally, health services research studies seeking to implement an intervention frequently discuss the problem of engagement with staff. Indeed, it has been pointed out that the ever numerous attempts to explain how context affects implementation risks overwhelming researchers and clinicians [22]. However, it is evident that rather than being context sensitive, the above described issues are currently writ large across the NHS, covering a variety of settings and environments. Differing health service research teams across the country are facing similar challenges, which can be seen via the issues described in the selected eight studies cited above. Yet, there is little recognition in the published literature that their predicament is universal. Instead, some research teams are trying to reinvent the wheel by devising innovative local solutions that will either pique the interest of busy and tired healthcare staff enough to take part or minimise the time involved in the research process to its most reductionist elements. A large amount of time and effort is being spent trying to work around intractable problems of healthcare staff being unable to take part in research activities. Yet as clinical practice gets more pressured, so does conducting research with clinicians.
WHAT CAN BE DONE?

Healthcare staff need to be given time and space to take part in health services research, as part of their role, rather than squeezing in snatched time around clinical care. There needs to be a significant re-structuring – both practically and mentally - which views research activities as an important part of clinical roles and gives them sufficient prestige and priority as part of the normal working day. Enabling factors are said to exist with regard to both the governance and management of engaging NHS staff in research but also towards a shift in culture and behaviours [23]. It has been suggested that time management systems need to be re-designed in order to recognise research activities undertaken by NHS staff [23]. This is a concrete activity which could sit alongside a more ambitious direction that organisational leadership and culture should outwardly value and promote research. Alternatively, it could be that the paradigm of health services research itself needs to adapt to ever constraining conditions within the NHS. The ‘researcher in residence’ proposed by Marshall et al (2014) [24] is one example that has particular merit. This model has the researcher as a core member of the delivery or clinical team often intensively working alongside staff members for months or even years. The researcher is embedded within the team rather than asking members of the team to take part in discrete, time limited research activities with the researcher. A fundamental ethos shift in this respect is that, in the researcher becoming a core member of the team, there is a shared sense of responsibility for the success or failure of any intervention being tested.

Looking more quantitatively, an interesting recent proposal is to use Learning Health Systems as part of a research culture. A Learning Health System is one in which data and analytics are part of a continuous cycle embedded within implementation
and improvement, whereby the aim is to make use of this data on a large scale, operating on a continuous basis [25]. Critically, a learning health community takes responsibility for acting on the learning, not just creating new evidence [25]. An example of this is the Connected Health Cities project which has successfully linked de-identified data from urgent care services across Yorkshire and Humber region of England in order to monitor patterns of service use and outcomes. This allows the monitoring of the impact of interventions, such as those to reduce demand for emergency care, in order to understand their effectiveness. A fully developed Learning Health System could potentially make great strides forward in ‘data heavy’ areas of inquiry such as how patient experience feedback and patient safety incident data can be harnessed and used by healthcare organisations to enact change. Often, this type of data is collected in large volumes by hospitals but little action is taken as a result of it because responsibility for action is unclear [26]. However, implementation of a Learning Health System in the NHS could face significant implementation challenges due to the way in which the NHS currently supports analytic endeavour. That is, analytics teams have a primary focus regulation and performance rather than quality improvement and transformation. Moreover, the data has to be of sufficient high quality and a form in which it can be readily analysed.

In terms of what research teams can do right now without having to set up different ways of working or try to instil culture change; slight adaptations of traditional research methods can be fruitful and many teams will intuitively already be doing this. For certain projects, we have started moving away from traditional research methods such as focus groups and interviews in qualitative work and moving away from formally organised meetings with ward staff in implementation projects. This is
because these activities usually demand 45 minutes to an hour of commitment from multiple staff members, which is too long and not practical under current working conditions. When using qualitative methods, our team found it extremely difficult on some hospital wards to ever get a medium size group of clinicians (five to eight) together in a focus group at the same time. Instead, we conducted focus ‘grouplets’ whereby smaller groups of three or four staff were released to take part in the research whilst their colleagues covered the ward clinically and then the two teams swapped. It is important to say that we have not noticed a reduction in quality or richness of data. Moving forwards, there may need to be a shift away from methodological purity in academic healthcare research to enable more rapid and suitable means of engaging staff. Ultimately, research teams may need to think paradigmatically differently about how they approach health research projects that require healthcare staff involvement. This will mean thinking and planning strategically at the grant application stage of a research project to ensure that healthcare staff have minimal burden placed upon their time, rather than subsequently adapting and downsizing methods during the life course of the study.

Lastly, the research community needs to recognise that a problem which is identified persistently across different clinical settings and various types of studies is not necessarily a problem that can be explained away as being about ‘individual context’. Some authors are beginning to acknowledge this in relation to seeing the effects of the crisis in the health service across multiple sites in the same study. For instance, implementation of a large scale patient safety programme across England was thwarted in some areas by “extreme policy related structural turbulence” [20].
High movement of staff around the NHS was a factor which led to a lack of ownership of a patient safety intervention when tested in the North of England [17]. A quality improvement intervention tested in a trial at around half of all hospitals in the UK found that “challenging contexts” were a major barrier to uptake [19]. Yet, few commentators have brought these findings together to make a meta level statement about how the current turmoil in the NHS is creating adverse conditions for the conduct of health research. The fire is starting to rage out of control but a disorganised group of people in separate parts of the city are pouring buckets of water on an inferno. As health researchers, we consider our work to be both useful and important. We have used the allegory of the Great Fire of Rome to demonstrate the impotence we feel looking in on a health system in crisis. It is crucial to state that we do not consider ourselves to be analogous to Emperor Nero. Yet, we must speak out about this issue and call for change, otherwise Rome is likely to be razed to the ground.

**CONCLUSION**

It is increasingly difficult to conduct research with frontline healthcare staff in the UK. This is due to an ongoing crisis in the NHS which has led to a lack of staff on the ground coupled with an increasingly pressured workload for those who remain in clinical practice. Emerging evidence from a range of research studies shows that the inability of healthcare staff to take part in research activities is often stated as a factor which hindered individual research projects and outcomes. This is an issue which is becomingly increasingly common across the NHS but is often erroneously discussed as being due to individual context or setting. The research community
needs to recognise the universality of this problem and work towards solutions both large and small, long term and immediate.

ACKNOWLEDGEMENTS

This paper was written whilst Laura Sheard was a writing resident at the Brocher Foundation (http://www.brocher.ch) in Switzerland. Sincere thanks go to the Brocher Foundation for hosting the writing of this paper. LS and RP conceived the initial idea for the paper together. LS then wrote the first draft and revised subsequent drafts. Both authors read and approved the final manuscript. The authors would like to thank Claire Marsh for her useful and insightful comments on an earlier draft of this paper. Thanks also to a wider group of colleagues who read a previous draft of the paper and put forward suggestions for revisions, during a meeting in March 2018. The views and opinions expressed therein are those of the authors only and do not necessarily reflect those of their wider research team members, Health Services and Delivery Research Programme, CLAHRC Yorkshire and Humber, NHS or the Department of Health.

REFERENCES


www.kingsfund.org.uk/blog/2017/10/falling-number-nurses-nhs-paints-worrying-picture


http://careers.bmj.com/careers/advice/Specialty_training_vacancies_increase_by_30%2525_in_a_year


www.pulsetoday.co.uk/your-practice/practice-topics/employment/gp-vacancy-rates-at-highest-recorded-with-one-in-eight-positions-unfilled/20031836.article


