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RESEARCH ARTICLE

STAFF ENGAGEMENT IN MALE, FEMALE AND NON-BINARY DOCTORS WORKING IN NON-PROFIT AUSTRALIAN HOSPITALS

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ABSTRACT

Given the importance of equal opportunity for all staff, this study will assist employers and policy makers better understand issues pertaining to engagement differences experienced by male, female and non-binary medical staff working in non-profit Australian hospitals by sex.

A survey was emailed to all medical staff working at two public hospitals and five private hospitals in three states, seeking responses to 30 pre-determined items. The survey used a valid and reliable instrument which provided an overall index of medical engagement, against which male, female and non-binary respondents relative engagement is ranked highest to lowest.

The results indicate that overall, male doctors (N=659) are more engaged than their female colleagues. Female doctors (N=316) working at the seven sites are less empowered and valued when compared to their male counterparts. The data also indicate that females feel the work culture is less collaborative than it is for males. This is particularly evident when comparing the results to the Australian (AU) norms. Non-binary doctors were significantly more disengaged compared to male and female colleagues. The results vary when compared by site, sex, jurisdiction, and sector.

The profile of medical engagement varies at the sites, and by sex. Differences appear to be related to how valued and empowered doctors feel and whether they are encouraged to develop their skills to progress their careers. Activity aimed at female and non-binary staff are required to address the lower levels of engagement then their male counterparts, particularly for non-binary staff.

KEYWORDS

Medical Leadership, engagement, health policy, clinical, sex, non-binary

INTRODUCTION

It is increasingly recognised that improvement in healthcare needs the positive involvement and engagement of doctors who are willing and able to adopt roles that make them highly influential in planning and delivering service change [1–3]. Highly engaged staff are more likely to bring their heart and soul to work, to take the initiative, and 'go the extra mile' and to collaborate effectively with others [4].

Virtually all health organisations have medical leaders in positions such as medical and clinical directors or service leads, but manifestly organisations differ in their level of performance [5]. The logic, therefore, suggests that some medical leaders are contributing to successful organisations in a way that others are not. It has been documented that the mechanism by which medical leadership influences organisational performance is via creating positive, supportive cultures in which individuals can flourish [6-7]. This has been called medical engagement and includes: the active and positive contribution of doctors within their normal working roles, to maintaining and enhancing the performance of the organisation, which itself recognises this commitment in supporting and encouraging high quality care [8].

In Australia (AU), a recent study has shown that medical engagement is a multi-factorial phenomenon which spans the relevant multiple professional sub-cultures, and which is influenced by many interrelated factors, within the organisational context [9]. Despite reports highlighting the need for greater medical engagement [10,2], and the benefits of medical engagement being widely understood [5], there is currently no information on the status of medical staff engagement in male, female and non-binary doctors working in non-profit AU hospitals.

The authors acknowledge the vital importance of language used to describe sex. For example, we identified research into 'gender', that went onto to describe the participants by their sex. Table 1 describes the terms used by the World Health Organisation and used in this article. This study focussed on the individual and organisational characteristics that influence employee engagement of male, female and non-binary doctors working in two public and five private hospitals operated by the same health care provider.

TABLE 1 DEFINITIONS AND TERMINOLOGY

Sex	Either of the two main categories (male and female) into which humans and most other living things are divided on the basis of their reproductive functions.
Gender	Refers to a person's innate, deeply felt internal and individual experience of gender, which may or may not correspond to the person's physiology or designated sex at birth
Transgender	Transgender' is an umbrella term for people whose gender identity and expression does not conform to the norms and expectations traditionally associated with the sex assigned to them at birth; it includes people who are transsexual, transgender or otherwise gender non-conforming
Non-binary	Does not identify with the two main categories (male or female) into which humans are divided on the basis of their reproductive functions.

Source: Adapted from World Health Organisation WHO, 2006. 2016, 2024

BACKGROUND

The term engagement initially emerged in the management literature when Kahn wrote about 'personal engagement' with one's work which he characterised as emotional, cognitive, and physical [7]. Kahn's theory was later expanded on to describe engagement as a multi-dimensional psychological state experienced by the individual in relation to their work. The most widely adopted measure of this is the Utrecht Work Engagement Scale, which evaluates work related vigour, dedication, and absorption [20].

There is now also a substantial base of research and literature about the need for engagement in the healthcare field. Much of the early commentary tends to pinpoint the need for such behaviour and describe how when clinicians are not engaged, things can go tragically wrong [21,22]. More recent material has described activity to either impede or enhance engagement - barriers including poorly defined career pathways, lack of expertise and time to be involved, or enablers such as shared values, developing professional cultures, inter-disciplinary collaboration and involving service users [4,10,23].

The benefits of doctors engaging with a broader organisational perspective with respect to their clinical responsibilities and accountability are of sufficient magnitude to warrant the investment of time, effort, and resources. To the doctor these include improved job satisfaction and a reduced risk of burnout. To the health service organisation benefits include lower patient mortality rates, fewer serious clinical and workplace incidents, achievement of service targets, improved financial management, and reduced staff absenteeism and turnover [24]. Patients benefit from higher quality care and a better experience [24].

It is the contention of Spurgeon and Clark [5] that while cultures that promote employee satisfaction and commitment are necessary, the ability for medical staff to collaborate with colleagues is an essential factor in understanding medical engagement [3]. The concept of engagement is seen as a significant component of all successful organisations across a range of sectors [25,26]. Spurgeon et al [24] describe the continued evidence of the positive relationship between the assessed levels of medical engagement and independently assessed organisational performance. Because of these benefits, hospital managers, funders, and makers of policy around the world have been developing a range of mechanisms, organisational and institutional, to encourage, develop and support doctors to be more engaged [24].

A recent study of medical staff engagement at non-profit hospitals in AU did find that doctors working at the hospitals feel engaged and are making a positive contribution to the organisation, which recognises their contribution [9]. The study concluded that medical engagement spans the multiple professional sub-cultures, and is influenced by many interrelated factors, within the organisational context [9]. There is a paucity of research into medical staff engagement by sex. One Danish study found female general practitioners (GPs) had higher medical engagement than their male colleagues [27]. Recent studies in the United States of America (USA) have shown inequity between sexes in a variety of medical contexts [14,13,28–31].

METHODOLOGY

A questionnaire was emailed to all medical staff, estimated to be 3000, working at two public hospitals and five private hospitals in three states involved in the study – see Table 2. The survey instrument, the Medical Engagement Scale (MES), has already been used in AU, New Zealand, Europe, Scandinavia, and the UK [8,24]. Ethics approval was granted for the study and no identifiable data was collected.

The MES is a valid and reliable instrument which provides an overall index of medical engagement. The MES survey was developed with a very large sample of NHS staff (over 20,000) and has good reliability (0.7 to 0.93) [24]. The MES instrument has a hierarchical structure and provides an overall index of medical engagement together with an engagement score on three reliable meta-scales (Working in a Collaborative Culture; Having Purpose and Direction; and Feeling Valued and Empowered) with two sub-scales each.

TABLE 2 LOCATION OF HOSPITAL BY SECTOR AND JURISDICTION

Hospital site	Sector	Jurisdiction
A	Public	New South Wales
B	Public	Victoria
C	Private	Victoria
D	Private	Queensland

E	Private	Queensland
F	Private	New South Wales
G	Private	New South Wales

Source: Author

TABLE 3: MEDICAL ENGAGEMENT SCALE (MES)

Medical engagement scale (MES)		
Meta-Scale 1:	Working in a collaborative culture	Sub-Scale 1: Climate for positive learning Sub-Scale 2: Good interpersonal relationships
Meta-Scale 2	Having purpose and direction	Sub-Scale 3: Appraisal and rewards effectively aligned Sub-Scale 4: Participation in decision- making and change
Meta-Scale 3	Feeling valued and empowered	Sub-Scale 5: Development orientation Sub-Scale 6: Work satisfaction

Source: Adapted by author from Spurgeon P, Barwell F, Mazelan PM (2008)

The average medical engagement scores for all organisations in both the external UK and AU reference databases were ranked and split into five colour-coded levels of engagement bands relative to the MES norms.

TABLE 4 – FIVE COLOURED BANDS USED TO RANK ENGAGEMENT FROM HIGHEST RELATIVE ENGAGEMENT (GREEN) TO LOWEST RELATIVE ENGAGEMENT (RED)

Band (colour)	Relative engagement to MES norms
Bright green	Highest relative engagement (top 1/5th)
Pale green	High relative engagement (top 2/5th)
Yellow	Medium relative engagement (middle 3/5th)
Pink	Low relative engagement (4/5th)
Red	Lowest relative engagement (bottom 5/5th

Source: Applied Research, UK.

Ethics approval was obtained from the Australian Institute of Business Human Research Ethics Committee, dated 5th September 2019, approval number 2019/L1/08. It was determined that the research met the requirements of the National Statement on Ethical Conduct in Human Research (2007). No patient or public involvement occurred.

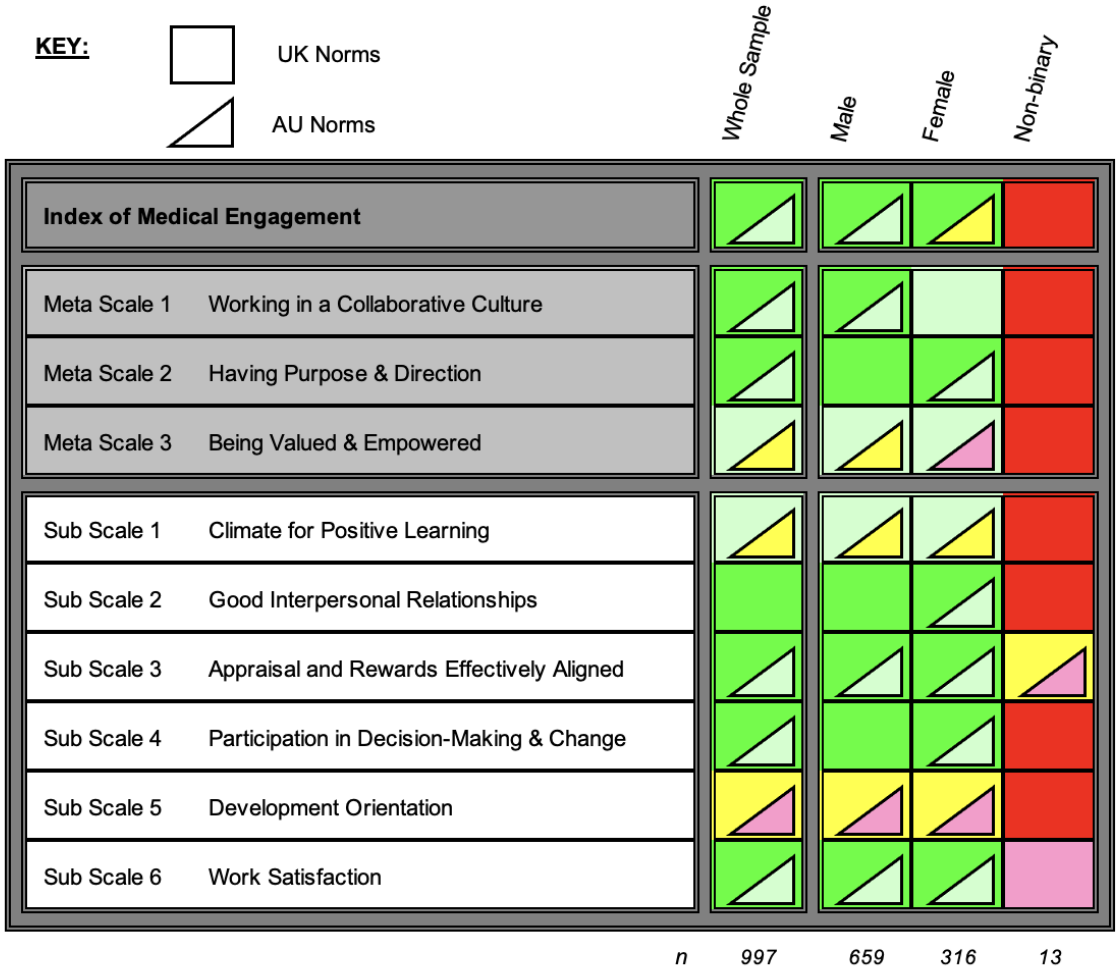
RESULTS

In total, 997 doctors responded to the survey. Figure 1 describes the combined profile of respondents by sex and MES items. Overall, male doctors (N=659) are more engaged than female doctors. Non-binary doctors rated the MES items in the lowest relative bands according to both UK and AU norms, with few exceptions where one or two sub-scales reached medium or low rankings.

Figure 2 shows engagement profiles by sex across the seven sites. Four non-binary doctors chose not to disclose their location but were included in the overall total (N=13). Male doctors were more engaged than females at five sites, while females were more engaged at one site. Female doctors (N=316) reported feeling less valued and empowered and perceived less collaboration in workplace culture compared to male colleagues. Non-binary doctors were notably disengaged across all sites. However, some satisfaction and pay alignment were reported by non-binary staff at select hospitals.

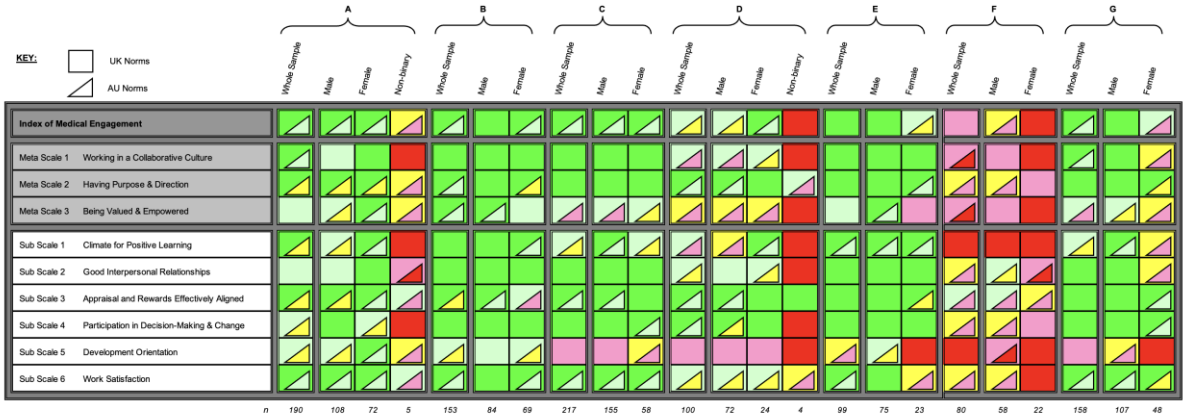
Comparative analysis using Tukey's Honest Significant Difference (HSD) test showed significant differences between non-binary doctors and their cisgender peers across several engagement dimensions. No significant differences were found between male and female (cisgender) doctors.

FIGURE 1 - LEVELS OF ENGAGEMENT FOR ALL DOCTORS BY SEX COMBINED FOR ALL SITES BENCHMARKED FOR UK AND AU (TRIANGLES IN FOREGROUND)



Source: Applied Research, UK

FIGURE 2 - LEVELS OF ENGAGEMENT FOR ALL DOCTORS BY SEX BREAKDOWN BY SITE BENCHMARKED FOR UK AND AU (TRIANGLES IN FOREGROUND) NB: FOUR NON-BINARY STAFF ELECTED NOT TO IDENTIFY THEIR LOCATION (SITE)



Source: Applied Research, UK

DISCUSSION

The results are consistent with international literature showing ongoing inequities in medicine based on sex [11,12,13]. For instance, fewer than 12.5% of large hospitals in AU had a female chief executive, and only 28% of medical schools had female deans [12]. In the USA, academic medicine continues to reflect disparities in faculty roles, leadership, and pay [13–19].

Australian studies also identify significant barriers to female medical engagement, including limited leadership roles and perceived lack of credibility [15,10]. These issues are especially prominent in male-dominated specialties [29,32], and surveys of junior doctors reflect stark contrasts in experience by sex [33]. Female doctors often avoid specialties not seen as family- or female-friendly [34], report worse work-life balance, and are less satisfied professionally [35].

There is limited research on non-binary doctors. One U.S. study estimates fewer than 1% of doctors identify as non-binary and many experience discrimination, identity concealment, and stigma [11]. In Australia, non-binary junior medical staff report twice the rate of harassment and discrimination compared to their peers [34]. Given the growing diversity of the medical workforce [34], these disparities have consequences for staff engagement and patient care. Studies show that female doctors, for example, may deliver more guideline-compliant and patient-centred care [34].

Non-binary people experience higher levels of incidence of mental health issue outcomes and healthcare dissatisfaction compared with female or males, so it follows that non-binary medical staff are less engaged than their female and male colleagues [36]. There is more research available on the experience non-binary patients which shows that non-binary patients benefit more from empathetic and supportive treatment [36]. It is possible that patients presenting at the study hospitals who are non-binary would benefit from being treated by non-binary doctors. More research is necessary to understand this link.

LIMITATIONS

The study was limited to seven hospitals located in three jurisdictions and owned by a single entity (Table 2) to which the researchers had access to conduct the study. These hospitals are comparable in size and scope of services to other Australian hospitals, which suggests that if the results could be replicated if process was repeated at other similar hospitals in Australia. For example, the hospitals have a very similar range of clinical speciality services and treat patients with similar conditions. It is noted that the hospitals do belong to a not-for-profit entity, so the findings may not be applicable to fully private or public health providers, and other settings like primary care, community care or aged care.

CONCLUSION

There is a growing base of research into inequity in medicine, especially in the USA, pertaining to the sex of the doctors. The focus of this material is on male and female doctors. There is a lack of research around how and why non-binary doctors are engaged in hospitals, and it is hoped that this study adds to the evidence base. Despite the manifest limitations in the study being confined to the not-for-profit sector in AU, this research will assist employing bodies, policy makers and workforce planners in their endeavours to provide appropriate support and opportunities for doctors in their workplace.

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