



Literature Review on Mentorship for Hospital Residents and the Development of Leadership

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Abstract

This literature review explores the role of mentorship and supervision during hospital residency, as well as the influence of mentorship, supervision and coaching on leadership skills. This article provides insight into definitions of mentorship, clinical leadership and management and how leadership theories have changed, as healthcare has become more complex.

Keywords: Mentorship; supervision; clinical leadership

Literature Review

Skills Introduction

This literature review explores the role of mentorship and supervision during hospital residency, as well as the influence of mentorship, supervision and coaching on leadership skills. This article provides insight into definitions of mentorship, clinical leadership and management and how leadership theories have changed, as healthcare has become more complex. There is a positive association between mentoring medical trainees and postgraduate training outcomes and success in exams. With regard to leadership training, studies have found that supervision, mentoring or coaching are beneficial in developing leadership skills. Junior doctors believe that leadership and management are important for physicians and some believed it should be incorporated into the curriculum. The article also looks at the different leadership styles and if a certain style lends itself to being a better mentor. Three commonly employed leadership styles in healthcare, include democratic, affiliative and authoritative. A distributive leadership style was identified as being useful in healthcare. The situational Leadership Theory implies that different situations call for different leadership behaviours.

Mentoring And Supervision of Hospital Residents

According to Sng et al. (2017, p. 866), 'mentoring relationships are pivotal to the outcome of the mentoring process' and should be voluntary and confidential. A mentor can be seen as a teacher, supervisor or a coach, guiding juniors to fulfil objectives, for example gaining skills, professional and personal growth, and academic development, as well as providing counselling and emotional guidance (Nimmons, Giny, and Rosenthal, 2019). Mentorship is defined as a 'dynamic, reciprocal relationship within a work environment between an advanced career incumbent (mentor) and a beginner (protégé) aimed at promoting the development of both' (Cullison, 2014, p.645).

Regarding supervision, a clinical supervisor can be defined as a 'trainer who is responsible for overseeing a specified trainee's clinical work environment and is appropriately trained to do so'. (General Medical Council, 2015, p. 15). Supervision involves one-to-one encounters aimed at improving competence, reflection on one's practice and focuses on either performance or development or both. The development component is often seen as mentoring (Cottrell et al., 2002). Coaching is a type of supervision, where an individual's full potential is encouraged and like mentoring, should be voluntary and confidential (Whitmore, 1996). One-to-one supervision or coaching has always occurred during training but is now coming to the forefront of medical education (Rombeau, Goldberg, and Loveland-Jones, 2010).

An observational study on mentorship for junior doctors, collecting quantitative and qualitative data, showed a positive association between mentoring medical trainees and better postgraduate training outcomes (Ong et al., 2018). Mentored trainees had more success in their postgraduate exams, as well as improving their confidence and progression in their careers. The mentoring relationship was more successful if the mentor had a facilitatory role. It was also highlighted that mentees should be able to choose their mentor. Similarly in this study, some residents saw the mentor as a facilitator and the study discussed the topic of guidance from their mentors in relation to their professional development and careers.

In a study looking at the impact of mentoring during a doctor's postgraduate training, mentoring was found to positively impact career success in a cohort of doctors in Switzerland, especially if an individual received mentoring from different people at the same time, so called 'development network



mentoring support' (Stamm and Buddeberg-Fischer, 2011, p.488). However, only half of the doctors in the study reported having a mentor, and female doctors were less likely to have a mentor. This study also noted that not all residents were assigned a mentor, but if they were, both female and male residents had the same opportunities for mentorship regarding their career plans. Similarly in a study on mentorship for Pakistani doctors in their postgraduate education, there were few opportunities for effective mentoring, despite the perceived benefits of mentoring especially in career planning. The authors highlighted the need for mentors and mentees to be better trained in this area (Sheikh et al, 2016).

Influence of Mentoring, Supervision and Coaching on Leadership Skills

In a survey by the Faculty of Medical Leadership and Management (FMLM), looking at leadership training, many of the junior doctors found that their supervisor was helpful. Some went to other junior doctors, programme directors and directors of medical education, for informal supervision. 81% of physicians thought shadowing a manager or doctor would be helpful, but only 29% had been given the chance to do so in the previous 12 months. Many of the junior doctors recommended a mentoring scheme or shadowing opportunities, to develop leadership skills for doctors of all grades, which is important for patient care and the morale of junior doctors (Hynes, Peake, and Tweedie, 2017).

In the UK, a pairing scheme between management trainees and Year 2 foundation doctors, was set up in South East England NHS, where they participated in a joint project to improve leadership skills, under the supervision of a mentor (Hadley, Marshall and Black, 2015). The pairs worked on projects together and shadowed each other, thus improving interdisciplinary team working and shared leadership. Each pair had a mentor, whom they met regularly. All the participants viewed this experience as beneficial. A study looking at leadership for residents in the USA, found that the US healthcare system does not prioritise leadership skills, but when it does happen, mentorship allowed relationships to continue after the formal leadership training curriculum had finished (Blumenthal et al., 2012).

In a study by Patel et al on leadership development for residents in the USA, the authors designed a leadership curriculum for trainees, pursuing leadership roles. The Executive Mentoring Program (EMP) was set up to help residents develop self-awareness about their leadership abilities, and how to use experience, reflection and feedback. Each resident was assigned a leadership mentor and they focused on personal development, interpersonal skills, teamwork and live and learn. The programme benefited the mentors, mentees and the health system and the authors concluded that if young physicians are better prepared to develop and lead through times of change, the more success they will have in healthcare in the future (Patel et al., 2019). This study highlighted that mentorship, especially informal methods, fostered leadership and through this experience, some of the residents could see themselves in leadership roles in the future. In a study looking at 'Darzi' fellowships and leadership for junior doctors in the UK, which had similarities to the aforementioned EMP in the USA, 60% of participants felt mentoring was very valuable. They valued having access to their mentor, to check in and get feedback in an informal setting (Stoll, 2011).

In contrast to the structured programmes in the Patel and Stoll studies, a qualitative study looking at creating physician leaders in the USA, highlighted that doctors believed that role modelling and mentoring contributed significantly to their careers especially if the mentor had a high level of emotional intelligence. The study participants preferred 'short, focused strategic mentorship relationships' with different people, and they also valued role modelling, as well as learning from directly observing skilled leaders (Taylor, Taylor and Stoller, 2009, p. 1133).

With regard to coaching, a qualitative study on group coaching for newly qualified doctors from Denmark, where they have adapted the seven CanMEDS roles (Frank, 2005), found that participation in a coaching course leads to an improvement in practice among newly graduated doctors. The course helps them to understand the complexity of healthcare, as well as contributing to the development of leadership skills. The junior doctors found it difficult to take on leadership roles and felt that they lacked communications skills.

Through coaching, they became more confident and were able to institute change, once they took the lead and began to understand complex health

organisations (Malling et al., 2020).

Clinical leadership and management:

Good clinical leadership is very important in achieving better patient outcomes and is also important in consistently delivering high quality care to patients (Warren and Carnall, 2011). The terms leadership and management are often used interchangeably but in the healthcare sector, they are distinct entities. Clinical leadership involves having 'an intentional influence over other people to guide, structure and facilitate activities and relationships in a group or organisation' (Kiesewetter et al., 2013, p. 2). With regard to hospital management, Mintzberg (1997, p. 3) highlights that managers 'organise in terms of administrative hierarchy'. Management can be seen as 'any role involving administrative, leadership, or organisational activities' (Bligh and Brice, 2009, p. 1163). To compare leadership and management, leadership is 'about setting direction, influencing others and managing change.... with management concerned with the marshalling and organisation of resources and maintaining stability' (Swanwick and McKimm, 2011, p. 23).

In a survey of junior doctors coming from various specialties including paediatrics, general practice, anaesthesia and internal medicine, over 97% of them believed management and leadership skills were important for physicians. Some barriers to leadership development included lack of time, short rotations, lack of support and training and lack of guidance from hospital management (Hynes, Peake, and Tweedie, 2017). In a qualitative study on training and education in healthcare leadership amongst leaders in the UK, Nichol, Mohanna and Cowpe (2014, p. 285) supported the creation of a 'physical healthcare academy' with emphasis on experiential learning. It was noted that leadership training was not well established in the NHS. Most participants advocated for talented potential leaders to be identified from across the NHS, with most being of the opinion that leadership should be a core skill like clinical skills, emphasising multi-disciplinary learning. In relation to role modelling, it was seen as useful for trainees to observe role models and for trainers to support trainees in informal learning and help them with reflection.

In a study from the Australian and New Zealand College of Psychiatrists in 2015, psychiatrists are encouraged to take on management and leadership roles and the college provides the training and education. The theory of 'expert leadership' highlights that 'leaders are associated with better organisational performance in a number of settings' (Goodall et al., 2015, p. 409). Success at an academy in Cleveland Clinic, USA was the subject of another study, where doctors were trained in leadership and management, through emphasising emotional intelligence, and teamwork early on in a clinician's career (Hess, Barss, and Stoller, 2014).

In another qualitative study looking at leadership development in family medicine residency in Canada, residents preferred a more formal approach to leadership training, with the participants believing that leadership should be included in the curriculum. In designing leadership training, the practical aspects of leadership were considered more important than the theory. The main barriers identified were time and capacity. Family Medicine residents felt that teamwork and communication should be included in the CanMEDS Leader Role (Grady et al., 2018). The CanMEDS leader competencies currently focus on the physician improving healthcare as part of a team, managing healthcare resources, leading as a professional and planning career, finances and human resources. A survey on leadership skill development for GP trainers and trainees in South East Scotland, found that 58% of the participants had received training in leadership and 42% had not. Of those who had training, 28% had received this during GP training and 72% as a GP. The majority expressed an interest in pursuing a leadership role but few have opportunities to participate in leadership during their training (Curry and Denney, 2016).

Darzi' Fellowships were designed to develop leadership skills in medical careers and involved twelve months out of specialty training. Quantitative and qualitative data was collected, focusing on the following themes: Impact on fellows, impact on trusts, and impact on the wider system (Stoll et al., 2011, p.273). Other training programmes in leadership include the Medical Leadership Competency Framework (MLCF) set up by the NHS and the Royal Colleges in the UK, and outline the competencies for medical students, junior doctors, early career consultants and General Practitioners (Aggarwal and



Swanwick, 2015). Regarding graduate leadership for residents from a variety of medical specialties, they underwent a 4-week period of training, following transactional and transformational leadership approach and it was noted that such training is important to develop strong, effective leaders (Saravo, Netzel, and Kiesewetter, 2017). A leadership programme for residents in the USA found that 80% of the participants felt their knowledge and skills improved over three months, as well as utilising their new leadership skills (Karpinski, Samson, and Moreau, 2015). A Management and Leadership Pathway for Residents (MLPR) at Duke Medicine was developed for residents, with the aim of creating physician leaders, where residents acquire clinical and management skills in their early careers (Ackerly et al., 2011). Another study from the USA also looked at the importance of early exposure to leadership education, in order to get physicians more involved in leading hospitals. The residents had the opportunity to meet with health care leaders regularly in settings such as committee meetings and at 'leadership rounds' (Gunderman and Kanter, 2009, p.1350). A systematic review on faculty initiatives to improve leadership in medical education found that "participants value leadership development activities and report changes in attitudes, knowledge, skills and behaviour" (Steinert, Naismith, and Mann, 2012, p.34).

Another meta-analysis concluded that leadership training for physicians lead to better knowledge and expertise, but few studies looked at the implications of wider outcomes at a system level (Frich et al., 2015).

Leadership styles: In a study exploring leadership styles by senior medical leaders in the UK, quantitative and qualitative data was collected and three main styles were commonly employed: democratic, affiliative, and authoritative, with commanding and coaching used infrequently. The choice of leadership depended on the organisation, context, characteristics and style history of the leader. The study 'demonstrated that medical leaders have a variety of patterns of use of leadership styles with no single style typology' (Chapman, Johnson, and Kilner, 2014, p.295).

McCue et al (1986, p. 57) found that 'people orientated styles of leadership', where there was encouragement and coaching by junior doctors, was regarded more highly by nursing colleagues, than a delegating style. This style of shared leading uses skills like facilitating, listening and influencing, rather than giving commands (Baldrige, 1978). A distributive leadership (DL) involves the vertical distribution of power from the centre downwards, which may even move outside the boundaries of the organisation and may be of benefit in increasingly complex healthcare systems, allowing individuals to lead in their own fields of expertise (Brookes and Grint, 2010). DL or 'leadership at all levels' is a 'shared, adaptive, and collaborative approach that forces leaders to focus on systems of care and not just organisational delivery of results through followership' (Aggarwal and Swanwick, 2015, p.109). On the other hand, Martin et al (2015, p. 17) identified some weaknesses of DL in that 'its focus is on the micro-foundations of organisations' and highlighted the confusion over the real meaning of DL. In a study looking at the role of supervision during residency training, and the influence of different leadership styles, the participants felt they could be leaders, but they needed more formal training in leadership. The 'Situational Leadership Theory' (SLT) was applied in this study, and incorporates the idea that the leadership style of the supervisor influences the residents to deliver high quality care, as well as achieving goals. The main aspect of SLT is that 'different situations require different leadership behaviours' (van der Wal, 2015, p. 2).

Conclusion

It has been shown that mentoring medical trainees leads to an improvement in postgraduate training outcomes and career success, especially if the mentor is seen as a facilitator. It is also important that the mentee chooses their mentor and that they receive mentoring from different mentors at the same time. However, studies highlight the lack of effective mentoring in healthcare. Regarding leadership training, mentoring, coaching and supervision have been shown to be beneficial in acquiring leadership skills, but again this is not always prioritised in the healthcare setting and there are barriers to leadership training. Some junior doctors preferred a more formal approach to leadership training and would like to see this as part of the curriculum. When training does occur, informal mentoring and role modelling in particular did foster leadership development. When leadership training is structured or part of an academy, experiential learning is emphasised and the concept of the "expert leader" is promoted. Regarding

leadership styles, a distributive style may be useful in the complex world of healthcare but most medical leaders use a variety of styles and different situations require different styles.

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