



University of Dundee

Disrupting the consultation

McElhinney, Zoe; Bartlett, Maggie

Published in:
Education for Primary Care

DOI:
[10.1080/14739879.2021.1939169](https://doi.org/10.1080/14739879.2021.1939169)

Publication date:
2021

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
McElhinney, Z., & Bartlett, M. (2021). Disrupting the consultation: students empowering patients in a longitudinal clerkship. *Education for Primary Care*. <https://doi.org/10.1080/14739879.2021.1939169>

General rights



Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Disrupting the consultation: students empowering patients in a longitudinal clerkship

Zoë McElhinney  and Maggie Bartlett 

General Practice Undergraduate Education, School of Medicine, University of Dundee, Dundee, Scotland, UK

ABSTRACT

Although well-established worldwide as a method of clinical medical education, Longitudinal Integrated Clerkships (LICs) are green shoots in the UK medical education landscape. The first comprehensive LIC in the UK was introduced in Dundee, Scotland in 2016. Substantial work has been carried out to evaluate the experiences of students and primary care tutors involved in the Dundee LIC, but the experiences of the patients LIC students cared for had not been evaluated. The purpose of this study was to explore the experiences of these patients, particularly the impact the involvement of a LIC student might have on their experience of healthcare. The study is a cross-sectional qualitative study involving semi-structured interviews with five patients who had experienced several contacts with LIC students. An interpretive phenomenological approach was taken. We describe the presence of the student as a disruptive force leading to the empowerment of patients. Students disrupted the status quo in the consultation by altering both the structure of the interaction and the doctor–patient relationship. The student–patient relationship was a powerful enabler of patient empowerment through the provision of education and information to the patient and through increasing patient centredness in the consultation. The positive social interaction provided by the student–patient relationship led to a reframing of patients’ perceptions of the medical profession, challenging their perceptions of occupational hierarchy and power of the medical profession.

ARTICLE HISTORY

Received 28 January 2021
Revised 28 April 2021
Accepted 16 May 2021

KEYWORDS

Longitudinal integrated clerkship; patient experience; doctor–patient relationship; patient-centredness; consultation



Introduction

Over the last 40 years, longitudinal integrated clerkships (LICs) have become an increasingly popular alternative to the traditional block rotation of clinical education [1,2]. Clear educational and workforce benefits have been described, particularly increasing interest in working in rural settings and in primary care [1]. The organising principle of a LIC is continuity [3]: students contribute to the care of patients over time and across clinical disciplines and have extended educational relationships with their patients’ clinicians [4,5].

It is well documented that patients accept students in their consultations and frequently perceive a value in doing so, often describing benefits to themselves such as longer consultations with more explanation and education about their illnesses [6–8], though some express a reluctance to discuss more personal problems when a student is present [6,8]. The literature on the patient experience in LICs specifically is limited but there is evidence that patients highly value their relationships with LIC students and perceive their experiences of healthcare to be enhanced as a result of their continuity

in both urban and rural settings [9–12]. In these studies, patients described students contributing positively to their medical care by helping with the coordination of care and providing education, explanation and emotional support [9]. LIC students were perceived as being very patient centred and seen to ‘fill a number of gaps in the current healthcare system including providing an interpersonal connection with patients that values the whole person, facilitating communication, access and co-ordination of care’ [9]. They were perceived by patients to have taken on physician-like behaviours and were considered to act as a bridge between patients and their physicians [9]. Hudson et al. [11], found that patients identified new roles for themselves as educators of students and partners in the recruitment of doctors for their communities, and perceived that working with students provided more opportunities to share decision-making in their health care.

This paper reports on an exploration of the experiences of patients with medical students in a dispersed longitudinal integrated clerkship (LIC) in the United Kingdom. Semi-structured interviews were used to

CONTACT Zoë McElhinney  z.c.mcelhinney@dundee.ac.uk  General Practice Undergraduate Education, School of Medicine, University of Dundee, Dundee, Scotland, UK.

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

gather data and these data were analysed using a theoretical framework that focused patient-centredness [13] and catalytic innovation [14].

Theoretical framework

The accepted ideal of the doctor – patient relationship in western societies has undergone considerable change over the last century from predominantly doctor-centred models to the current ideal of mutual participation and patient-centred medicine [15]. The prevailing cultural norms or ‘shapers’ are one of many factors described by Mead and Bower [13] as influencing patient centredness in consultations, with other factors including doctor factors, patient factors, consultation level influences and professional context influences (see Figure 1). Recognising a prior lack of consensus as to the meaning of the term ‘patient centred care’, Mead and Bower identified five conceptual dimensions as characterising patient centred care: biopsychosocial perspective, ‘patient-as-person’, sharing power and responsibility, therapeutic alliance, and ‘doctor-as-person’ [13], (see Table 1). We use these conceptual dimensions as a framework to discuss how LIC students facilitated patient centred care.

The concept of catalytic innovation was developed from Christensen’s disruption theory [16], which describes innovations in business that are simpler and less expensive than existing products and that do not initially meet needs as well as existing products but gradually gain traction because they offer an alternative which is attractive in some way. The classic example being the personal computer as an alternative to the prohibitively expensive mini-computer in the 1980s. Catalytic innovation, a later development of this theory, describes its application to social-sector challenges where changes that offer innovative solutions to address needs in under resourced areas focus on social change on a large scale [14]. Catalytic innovation theory has been used as a framework for interpreting the results of this study as it became apparent that the introduction of widespread LIC placements within the National Health Service (NHS) could be seen as an innovation which could enhance the patient experience in settings where GP resources are stretched.

Context

In Scotland, where there are considerable workforce pressures in general practice, particularly in remote

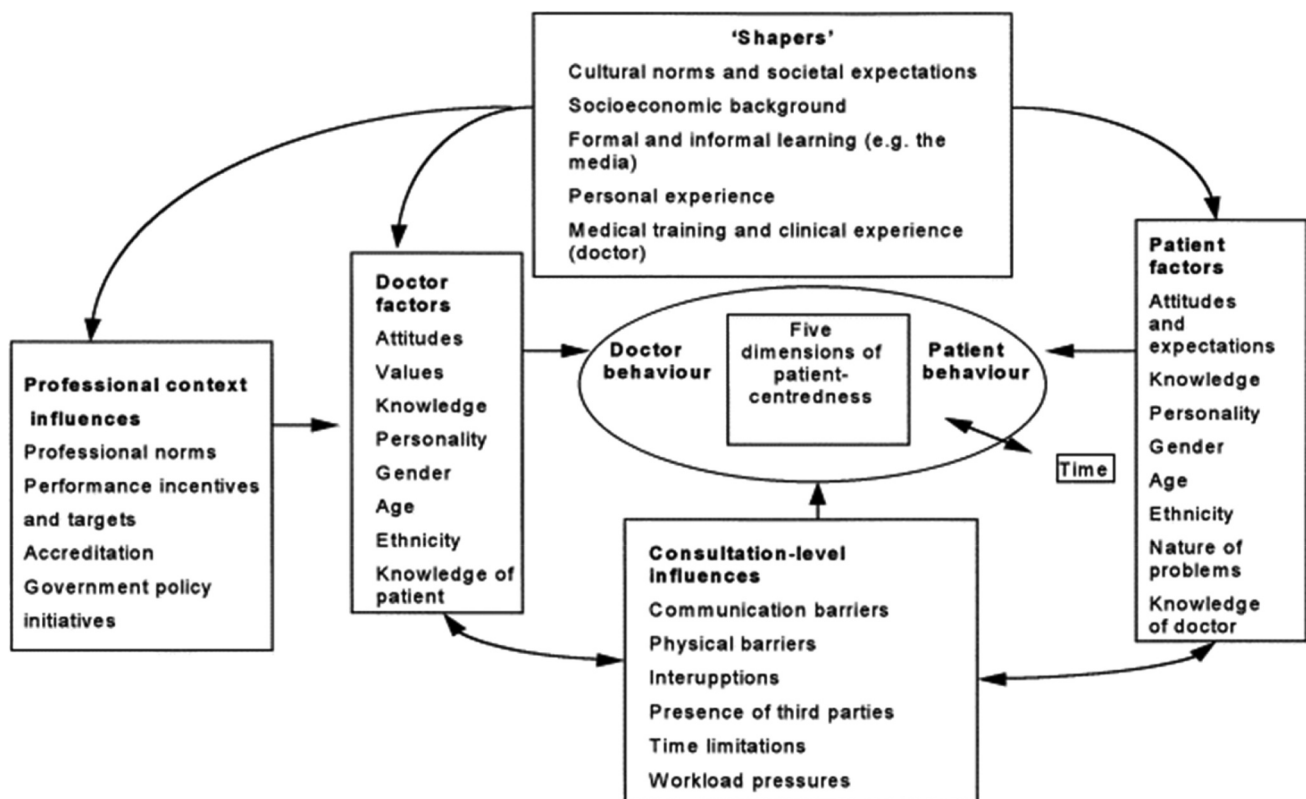


Figure 1. Factors influencing patient-centredness [13]. This Figure was published in *Social Science & Medicine*, 51, Nicola Mead & Peter Bower, Patient-centredness: a conceptual framework and review of the empirical literature, 1087–1110, Copyright Elsevier (2000). Reproduced with permission.

Table 1. Mead and Bower's 5 key dimensions of patient-centredness [13].

Dimension	Description
Biopsychosocial perspective	Degree to which the doctor conceptualises illness using the biopsychosocial model as opposed to biomedical model.
The 'patient-as-person'	Degree to which the doctor attempts to understand the patient's unique experience of illness, incorporating understanding of the patient's personality and context.
Sharing power and responsibility	Degree to which doctor and patient participate as equals in a collaborative relationship.
The therapeutic alliance	Degree to which doctor and patient develop a common understanding of goals of treatment and the requirements of the treatment.
The 'doctor-as-person'	Degree to which personal qualities of the doctor, including awareness of emotional responses, influence the doctor-patient relationship.

and rural areas [17], the UK's first comprehensive LIC was introduced at Dundee School of Medicine in 2016 [18]. Students spend 40 weeks in the penultimate year of the undergraduate medical programme based in general practice (family medicine). They identify their own learning needs and meet them by following the patients they see in their practice as they attend for investigations, outpatient appointments and inpatient treatment in secondary care. Despite logistical barriers, students achieve continuity of care in their interactions with patients in both primary care and secondary care.

In 2020, whole year cohorts (approximately 55 students) in a new 4-year graduate entry medical programme will join Dundee's LIC in their penultimate year. These students, as well as up to ten students from Dundee's 5-year programme, will be involved in the care of patients across Scotland. We considered it necessary to have an understanding of how the involvement of LIC students affects patients' experiences of healthcare in the context of the NHS Scotland.

Methods

The study design is a cross-sectional qualitative study, taking an interpretative phenomenological approach [19].

Potential participants were identified by the students' general practice tutors. Though this may have led to a selection bias, we needed to avoid asking patients who might be too unwell to participate. Potential participants were invited by personal letter from the GP. Participants were provided with written participant information sheets prior to the interview. These were reviewed with the participants prior to gaining consent. Participants were informed that consent could be withdrawn after the interview.

Semi-structured interviews were carried out at the patient's GP practice by a single researcher (ZMcE).

Interviews were carried out at the end of the academic year, either just before or shortly after students had completed their placements. Participants were aware that the researcher was a practising GP. The questions asked explored students' involvement in care, relationships with the student, and how their involvement with the student had affected their experience of healthcare or their understanding of their illness or condition. Interviews were audio recorded and transcribed verbatim by a commercial company. Transcripts were checked against the original recordings for accuracy.

Analysis of the data was carried out by both authors independently. Transcripts were read repeatedly, and codes developed from initial readings. The frequency of occurrence of codes across the dataset was determined and codes reviewed to determine a number of predominant themes in the participants' experiences [20]. The researchers then interrogated the findings to develop possible meanings of the experiences, coming to an overarching interpretative understanding of the phenomenon.

Results

Five patients from two practices participated in the study. One was male and four were female; a range of ages from young working adults to elderly retired adults was represented in the sample. Patients described varying degrees of contact with the students. This ranged from multiple encounters with a student including during a hospital admission and at appointments in both primary and secondary care, to between three and five encounters (telephone and face to face) with a student in primary care.

Two superordinate themes were identified through the analysis: 'disrupting the consultation' and 'disrupting the doctor-patient relationship'. These are discussed below.

Disrupting the consultation

Consultations were disrupted by the presence of a student. Patients described consultations in which the student was 'sitting in' with the doctor (predominantly in secondary care), and those in which the student began the consultation alone with the patient before being joined by the GP to complete the consultation.

Patients tended to perceive that consultations without a student present were doctor-centred. They often attributed this style of consulting to the constraints of the NHS, referring to short appointment times, full

waiting rooms and busy ward rounds as reasons why they felt their medical consultations afforded little time for discussion and explanation. Patients described how their concerns about the demands of their doctors' work had inhibited their interactions with their doctors:

you've got your ten-minute appointment so you don't really want to keep the doctors back. So it's just as quick as you can tell them what the problem is. (P3)

Patients seemed to have some understanding that experienced doctors could arrive at a diagnosis more quickly and that this might lead to the doctors spending less time gathering information:

Because normally when you come to the doctors because they know, I think because they know what they're doing or what they're suspecting, they don't actually tell you. (P5)

The presence of a student in the consultation increased the amount of explanation doctors provided. Listening to discussions between the student and the doctor was helpful for patients, enhancing their understanding of the clinical decision-making process and facilitating discussion between patient, student and doctor with the result that patients felt more involved in their care.

when (Student) was there, he was automatically going into teaching mode. So he was telling her everything, so we were actually learning a lot by listening to what he was telling her ... (P4)

In consultations with students, patients felt that more time was spent listening to their history than would be expected in a typical GP or hospital consultant consultation. Consequently, patients felt they were being treated as an individual rather than a condition and that the students endeavoured to understand the causes of their symptoms.

Students provided knowledge and explanation to patients, enhancing their confidence in asking questions of their doctors. Students acted as intermediaries between patients and doctors, particularly during secondary care consultations:

the medical student helped me to understand what was going on and the severity. so he would speak to me, then by the time they got in I felt I had the ability to ask questions (P1)

Overall, consultations involving students resulted in a more patient-centred experience for patients particularly in Mead and Bower's dimensions of sharing power and responsibility, and 'patient as person' [13].

Disrupting the doctor-patient relationship

Patients described feeling that it could be daunting to visit a GP. In contrast, patients felt that students were able to put them at ease in the consultation. They valued the personal relationships they developed with students and spoke warmly of their interactions with students, describing them as genuine, caring and good at listening.

a genuinely nice person that you felt comfortable talking to (P1)

Students were very much seen as belonging to the medical profession, as evidenced by patients referring to them at times as 'doctors',

she had a very caring nature as a doctor I would say probably one of the best I've seen (P5)

and patients expressed surprise that they could feel so comfortable talking to prospective doctors.

there was that genuine ability to be able to talk to somebody on a one to one basis without that other person feeling any less than what they are (P1)

Encounters with students were described as having a lasting effect on patients' approach to their medical care by having altered their perceptions of how they could participate in a consultation,

I think it gives you confidence to perhaps say, well can we try something else? (P2)

I was asking more questions than I'd normally do (P3)

and of the medical profession:

just made me feel more relaxed and if I could speak to her like that, I could speak to the doctors like that (P3)

Discussion

The presence of students disrupted the status quo through effects on both the process of the consultation and on the doctor-patient relationship. The findings align with those of previous studies on patient perceptions of the involvement of students in their care reporting increased explanation, knowledge and emotional support [7,9]. The disruptive effect of the student on the doctor-patient relationship has not been previously described. The disruption (a change in the accepted or expected order of things) effected by patients' involvement with students was achieved through empowering patients during consultations by increasing patient-centredness and by reforming patients' views of the medical profession.

Students facilitated a move to a more patient-centred model of consulting predominantly by increasing the salience of three of Mead and Bower's dimensions of patient-centredness. These three dimensions were: 'patient-as-person' (patients felt that students saw them as individuals, not conditions), 'sharing power and responsibility' (students altered the balance of power in the consultation, increasing the patients' power by facilitating discussions with the patients' doctors and providing information and education) and 'therapeutic alliance' (the degree to which there is a common understanding of treatment goals) [13]. Effects on two of Mead and Bower's five dimensions of patient centredness ('biopsychosocial perspective', the degree to which doctors generally apply a biopsychosocial model rather than biomedical model and 'doctor-as-person', the personal qualities of doctor) [13], being related to the personal behaviours and qualities of the doctor, were not demonstrated. Further research would be helpful to explore the influence of LIC students on these two dimensions of patient-centredness.

This increase in these three dimensions of patient-centredness was achieved by altering factors which altered either the process of the consultation or the doctor-patient relationship [13]. Factors predominantly affecting process included consultation level influences (longer appointments and fewer workload pressures for student consultations, and the presence of students as a third party in doctor-patient consultations altering the behaviour of doctors) and professional context influences (students come from an educational background which promotes patient centredness, provides training in consultation skills and emphasises the biopsychosocial perspective). Factors influencing the relationship include 'shapers' and their influences on patient factors and doctor factors such as attitudes to and expectations of the consultation. As well as influences on the consultation process, the relationship between student and patient works on a higher level to disrupt the doctor-patient relationship by challenging patients' expectations (shaped by cultural norms, media depictions of doctors, societal expectations and prior experience) of how the relationship between doctor and patient 'should' be [13]. It was evident from patients in this research that they expected interactions to be time-pressured and doctor-centred with little opportunity for discussion, based on their prior experience and their understanding of the constraints of the NHS. Patients described feeling comfortable in their interactions with students, seeing them as 'normal' people as well as members of the medical profession, and feeling

that students saw them as individuals, not just medical problems.

The disruption in the status quo empowered patients. They started to imagine different ways of interacting with doctors and participating in consultations. There was a sense that they were re-evaluating their perceptions of the medical profession and starting to feel that they could interact with doctors on a more equal basis. Some patients reported that they had subsequently approached consultations with their doctors differently and that this had been a positive experience for them. In this way, patients' altered expectations of the doctor-patient relationship (patient factors) influenced their behaviour in the consultation, increasing the likelihood of patient centred consultations by influencing the dimensions of sharing power and responsibility, therapeutic alliance and 'patient-as-person' [13]. Patients had increased expectations of sharing of power and responsibility and of a therapeutic alliance with their doctors and their new-found assertiveness encouraged them to explain and contextualise their problems more fully, thus promoting the 'patient-as-person' dimension.

Christensen's theory of catalytic innovation [14] can be applied to the disruptive changes described by the involvement of LIC students in patient care. The introduction of LIC students in UK general practice can be considered as an 'innovation' offering an alternative to GP time which meets some of the needs of patients and is attractive to patients through the facilitation of patient-centred care. As in previous studies, LIC students appeared to 'fill gaps' in the healthcare system [9]. Medical education in the UK favours patient-centred models of consulting and wider political drives such as the 'Realistic Medicine' campaign in Scotland [21] seek to improve patients' participation in their care. However, well-documented workload pressures in UK general practice [22] and short consultation times (typically 10 minutes in UK general practice) are factors identified by Mead and Bower as negative consultation level influences on patient centredness [13]. In our study, patients identified the workload pressures of their doctors and short consultation times as reasons why they held back from asking questions and initiating discussions, behaviours which they desired and which would have improved the patient centredness of the consultation. This suggests that consultation level factors affect patient-centredness through their influences on the patient as well as the doctor.

The longitudinality of the LIC placement appeared to be vital in enabling patients to consider consulting with the student as an acceptable alternative to a GP consultation and in enabling the patient and student to develop a therapeutic relationship during the LIC. The fact that

the student was embedded in the patient's familiar GP surgery, overtly part of that community of practice through 'legitimate peripheral participation' [23] gave the patients confidence in the students' positional authority and allowed for the development of trust. Patients felt able to discuss personal problems with LIC students in contrast to earlier studies describing patient reluctance to discuss such issues with students [6,8].

Strengths and weaknesses

The strength of this study is the richness of the data collected which allowed the researchers to develop an in-depth understanding of the experiences of patients involved in the LIC. The richness of the data, being the main consideration in phenomenological research, means that the small number of participants did not impair the validity of these findings.

Weaknesses include possible selection bias given that patients were invited by their GPs, and that no patients described negative experiences or expressed any negative views of the LIC could be an indication of bias resulting from their knowledge of the interviewer. Patients were aware that the interviewer was a practising GP and a member of the academic team involved with the LIC at the University of Dundee. This could have led patients to modify answers which could have been seen to be critical of GPs or the LIC or to be keen to make clear their understanding of the workload pressures facing GPs.

Conclusion

These findings suggest that medical students undertaking LICs can have a powerful and enduring effect on patients' experiences of healthcare as a result of empowering patients in their future interactions with doctors. LICs could therefore be promoted not only for their educational and workforce benefits, but for their positive effects on patients' experiences of healthcare. The presence of LIC students in general practice could be seen as a 'catalytic innovation' [14] improving patients' immediate experiences of healthcare and producing enduring change in their perceptions of the type of therapeutic relationship they could have with their doctors.

Acknowledgments

The authors would like to thank the patients who participated in this research and the GP tutors who assisted in the

recruitment of participants.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Zoë McElhinney  <http://orcid.org/0000-0003-0822-2698>

Maggie Bartlett  <http://orcid.org/0000-0001-9200-7645>

Ethical Approval

Ethical approval was granted by the NHS research ethics committee (REC Reference 18/SC/0704).

References

- [1] Walters L, Greenhill J, Richards J, et al. Outcomes of longitudinal integrated placements for students, clinicians and society. *Med Educ.* 2012;46:1028–1041.
- [2] Halaas GW. The rural physician associate program: successful outcomes in primary and rural practice. *Rural Remote Health.* 2005;5(2):453.
- [3] Hirsh DA, Ogur B, Thibault GE, et al. Continuity as an organising principle for clinical education reform. *New Eng J Med.* 2007;356:858–866.
- [4] Norris TE, Schaad DC, DeWitt D, et al. Longitudinal integrated clerkships for medical students: an innovation adopted by medical schools in Australia, Canada, South Africa, and the United States. *Acad Med.* 2009;84:902–907.
- [5] Worley P, Couper I, Strasser R, et al. A typology of longitudinal integrated clerkships. *Med Educ.* 2016;50(9):922–932.
- [6] Mol SSL, Peelen JH, Kuyvenhoven MM. Patients' views on student participation in general practice consultations: a comprehensive review. *Med Teach.* 2011;33:e397–e400.
- [7] Price R, Spencer J, Walker J. Does the presence of medical students affect quality in general practice consultations? *Med Educ.* 2008;42(4):374–381.
- [8] O'Flynn N, Spencer J, Jones R. Does teaching during a general practice consultation affect patient care? *Br J Gen Pract.* 1999;49(438):7–9.
- [9] Poncelet AN, Wamsley M, Hauer KE, et al. Patient views of continuity relationships with medical students. *Med Teach.* 2013;35(6):465–471.
- [10] Hudson JN, Weston KM, Farmer EE, et al. Are patients willing participants in the new wave of community-based medical education in regional and rural Australia? *Med J Aust.* 2010;192(3):150–153.
- [11] Hudson JN, Knight PJ, Weston KM. Patient perceptions of innovative longitudinal integrated clerkships based in regional, rural and remote primary care: a qualitative study. *BMC Fam Pract.* 2012;13(1):72.
- [12] Ivory KD, Luscombe G, Klein LA, et al. "Thank you for giving me a voice!" A longitudinal evaluation of patients' experience of partnering with students in an

- Australian medical school. *J Med Educ Curric Dev.* 2017;4:2382120517692776.
- [13] Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. *Soc Sci Med.* 2000;51(7):1087–1110.
- [14] Christensen M, Baumann H, Ruggles R, et al. Disruptive innovation for social change. *Harv Bus Rev.* 2006 Dec;1–7.
- [15] Kaba R, Sooriakumaran P. The evolution of the doctor-patient relationship. *Int J Surg.* 2007;5:57–65.
- [16] Christensen CM, Baumann H, Ruggles R, et al. Disruptive innovation for social change. *Harv Bus Rev.* 2006 Dec;84(12):94–101, 163.
- [17] Primary care workforce survey Scotland 2017. A survey of Scottish general practices and general practice out of hours services. Scotland: Information Services Division, NHS National Health Services Scotland; 2018. [cited 2020 Nov 17]. Available from: <https://www.isdscotland.org/Health-Topics/General-Practice/Publications/2018-03-06/2018-03-06-PCWS2017-Report.pdf>
- [18] Bartlett M, Dowell J, Graham F, et al. Dundee’s longitudinal integrated clerkship: drivers, implementation and early evaluation. *Educ Prim Care.* 2019;30(2):72–79.
- [19] Pietkiewicz I, Smith JA. A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychol J.* 2014;20(1):7–14.
- [20] Smith JA, Flowers P, Larkin, M. Interpretative phenomenological analysis: Theory, method and research. London: Sage; 2009.
- [21] Calderwood C Realistic medicine: chief medical officer’s annual report, 2014–15. Edinburgh: The Scottish Government; 2016. [cited 2020 Nov 17]. Available from: <https://www.gov.scot/binaries/content/documents/govscot/publications/progress-report/2016/01/chief-medical-officers-annual-report-2014-15/documents/chief-medical-officers-annual-report-2014-15/chief-medical-officers-annual-report-2014-15/govscot%3Adocument/00492520.pdf>
- [22] The King’s Fund. Understanding pressures in general practice. London: The King’s Fund; 2016. [cited 2020 Nov 17]. Available from: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Understanding-GP-priorities-Kings-Fund-May-2016.pdf
- [23] Lave J, Wenger E. Situated learning: legitimate peripheral participation. Cambridge: Cambridge University Press; 1991.