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On becoming a GP: professional identity formation in GP residents

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I came in from the wilderness, a creature void of form.

Bob Dylan

Chapter 1

General introduction

1

Sketches of PIF

The developmental stages of Homo Medicalis

When I arrived in Leiden in 1996 as a first-year medical student, my image of what I would become wasn't much more concrete than a copper plate (polished by me every Saturday morning) on the door of a stately mansion, somewhere in Friesland, with my name on it, stating I was a general practitioner, in ornamental letters.

Ten years later I made my first home visit as a General Practice (GP) resident. I searched my way through a village that I did not know and that did not know me. When I had found the right address, I rang the bell and through the intercom I heard: "Who's there?" I hesitated for a moment what to say, but then, to my own surprise, I called out, "The doctor!" The door buzzed open.

In the previous 10 years I had gone through all the prescribed developmental stages of Homo Medicalis. From student, through intern and ward doctor, to general practitioner in training. From the lecture theatre to the consulting room. From theory to practice. From watching others to doing the job by myself. But it wasn't until I was asked, "Who's there?" that I realised the journey I had taken.

Another 10 years later, I began a PhD in Professional Identity Formation (PIF). Through that frame of mind, I now view that long journey as an intensive socialisation process, influenced by all kinds of factors. Most prominent, of course, were the role models I encountered along the way, the clinical experiences and stories of patients. These and other factors formed my professional identity(1).

Professional Identity Formation and its precursors at a glance

Supporting the development of a professional identity is a primary objective of medical education(2-6). Our identity - who we are - guides our behaviour. Our professional identity - who we are as professionals - guides our behaviour as professionals and is the cornerstone of professionalism(2, 7). PIF is a relatively new framework in which physicians' professionalism can be discussed. It is about the socialisation process through which residents become professionals who think, act, and feel like a physician(5). The personal example above, illustrates PIF as a dynamic process achieved through socialisation(3). Where we used to discuss professionalism in terms of virtues (the good physician as a person of character) or

behaviour (the good physician as a person who demonstrates competence), medical education research now focuses on identity and its formation (the good physician as a person who integrates into his or her identity a set of values corresponding with the physician community with the result to think, act, and feel like a physician)(8). However, an emphasis on professional behaviour will remain important, not least because unprofessional behaviour can be seen as a signal indicating the derailment or stagnation of PIF. Therefore, in this thesis PIF is unravelled in the context of GP residency using the findings from four studies, following two lines of thought: 1. from unprofessional behaviour to PIF and 2. from GP practice to GP training.

A sneak preview

Below, we present illustrative quotes from the 4 studies we have undertaken, which aim to give the reader a preview into the empirical studies on which this thesis is based.

Complainant (male, 53) and his wife complain about the care provided at the out-of-hours general practice (OOH GP) because of a missed diagnosis combined with not being taken seriously by the GP (quote from **Study 1**) :

“What we want is this situation not to recur, not with another patient. Let it be a learning experience. Fortunately, it ended well, but it could have gone differently. Had we followed that GP's advice, the consequences might have been incalculable.”

Designated professionalism faculty member (male) answering the question: “What kind of unprofessional behaviour is seen among GP residents?” (quote from **Study 2**):

“Being unteachable, that's a very strong synopsis ... so someone who is not teachable in any way. Not giving insight, not communicating, not giving insight in things that have gone wrong, especially mistakes that have been made.”

Resident (female, third-year) in a focus group conversation discussing the question: “How do residents become good GPs?” (quote from **Study 3**):

“I think that the bond you have with your supervisor is very important for your own development. Because [a poor bond] can really hinder your own development and cause insecurity. ... it’s very important in how you can learn. And whether you get the space to learn and whether the supervisor suits you. And I think that also partly determines how you are formed as a GP. So, how you develop.”

Clinical supervisor (female) in a focus group discussion discussing the question: “What is your role in supporting residents toward becoming GPs?” (quote from **Study 4**):

“I especially like the fact that you can support a resident through personal growth to become a GP. So, that’s what I really like to see when you ‘deliver’ them. That you think: gosh, he really has become a GP.”

We start our study into PIF in the context of GP residency by studying the public’s expectations of GPs. We do this by means of a focus on GPs’ unprofessional behaviours as vented in patient complaints. The reason for beginning our research from the viewpoint of the patient is eloquently summarised by the American physician and abdominal surgeon John Benjamin Murphy (1857–1916): “The patient is the centre of the medical universe around which all our works revolve and towards which all our efforts tend.”(9, 10). Moreover, research has shown that lapses in physicians’ professionalism may affect health outcomes, therapeutic relationships and the public’s perception and trust in the medical profession(11-18). Patient complaints provide unique and important insights into people’s expectations. Unsolicited complaints do this par excellence as they contain spontaneously provided information reflecting issues that are of high importance to patients, which would otherwise remain uncaptured(14, 15, 19, 20). Most research on what is perceived as (un)professional behaviour has hitherto been conducted in a hospital setting(11-16, 21). Therefore we chose the GP context for this study, and more specifically the OOH GP context, as we expected lapses in professionalism that may go unnoticed in regular GP care to emerge more clearly in OOH GP, the context which asks the utmost of a GP(22-25). Quote 1 illustrates that the GP care provided is sometimes suboptimal. Moreover, GPs sometimes display unprofessional behaviour.

Studying patient complaints and especially the burden physicians' unprofessional behaviour imposes on patients, raises the question how unprofessional behaviour and its remediation are addressed in GP training. Moreover, research has revealed a clear association between the unprofessional behaviour of physicians and unprofessional behaviour during undergraduate and postgraduate training(26-30). However, the literature reveals that there is a lack of appropriate language to describe unprofessional behaviour and its remediation(31, 32). This contributes to identifying of lapses in professionalism either too late, or not at all. This is often termed as 'failure to fail'. To overcome this problem, the Four I's model for describing unprofessional behaviours was recently developed, consisting of descriptors for unprofessional behaviour, classified into four distinct categories; lack of Involvement (failure to engage); lack of Integrity (dishonest behaviour); lack of Interaction (disrespectful behaviour); and lack of Introspection (poor self-awareness)(31, 33). This model originated from research in undergraduate medical education (UGME). Thorough research into unprofessional behaviour and its remediation in the postgraduate medical education (PGME) setting, including the application of the Four I's model, was thus far absent(34, 35). Therefore, in our second study we investigated which unprofessional behaviours of GP residents GP clinical supervisors and faculty were confronted with, and how they remediated these unprofessional behaviours. Quote 2 illustrates that unprofessional behaviour is indeed a thorny problem in GP training and begs the question how residents are formed into professional GPs. A behaviour-based perspective on professionalism focussing on (un)professional behaviour and remediation indeed remains indispensable(36, 37). However, it was felt that a broader view on the process of developing into a professional - beyond professionalism as a measurable competency - was needed(38). Therefore, in medical education research the focus shifted to the perspective of 'Professional Identity Formation' (PIF)(6). The fact that residency - although sparsely studied with regard to PIF - has often been identified as a key stage in PIF and the GP context is unique on i which to study PIF, is why subsequently we delve into PIF itself; first from the viewpoint of residents; and then from the viewpoint of their supervisors.

Quotes 3 and 4 illustrate aspects of the development of GP residents into professional GPs. With these studies we aim to understand the complexity of PIF and the role of influencing factors on PIF, as this can add to a more purposeful approach to the subject(2, 5, 39, 40). An approach in which resident's need for support in PIF is acknowledged: this approach must

also allow supervisors and faculty members to acquire adequate tools to intervene in the process of PIF where necessary.

Rationale

Social contract

Physicians' professionalism is a core factor in providing high-quality patient care(41, 42). The unprofessional behaviour by physicians on the other hand, compromises patient-physician relationships, patient safety and quality of care. It can also harm patients' trust in the medical profession(43-48). However, not all doctors seem to have a clear understanding of what the public expects from them. Numerous recent national and international high-profile media cases questioned doctors professionalism and consequently led to the belief that medicine's professionalism is under threat(49, 50).

The relationship medicine holds with society can be described as a 'social contract', detailing the obligations, rights and expectations of society and medicine toward one other(51, 52). Although parts of this social contract are written down in laws and guidelines, other important parts, relating to medicine's moral basis, are difficult to pin down in rules and regulations. Caring, compassion and commitment, for instance, are fundamental to the social contract(52). Individual patients and society as a whole expect physicians to reflect these values in their daily practice(52). Responding effectively to societal expectations and obligations is thus necessary for the maintenance of medicine as a profession(53). Professionalism can consequently be seen as the profession's contribution to the social contract(54).

Differing frameworks

There are differing frameworks that can be used to address professionalism. These differing frameworks are reflected in the many definitions on professionalism and made Erde state: "I do not strive for a clear and unambiguous definition of 'professionalism' because I do not believe one is possible"(55). The dominant professionalism frameworks, however, can be distinguished from one another and either focus on professionalism as attitude, as behaviour or as a process.

Until recently, two lines of thought on professionalism could be distinguished in the medical education literature; on one hand professionalism can be viewed as an abstract, theoretical construct; and on the other a more practical one, namely professionalism as a behaviour(8, 56). In the first approach, professionalism is described in idealistic terms (e.g. altruism, accountability, integrity etc.) which often mirror attitude, virtues, values or character traits, but which are difficult to assess(8, 56). In the second approach, professionalism is perceived as behaviours, which are observable and can be assessed, and for which expectations can relatively easily be set. Improvements in the professional behaviour of doctors are closely associated with improvements in healthcare outcomes(41). Unprofessional behaviour among doctors is a recurring theme in patient complaints about doctors(41, 57). Unprofessional behaviour of doctors not only negatively affects the patient-doctor relationship(47) but also compromises patient safety and quality of care(41, 58). Moreover, the unprofessional behaviour of doctors can harm patients indirectly by endangering the ‘social contract’ doctors have with society(41, 51).

The foundation for future professional behaviour is laid during the educational years. In the current era of competency-based medical education, professional behaviour is an elaboration of the ‘Professional role’, as is in the widely adopted CanMEDS framework(59). Interest in this role in medical education gained momentum when research showed a clear association between unprofessional behaviour in both undergraduate and postgraduate medical school, and unprofessional behaviour in later clinical practice. These recent developments have caused professionalism to become a key element in medical education and postgraduate training(59-62).

To address the concern that professionalism education would be seen as merely completing a list of values and desired behaviours, the concept of PIF has been added to the discourse. We will discuss this in more detail in the next paragraph(8).

Professional Identity Formation

Central to the perspective of PIF is the focus on the process by which a doctor becomes a professional within the professional community(63). PIF, defined as the development of professional values, actions and aspirations(64), happens at two levels: (1) at the individual level, involving the psychological development of a person and (2) at the collective level, involving a socialisation process(65). Socialisation can be defined as the process by which an

individual learns to function within a particular group or society by internalising its values and norms(52).

Developing the identity of a doctor, i.e., learning to think, feel, and act as a physician is a perspective that is becoming increasingly influential in medical education(3, 5, 8). This change in focus is compatible with the perspectives of moral psychologists who studied the gap between knowing and doing. They state that beliefs and values alone are insufficient to ensure professional behaviour; they need to be deeply rooted in one's identity(66).

However, exactly what happens to individuals during this process as they move from lay outsiders to skilled professionals and full members of the medical community is to great extent, unknown.

Understanding the process involved in the development of a resident's professional identity and the roles of influencing factors, could add to a more purposeful approach to PIF(2, 5, 39, 40).

Whereas many studies have explored PIF in undergraduate medical education (UGME) (67-76), only a few empirical studies have explored PIF in postgraduate medical education (PGME)(40, 77-81). This is even more true for research on PIF in GP residency. This is striking as residency in general is identified as a key stage in PIF because it forms the physician-to-be(64, 78, 79).

Nevertheless, General Practice is a unique niche in which PIF can be studied because in GP training the relationship between resident and supervisor is relatively long-term and personal. The supervisor witnesses the unfolding of residents' PIF, which can yield valuable insights into this process.

Aims

This thesis presents a series of studies aimed to unravel Professional Identity Formation in the context of GP residency. The following research questions will be addressed:

1. How can patient complaints in the GP setting be characterised and what elements of physicians' professionalism are addressed in these complaints? (**Study 1**)

2. Which behaviours of GP residents are considered unprofessional according to their supervisors and faculty and how is remediation applied? (**Study 2**)
3. How do residents perceive their PIF process during GP residency and what factors are perceived to be influential? (**Study 3**)
4. How do supervisors perceive their role in the PIF of residents? (**Study 4**)

Context

The studies presented in this thesis were conducted at the eight GP training centres in the Netherlands, with the exception of study 1, which was conducted at an out-of-hours general practice cooperative (GP Services Rijnland).

Postgraduate training for general practice in the Netherlands is offered by the Departments of Family Medicine at eight university medical centres. They offer highly comparable programmes, which last approximately three years, depending on the trainee's prior experience and personal circumstances. Years one and three consist of providing patient care under the supervision of a single designated supervisor. Year two consists of rotations in Accident and Emergency, nursing homes and psychiatric outpatient clinics, with different supervisors. Throughout the training programme, four days of practice are complemented by a day-release program at the university, staffed by GP and behavioural science teachers, designed to deepen learning from experiences in practice. The days in GP practice expose residents to clinical experiences with increasing complexity over time and allow them to consult their GP-supervisors as needed. In years one and three, residents also have two 'independent clinical weeks', in which GP-supervisors leave the practice entirely to the resident.

Because the quality of research is defined by, amongst other things, the integrity and transparency of the research philosophy of the researchers(82), we want to acknowledge our view on the nature of reality (ontology) and the nature knowledge (epistemology)(82, 83). Our ontological and epistemological assumptions are grounded in a constructivist paradigm. This means we see reality as subjective and changeable and knowledge as based upon diverse

interpretations of reality(83). As a consequence of our constructivist stance our methods are qualitative(82, 83).

Thesis overview and methodology

In **Chapter 1**, we present a short introduction in which we guide our readers into the research field of PIF and its precursors and describe the research aims and context of our studies.

In **Chapter 2**, we present a retrospective observational study in which all unsolicited patient complaints to a representative out-of-hours general practice service provider over a 10-year period, were analysed. In this study, we aimed to characterise the patient complaints as well as to illuminate what elements of physicians' professionalism were addressed in these complaints.

In **Chapter 3**, we present an exploratory study applying thematic analysis of data derived from semi-structured focus group interviews with supervisors from four Dutch GP training institutes and individual semi-structured interviews with all eight designated professionalism faculty members. In this study we aimed to investigate which behaviours of GP residents are considered unprofessional according to supervisors and faculty, and how remediation is applied.

In **Chapter 4**, we present a qualitative descriptive study using semi-structured focus group interviews with residents from four Dutch GP training institutes. We conducted this study with the objective to gain insight into the process of PIF during GP residency from the perspective of residents themselves and to assess which factors they perceived as influential.

In **Chapter 5**, we present a qualitative study based on qualitative description, in which we conducted semi-structured focus group interviews with supervisors from four Dutch GP training institutes. In this study we sought to understand how supervisors perceive their role in the PIF of their residents.

In **Chapter 6**, the results of the previous chapters are aggregated and synthesised into a set of conclusions and discussed in relation to the literature. In addition, we consider the strengths and weaknesses of our research. We conclude with implications for both GP practice as well as medical education and research.

Chapter 7, contains a summary in English and in Dutch as well as some information about the author.

References

1. Barnhoorn PC. Wat is professioneel? Professionaliteit in de zorg: Springer; 2021. p. 1-8.
2. Rees CE, Monrouxe LV. Who are you and who do you want to be? Key considerations in developing professional identities in medicine. *Medical Journal of Australia*. 2018;209(5):202-3.
3. Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. Reframing medical education to support professional identity formation. *Academic Medicine*. 2014;89(11):1446-51.
4. Cruess RL, Cruess SR, Steinert Y. Amending Miller's pyramid to include professional identity formation. *Academic Medicine*. 2016;91(2):180-5.
5. Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. *Academic Medicine*. 2015;90(6):718-25.
6. Barnhoorn PC, Houtlosser M, Ottenhoff-de Jonge MW, Essers GT, Numans ME, Kramer AW. A practical framework for remediating unprofessional behavior and for developing professionalism competencies and a professional identity. *Medical teacher*. 2019;41(3):303-8.
7. Monrouxe LV. Identity, identification and medical education: why should we care? *Medical education*. 2010;44(1):40-9.
8. Irby DM, Hamstra SJ. Parting the clouds: three professionalism frameworks in medical education. *Academic Medicine*. 2016;91(12):1606-11.
9. Barnhoorn PC, Youngson CC. Defining professionalism: Simplex sigillum veri! *Med Teach*. 2014;36(6):545.
10. Barnhoorn PC, Youngson C. Refining a definition of medical professionalism. *Acad Med*. 2014;89(12):1579.
11. Saha R, Kabanovski A, Klejman S, Margolin E, Buys YM. Patients' complaints involving ophthalmologists in the province of Ontario, Canada: a 5-year review. *Can J Ophthalmol*. 2019.
12. Catron TF, Guillaumondegui OD, Karrass J, Cooper WO, Martin BJ, Dmochowski RR, et al. Patient Complaints and Adverse Surgical Outcomes. *American journal of medical quality : the official journal of the American College of Medical Quality*. 2016;31(5):415-22.
13. Wofford MM, Wofford JL, Bothra J, Kendrick SB, Smith A, Lichstein PR. Patient complaints about physician behaviors: a qualitative study. *Academic medicine : journal of the Association of American Medical Colleges*. 2004;79(2):134-8.
14. Montini T, Noble AA, Stelfox HT. Content analysis of patient complaints. *International Journal for Quality in Health Care*. 2008;20(6):412-20.
15. van Mook WN, Gorter SL, Kieboom W, Castermans MG, de Feijter J, de Grave WS, et al. Poor professionalism identified through investigation of unsolicited healthcare complaints. *Postgrad Med J*. 2012;88(1042):443-50.
16. Mattarozzi K, Sfrisi F, Caniglia F, De Palma A, Martoni M. What patients' complaints and praise tell the health practitioner: implications for health care quality. A qualitative research study. *Int J Qual Health Care*. 2016; 29(1), 83-89
17. Aguilar AE, Stupans L, Scutter S. Assessing students' professionalism: considering professionalism's diverging definitions. *Educ Health (Abingdon)*. 2011;24(3):599.
18. Cruess RL, Cruess SR, Steinert Y. Teaching medical professionalism: supporting the development of a professional identity: Cambridge University Press; 2016.
19. Gillespie A, Reader TW. The Healthcare Complaints Analysis Tool: development and reliability testing of a method for service monitoring and organisational learning. *BMJ Qual Saf*. 2016;25(12):937-46.
20. Reader TW, Gillespie A, Roberts J. Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Qual Saf*. 2014;23(8):678-89.
21. Kee JW, Khoo HS, Lim I, Koh MY. Communication skills in patient-doctor interactions: learning from patient complaints. *Health Professions Education*. 2018;4(2):97-106.

22. Wallace E, Cronin S, Murphy N, Cheraghi-Sohi S, MacSweeney K, Bates M, et al. Characterising patient complaints in out-of-hours general practice: a retrospective cohort study in Ireland. *British Journal of General Practice*. 2018;68(677):e860-e8.
23. Barragry RA, Varadkar LE, Hanlon DK, Bailey KF, O'Dowd TC, O'Shea BJ. An analytic observational study on complaints management in the general practice out of hours care setting: who complains, why, and what can we do about it? *BMC family practice*. 2016;17:87.
24. Gaal S, Hartman C, Giesen P, Van Weel C, Verstappen W, Wensing M. Complaints against family physicians submitted to disciplinary tribunals in the Netherlands: lessons for patient safety. *The Annals of Family Medicine*. 2011;9(6):522-7.
25. van der Horst HE, de Wit N. Redefining the core values and tasks of GPs in the Netherlands (Woudschoten 2019). *British Journal of General Practice*. 2020;70(690):38-9.
26. Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND. Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board. *Academic medicine*. 2004;79(3):244-9.
27. Papadakis MA, Teherani A, Banach MA, Knettler TR, Rattner SL, Stern DT, et al. Disciplinary action by medical boards and prior behavior in medical school. *The New England journal of medicine*. 2005;353(25):2673-82.
28. Teherani A, Hodgson CS, Banach M, Papadakis MA. Domains of unprofessional behavior during medical school associated with future disciplinary action by a state medical board. *Academic medicine*. 2005;80(10 Suppl):S17-20.
29. Papadakis MA, Arnold GK, Blank LL, Holmboe ES, Lipner RS. Performance during internal medicine residency training and subsequent disciplinary action by state licensing boards. *Ann Intern Med*. 2008;148(11):869-76.
30. Krupat E, Dienstag JL, Padrino SL, Mayer JE, Jr., Shore MF, Young A, et al. Do Professionalism Lapses in Medical School Predict Problems in Residency and Clinical Practice? *Academic medicine* .: 2020;95(6):888-95.
31. Mak-van der Vossen M, Teherani A, van Mook W, Croiset G, Kusurkar RA. How to identify, address and report students' unprofessional behaviour in medical school. *Medical teacher*. 2020;42(4):372-9.
32. Pirie Ziring D, Frankel RM, Danoff D, Isaacson JH, Lochnan H. Silent witnesses: faculty reluctance to report medical students' professionalism lapses. *Academic Medicine*. 2018;93(11):1700-6.
33. Mak-van der Vossen M, van Mook W, van der Burgt S, Kors J, Ket JCF, Croiset G, et al. Descriptors for unprofessional behaviours of medical students: a systematic review and categorisation. *BMC medical education*. 2017;17(1):164.
34. Papadakis MA, Paauw DS, Hafferty FW, Shapiro J, Byyny RL. Perspective: the education community must develop best practices informed by evidence-based research to remediate lapses of professionalism. *Academic medicine*. 2012;87(12):1694-8.
35. Pirie J, Amant LS, Takahashi S. Managing residents in difficulty within CBME residency educational systems: a scoping review. *BMC medical education*. 2020;20(1):1-12.
36. van Mook WN, van Luijk SJ, Zwietering PJ, Southgate L, Schuwirth LW, Scherpbier AJ, et al. The threat of the dyscompetent resident: A plea to make the implicit more explicit! *Advances in health sciences education : theory and practice*. 2015;20(2):559-74.
37. Barnhoorn PC, Houtlosser M, Ottenhoff-de Jonge MW, Essers G, Numans ME, Kramer AWM. A practical framework for remediating unprofessional behavior and for developing professionalism competencies and a professional identity. *Medical teacher*. 2018:1-6.
38. Holden MD, Buck E, Luk J, Ambriz F, Boisaubin EV, Clark MA, et al. Professional identity formation: creating a longitudinal framework through TIME (Transformation in Medical Education). *Academic medicine*. 2015;90(6):761-7.
39. Cruess SR, Cruess RL, Steinert Y. Supporting the development of a professional identity: general principles. *Medical teacher*. 2019;41(6):641-9.

40. Brown J, Reid H, Dornan T, Nestel D. Becoming a clinician: Trainee identity formation within the general practice supervisory relationship. *Medical education*. 2020;54(11):993-1005.
41. Barnhoorn PC, Essers GT, Nierkens V, Numans ME, van Mook WN, Kramer AW. Patient complaints in general practice seen through the lens of professionalism: a retrospective observational study. *BJGP open*. 2021.
42. Li H, Ding N, Zhang Y, Liu Y, Wen D. Assessing medical professionalism: a systematic review of instruments and their measurement properties. *PloS one*. 2017;12(5):e0177321.
43. Reader TW, Gillespie A, Roberts JJBq, safety. Patient complaints in healthcare systems: a systematic review and coding taxonomy. 2014;23(8):678-89.
44. Schnitzer S, Kuhlmeier A, Adolph H, Holzhausen J, Schenk LJ. Complaints as indicators of health care shortcomings: which groups of patients are affected? 2012;24(5):476-82.
45. Panagioti M, Geraghty K, Johnson J, Zhou A, Panagopoulou E, Chew-Graham C, et al. Association between physician burnout and patient safety, professionalism, and patient satisfaction: a systematic review and meta-analysis. 2018;178(10):1317-31.
46. Rosenstein AH. The quality and economic impact of disruptive behaviors on clinical outcomes of patient care. *American journal of medical quality*. 2011;26(5):372-9.
47. Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. *Jama*. 2002;287(22):2951-7.
48. Cruess R, Cruess S. Updating the Hippocratic Oath to include medicine's social contract. *Medical education*. 2014;48(1):95-100.
49. Cruess SR, Cruess RL. Professionalism must be taught. *Bmj*. 1997;315(7123):1674-7.
50. Van Mook WN, de Grave WS, van Luijk SJ, O'Sullivan H, Wass V, Schuwirth LW, et al. Training and learning professionalism in the medical school curriculum: current considerations. *European journal of internal medicine*. 2009;20(4):e96-e100.
51. Cruess R, Cruess S. Updating the Hippocratic Oath to include medicine's social contract. *Medical education*. 2014;48(1):95-100.
52. Cruess RL, Cruess SR. Professionalism and professional identity formation: the cognitive base. Teaching medical professionalism: Supporting the development of a professional identity. 2016:5-25.
53. Cruess RL, Cruess SR. Teaching professionalism: general principles. *Medical teacher*. 2006;28(3):205-8.
54. Harris JM. It is time to cancel medicine's social contract metaphor. *Academic Medicine*. 2017;92(9):1236-40.
55. Erde EL. Professionalism's facets: ambiguity, ambivalence, and nostalgia. *Journal of Medicine and Philosophy*. 2008;33(1):6-26.
56. Barnhoorn PC. Shared decision making seen through the lens of professional identity formation. *Patient education and counseling*. 2020;103(7):1446-7.
57. van Mook WN, Gorter SL, Kieboom W, Castermans MG, de Feijter J, de Grave WS, et al. Poor professionalism identified through investigation of unsolicited healthcare complaints. *Postgraduate medical journal*. 2012;88(1042):443-50.
58. Rosenstein AH. The quality and economic impact of disruptive behaviors on clinical outcomes of patient care. *American Journal of Medical Quality*. 2011;26(5):372-9.
59. Royal College of Physicians and Surgeons in Canada. The CanMEDS. <https://www.royalcollege.ca/rcsite/canmeds/about-canmeds-e>. Accessed August 30th 2021.
60. Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND. Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board. *Academic Medicine*. 2004;79(3):244-9.
61. Papadakis MA, Teherani A, Banach MA, Knettler TR, Rattner SL, Stern DT, et al. Disciplinary action by medical boards and prior behavior in medical school. *New England Journal of Medicine*. 2005;353(25):2673-82.