On becoming a GP: professional identity formation in GP residents

Barnhoorn, P.C.

On becoming a GP

Professional Identity Formation in GP residents

Pieter C. Barnhoorn

On becoming a GP

Professional Identity Formation in GP residents

Correspondence should be addressed to Pieter C. Barnhoorn, Department of Public Health and Primary Care, Leiden University Medical Center, Hippocratespad 21, PO Box 9600, Zone V0-P, 2300 RC Leiden, The Netherlands; Telephone: +31 (0)71-5268468; e-mail: P.C.Barnhoorn@LUMC.nl

De uitgave van dit proefschrift is mede ondersteund door de Nederlandse Vereniging voor Medisch Onderwijs (NVMO).

Cover copyright: Getty Images
Photographer: W. Eugene Smith
Printing: UFB / Grafimedia, Leiden, The Netherlands

On becoming a GP

Professional Identity Formation in GP residents

Pieter C. Barnhoorn

proefschrift

ter verkrijging van

de graad van doctor aan de Universiteit Leiden,

op gezag van rector magnificus prof.dr.ir. H. Bijl,

volgens besluit van het college voor promoties

te verdedigen op donderdag 2 februari 2023

klokke 16.15 uur

door

Pieter Cornelis Barnhoorn

geboren te Haulerwijk

in 1977

Promotoren

Prof. dr. M.E. Numans

Prof. dr. W.N.K.A. van Mook, Universiteit Maastricht, Maastricht

Copromotor

Dr. V. Nierkens

Promotiecommissie

Prof. dr. M. Bussemaker

Prof. dr. J.M.M. van Lith

Prof. dr. N.D. Scherpbier, Rijksuniversiteit Groningen, Groningen

Prof. dr. C.R.M.G. Fluit, Radboud Universiteit, Nijmegen

Voor Henk Thiadens, Ton van Haastert en Annet Roelen, die mij leerden denken, doen en voelen als een huisarts.

Table of contents

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

Bob Dylan

Chapter 1

1

General introduction

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, Guillamondegui 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, Kuhlmey 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://wwwroyalcollegeca/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.

62. 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):S17-S20.
63. Wynia MK, Papadakis MA, Sullivan WM, Hafferty FW. More than a list of values and desired behaviors: a foundational understanding of medical professionalism. Academic Medicine. 2014;89(5):712-4.
64. Cooke M, Irby DM, O'Brien BC. Educating physicians: a call for reform of medical school and residency: John Wiley & Sons; 2010.
65. Jarvis-Selinger S, Pratt DD, Regehr G. Competency is not enough: integrating identity formation into the medical education discourse. Academic Medicine. 2012;87(9):1185-90.
66. Kalet A, Buckvar-Keltz L, Harnik V, Monson V, Hubbard S, Crowe R, et al. Measuring professional identity formation early in medical school. Medical teacher. 2017;39(3):255-61.
67. Yakov G, Riskin A, Flugelman AA. Mechanisms involved in the formation of professional identity by medical students. Medical Teacher. 2020:1-22.
68. Wong A, Trollope-Kumar K. Reflections: an inquiry into medical students' professional identity formation. Medical Education. 2014;48(5):489-501.
69. Monrouxe LV. Negotiating professional identities: dominant and contesting narratives in medical students' longitudinal audio diaries. Current Narratives. 2009;1(1):41-59.
70. Helmich E, Bolhuis S, Dornan T, Laan R, Koopmans R. Entering medical practice for the very first time: emotional talk, meaning and identity development. Medical Education. 2012;46(11):1074-86.
71. Kline CC, Park SE, Godolphin WJ, Towle A. Professional identity formation: a role for patients as mentors. Academic Medicine. 2020;95(10):1578-86.
72. Kay D, Berry A, Coles NA. What experiences in medical school trigger professional identity development? Teaching and learning in medicine. 2019;31(1):17-25.
73. Monrouxe LV, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Medical education. 2011;45(6):585-602.
74. Madill A, Latchford G. Identity change and the human dissection experience over the first year of medical training. Social Science & Medicine. 2005;60(7):1637-47.
75. Ratanawongsa N, Teherani A, Hauer KE. Third-year medical students' experiences with dying patients during the internal medicine clerkship: a qualitative study of the informal curriculum. Academic Medicine. 2005;80(7):641-7.
76. Désilets V, Graillon A, Ouellet K, Xhignesse M, St-Onge C. Reflecting on professional identity in undergraduate medical education: implementation of a novel longitudinal course. Perspectives on Medical Education. 2021:1-5.
77. Sternszus R, Boudreau JD, Cruess RL, Cruess SR, Macdonald ME, Steinert Y. Clinical Teachers' Perceptions of Their Role in Professional Identity Formation. Academic Medicine. 2020;95(10):1594-9.
78. Sawatsky AP, Santivasi WL, Nordhues HC, Vaa BE, Ratelle JT, Beckman TJ, et al. Autonomy and professional identity formation in residency training: a qualitative study. Medical education. 2020;54(7):616-27.
79. Pratt MG, Rockmann KW, Kaufmann JB. Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. Academy of management journal. 2006;49(2):235-62.
80. Hansen S, Mathieu S, Biery N, Dostal J. The emergence of family medicine identity among first-year residents: a qualitative study. Family medicine. 2019;51(5):412-9.
81. Barnhoorn PC, Nierkens V, Numans ME, Steinert Y, Kramer AW, van Mook WN. General practice residents' perspectives on their professional identity formation: a qualitative study. BMJ open. 2022;12(7):e059691.
82. Bunniss S, Kelly DR. Research paradigms in medical education research. Medical education. 2010;44(4):358-66.

83. Bergman E, de Feijter J, Frambach J, Godefrooij M, Slootweg I, Stalmeijer R, et al. AM last page: A guide to research paradigms relevant to medical education. Academic Medicine. 2012;87(4):545.

...quand il n'y a plus rien d'autre que l'humanité de

l'autre humain.

Emmanuel Levinas

Chapter 2

Patient complaints in general practice seen through the lens of professionalism: a retrospective observational study

Barnhoorn, P. C., Essers, G. T. J. M., Nierkens, V., Numans, M. E., van Mook, W. N. K. A., & Kramer, A. W. M. (2021). Patient complaints in general practice seen through the lens of professionalism: a retrospective observational study.
BJGP open, 5(3).

Barnhoorn, P. C., Essers, G. T. J. M., Nierkens, V., Numans, M. E., van Mook, W. N. K. A., & Kramer, A. W.M (2021). Ik wil serieus genomen worden: klachten van patiënten op de huisartsenpost.
Huisarts en Wetenschap, 64(12).

Abstract

Background: Professionalism is a key competence for physicians. Patient complaints provide a unique insight into patient expectations regarding professionalism. Research exploring the exact nature of patient complaints in general practice, especially focussed on professionalism, is limited.

Aim: To characterise patient complaints in primary care and to explore in more detail which issues with professionalism exist.

Design & setting: A retrospective observational study in which all unsolicited patient complaints to a representative out-of-hours general practice service provider were analysed over a 10-year period (2009–2019).

Method: Complaints were coded for general characteristics and thematically categorised in themes using the CanMEDS Physician Competency Framework (CanMEDS) framework as sensitising concepts. Complaints categorised as professionalism were subdivided using open coding.

Results: Out of 746,996 patient consultations (telephone, face-to-face and home visits) 484 (0.065%) resulted in eligible complaint letters. The majority consisted of two or more complaints, resulting in 833 different complaints. Most complaints concerned GPs (80%); a minority (19%) assistants. Thirty-five percent concerned perceived professionalism lapses of physicians. We found a rich diversity in the wording of professionalism lapses, where “not being taken seriously” was mentioned most often. Forty-five percent related to medical expertise, such as missed diagnoses or unsuccessful clinical treatment. Nineteen percent related to management problems, especially waiting times and access to care. Communication issues were only explicitly mentioned in 1% of the complaints.

Conclusion: Most unsolicited patient complaints are related to clinical problems. A third, however, concerns professionalism issues. Not being taken seriously was the most frequent mentioned theme within the professionalism category.

How this fits in

Research exploring the exact nature of patient complaints in general practice, especially focussing on professionalism, is limited. It was found that one-third of unsolicited patient complaints concerned professionalism issues. In addition, a rich diversity in the wording of professionalism lapses was found, where 'not being taken seriously' was mentioned most often. By staying close to the words that patients use, the richness of the lessons that can be learnt from patient complaints can be preserved. These lessons provide important opportunities to improve GP care and GP training.

Introduction

Professionalism is a key competence for all physicians(1). Lapses in physicians' professionalism may affect health outcomes, therapeutic relationships and the public's perception and trust in the medical profession(1-8). Perceived professionalism lapses are part of patient complaints in all healthcare settings(6, 9-13). General Practitioners (GPs) are especially vulnerable to patient complaints(13-16).

Patient complaints provide unique and important insights into people's expectations, especially as unsolicited complaints contain spontaneously provided information reflecting issues that are of high importance to patients and are not being captured otherwise(5, 6, 10, 17). Complaints reflect patients' expectations about provided care, especially concerning professionalism. Therefore, complaints are increasingly recognised as a potentially valuable source of information for improving health care quality(6, 7, 9, 18-20). However, the exact relationship between complaints and quality of care is complex. Not all adverse events or all instances of patient dissatisfaction lead to complaints(20, 21). Moreover, patient dissatisfaction may lead to complaints even when provided care has been exemplary(20, 21). A further challenge in research on patient complaints is that professionalism issues may appear in many guises and can even be reflected in complaints if not explicitly mentioned (4, 7, 9-11). Moreover, when coding complaints using a standardised format, there is a danger of losing the richness of lessons that can be learned from patient complaints(10, 22). Research on patient complaints has the potential to address these challenges.

The exact nature of professionalism lapses often goes unnoticed because a universally agreed upon definition of professionalism is missing(23-30). Aspects of professionalism have been defined in terms of virtues (the good physician as a person of character) or behaviour (the good physician as a person who demonstrates competence)(27, 29, 31). In our view, the CanMEDS Physician Competency Framework (CanMEDS), the General Medical Council (GMC) guidance and the Ottawa Working Group on Professionalism provide sufficient direction for research on professionalism, as does research that describes and classifies unprofessional behaviours(32-36). However, what people expect of physicians regarding professionalism and what they consider lapses in professionalism needs to be researched.

It should be acknowledged that professionalism can have different meanings in different contexts(6, 28, 37-40). Most research on what is perceived as (un)professional behaviour has hitherto been conducted in hospital settings(2-7, 41). These studies found that most complaints are about medical, organisational and communication issues as well as lapses in professionalism(2, 4-7, 19). Whether these findings are generalisable to settings outside the hospital is under-researched(2-7, 41). Especially research focussed on professional lapses in the general practice (GP) context needs broadening and deepening, as previous research lacks the qualitative richness that patient complaints deserve(13, 19, 42-45). We expect that professionalism lapses that may go unnoticed in regular GP care emerge more clearly in the out-of-hours general practice (OOH GP), as this context asks the utmost of a GP(19, 44, 46, 47).

Summarising, the exact nature of patient complaints, in particular the perceived professional lapses, often remains enigmatic and unexplored, especially in the GP context. This study therefore aims to answer the following research questions: How can patient complaints in the GP setting be characterised? What elements of physicians' professionalism do patients address in these complaints?

Method

To investigate the exact nature of patient complaints in OOH GP care, with a special focus on perceived professionalism lapses of physicians, a detailed content analysis was performed of original unsolicited patient complaints lodged at an OOH GP centre. The original patient complaints were used in order to stay close to the words that patients used, aiming to preserve the richness of lessons that can be learnt from patient complaints.

Study context

The Dutch health care system is funded by a combination of tax contributions and a compulsory health insurance consisting of a per capita payment and fee-for-service. GPs are responsible for patients enlisted in their practice 24/7. On weekdays between 8:00 AM and 5:00 PM, primary medical health care is delivered by the GP practice. Outside office hours, care is outsourced to the local OOH GP centres. Here, GPs answer emergency calls, offer consultations and arrange home visits(48). The OOH GP cooperative in the present study (GP Services Rijnland) consists of three OOH GP care clinics. These clinics provide care for patients enlisted in GP practices in eight municipalities in both rural and (sub-)urban areas, adding up to 325,000 inhabitants. These three clinics provide 75,000 calls, consultations and home visits annually. If patients are dissatisfied with their care, they can lodge a complaint, either written, by email, telephone, a form on the website or face-to-face, in a robust complaint system managed by a complaints officer.

Study design and procedure

In this retrospective observational study, a content analysis was performed of all unsolicited healthcare complaints lodged at the OOH GP centre between 2009 and 2019, and all related relevant correspondence. For the purpose of this study, a complaint letter was defined as a letter (or transcript of a telephone or face-to-face encounter) which addresses one or more type of wrong doing, offence, grievance or resentment arising from the offered OOH GP service. A complaint was defined as every separately distinguishable type of wrong doing, offence, grievance or resentment which could be distilled from a complaint letter.

All complaint letters were retrieved from storage, anonymised and digitalised by the OOH GP complaints officer.

Excel software was used to organise the data. Descriptive statistics were used for quantitative analysis of the codes and categories. We used the STROBE guidelines in the conduct and reporting of this study(49). The study was performed in three steps.

The members of the research team were purposefully sampled to prevent blind spots in the analysis. All authors work as educational researchers and medical educators; four authors are clinicians, three are GPs. Walter NKA van Mook is an intensivist, Geurt TJM Essers is a psychologist, and Vera Nierkens is a health scientist specialised in health behaviour.

Data analysis step 1: General characteristics

Where identifiable, the OOH GP complaints officer recorded: the sex and age of the patient whom the complaints concerned; whether the complainant was the patient in question, a relative or another person involved (for example, the patient's legal representative); to whom the complaint was directed (GP, GP resident, or the assistant); and how the complaint was submitted (by letter, mail, telephone or face-to-face).

Data analysis step 2: Themes

The first round of content coding was open, inductive and done with an iterative, constant comparison approach. Two authors analysed 25 randomly chosen transcripts and discussed their initial open coding. Distinct codes were assigned to each remark referring to different contents of the complaint. If a complaint letter concerned >1 aspect of care, each complaint was coded separately. Hereafter, one author analysed all 2009 and 2010 complaint letters (n = 90) and the open coding was discussed again. Two authors sought and found consensus on the axial coding scheme, which was then cross-checked with two other researchers. Subsequently, two authors performed selective coding, categorising the different codes into more abstract themes. Consensus on the themes was reached within the whole research team after two rounds of discussion. As the abstract themes paralleled the CanMEDS competencies, these competencies were used as sensitising concepts in a second round of deductive coding(33). It was decided to assign all complaints that could not clearly be categorised in one of the other six CanMEDS competencies to professionalism so as not to miss any authentic patient information.

Although data saturation was reached prior to finishing coding, all complaints were coded to ensure that the results accurately represented the frequencies and themes of the patient complaints.

Data analysis step 3: Professionalism

In order to answer research question 2, a deeper open analysis was conducted of the complaints coded as professionalism. We also analysed whether these professionalism-related complaints stood on their own or were mentioned in combination with other complaints and vice versa.

Results

Over the 10-year study period 746,996 patient consultations took place. The annual number varied between 70,853 (2013) and 84,410 (2018). These telephone contacts, face-to-face GP consultations and home visits resulted in 493 complaint letters lodged. Three proved registrations of adverse events, five were addressed to healthcare professionals not in OOH GP care service, and one lacked detailed information, hampering further analysis. Consequently, nine complaint letters were excluded and 484 (concerning 0.065% of total consultations, annual percentage ranging from 0.059% to 0.161%) were analysed.

General characteristics

The vast majority of the complaints (362) was submitted by letter or email (75%), 116 by telephone (24%) and six in a face-to-face meeting (1%) (Table 1). Complaints were submitted by patients themselves (41%), their parents (30%), their partners (13%) or their children (11%). The remaining 5% were lodged by other relatives and colleagues. Most complaints were about GPs (80%). In 19%, the OOH GP care centre assistant was involved. Ten percent was directed against the organisation of the OOH GP care centre. In six complaints (1%), the GP resident was explicitly mentioned as transgressing. The sex of the patient was not mentioned in 19 complaints (4%). Of the remaining 465 complaints, 259 (56%) related to female patients and 206 (44%) to male patients. The age of the patient was known in 331 complaint letters (68%). Of these, 104 were aged 0 – 18 years (31%), 150 were aged 19 – 64 (45%) and 77 were 65 years or over (23%).

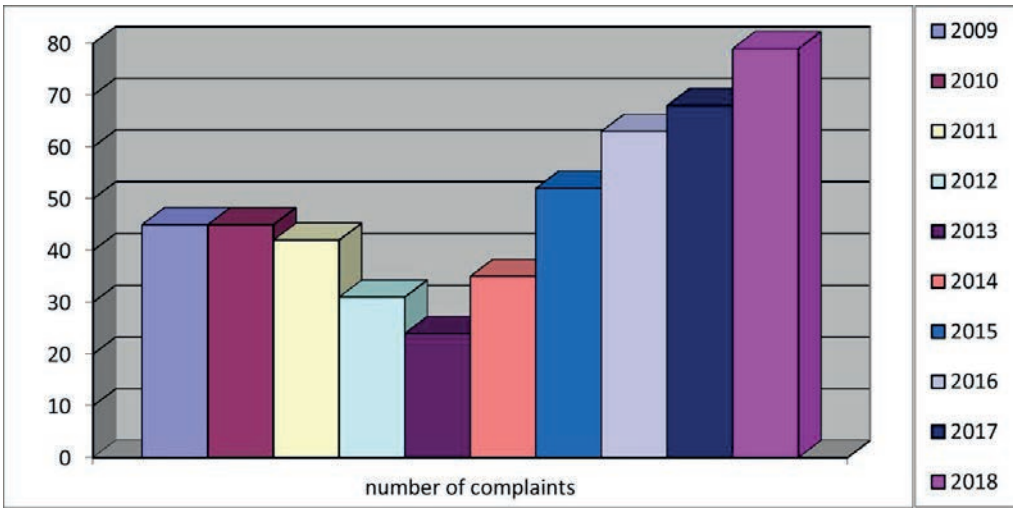
Table 1. General characteristics of complaints.

Medium, n (%)	Complainant, n (%)	Aimed at, n (%) [a]	Sex, n (%)	Age, n (%)
Email or letter, 362 (75)	Patient, 198 (41)	GP, 389 (80)	Female, 259 (56)	0–18, 104 (31)
Telephone, 116 (24)	Parent, 147 (30)	Assistant, 90 (19)	Male, 206 (44)	19–64, 150 (45)
Face to face, 6 (1)	Partner, 63 (13)	Organisation, 49 (10)	Missing, 19 (4)	≥65, 77 (23)
	Child, 54 (11)	Resident, 6 (1)		Missing, 153 (32)
	Other, 22 (5)			
Total, 484 (100)	Total, 484 (100)	Total, 484 (100)	Total, 484 (100)	Total, 484 (100)

[a]Some complaints were aimed at more than one person.

After an initial decline in the number of complaints, an increase was observed from 24 complaints in 2013 to 79 complaints in 2018 (Figure 1). This absolute increase was accompanied by an increase in relative numbers.

Figure 1. Number of complaints per year.



Half of the complaint letters (49%) concerned one single complaint (data not shown). The remaining half concerned two or more complaints. In six cases there were up to five different complaints lodged at the same time. In total, out of the 484 analysed complaint letters, 833 different complaints could be distilled.

Themes

Table 2 shows all complaint themes except those about professionalism. A total of 376 concerned medical expertise (45%), for example, missed diagnoses (predominantly missed fractures, myocardial infarction, and appendicitis), insufficient medical examination, poor or unsuccessful clinical treatment (such as incorrect placement of catheters or suboptimal stitching) and outdated, wrong, or absent advice. One hundred and nineteen complaints pertained to management issues (14%), for example, long waiting time for care, refusal to visit or consult, and finance and billing. Five complaints were solely about communication (1%), for example, not being called back. The remaining 333 complaints (40%) could not be clearly categorised in the above-mentioned CanMEDS competencies, that is, medical expert, manager and communicator, nor in the competencies collaborator, health advocate, or scholar, and were preliminary coded as professionalism. After analysing all 2009 and 2019 complaint letters (n = 90), no new themes emerged.

Table 2. Complaint themes except professionalism.

Sensitising concept	Theme	N (%)	Exemplary quotes
Medical expertise	Missed diagnosis	177 (21%)	*"Eventually, the toe turned out to be broken after all." (1120)*
			"Because of persistent complaints, my own doctor later referred me to the cardiologist, who diagnosed myocardial infarction." (1003)
			"The following day, my appendix was found to be inflamed and I had to have an operation immediately." (1431)
Medical expertise	Insufficient medical examination	99 (12%)	*"He only felt with two fingers whether there was a temperature difference. Furthermore, he didn't perform any physical examination." (1739)*
			"I was briefly examined and then dismissed." (1853)
Medical expertise	Poor, or unsuccessful clinical treatment	71 (9%)	*"However, placing the catheter had no effect." (1427)*
			"The anaesthetics did not go smoothly; the anaesthetic fluid came out through the wound and did not work." (1808)
Managing	Long waiting time for care	55 (7%)	*"After three hours, there was still no doctor and the pain became unbearable for my wife." (1006)*

Managing	Refusal to visit or consult	47 (6%)	*"A doctor can never make a diagnosis over the phone! After repeatedly emphasizing that it was really impossible to come to the clinic, the doctor even started a discussion." (1202)*
			"We had to wait over an hour in the waiting room." (1868)
Medical expertise	Outdated, wrong or no advice	29 (3%)	*"Further advice was not given, so a restful sleep was not an option." (0944)*
			"When asked by my own doctor, this advice turned out to be incorrect." (1739).
Managing	Finance and billing	17 (2 %)	*"She received no advice during the phone call, on the contrary, the call was broken off for no reason at all. Because of this, we are unpleasantly surprised to have to pay an amount of 25 euros and request a remission of the amount." (1823)*
Communication	Not called back	5 (1%)	*"My brother was then informed that he would be called back by the doctor within 10 minutes about the situation. However, he has not been called back at all!" (1701)*

Professionalism

The 333 complaints coded under 'professionalism' were explored in more detail. Of these 333 complaints, 290 were indeed about perceived lapses in physicians' professionalism. The remaining 43 complaints were all found to be directed specifically against the organisation of the OOH GP care centre (for example, unhygienic working environment, insufficient or unclear signage, or non-medical advertising brochures in the waiting room) or the OOH GP care centre assistant (for example, unclear information about the clinic's address and asking more information than necessary). These complaints were not investigated further, as they fell outside the scope of this study. Patients articulated the perceived lapses in physicians'

professionalism in different terms. Examples included the following: not being taken seriously; being patronised; being unpleasantly spoken to; receiving inappropriate comments; perceiving a lack of empathy; perceiving the physician as being rushed; a physician who does not introduce himself or herself; not shaking hands; a physician who appears arrogant or uninterested; or displays physical harshness or unwanted intimacy. Table 3 shows explanatory quotes. The theme most frequently found within the professionalism category was 'not being taken seriously' (n = 88), mostly in regard to the health issue itself, the urgency, or the perception that one was seen as being overprotective. Of the 484 complaint letters, 213 contained complaints concerning lapses in professionalism, which in 87 (41%) cases was the only complaint. In 61 (29%) cases, a lapse in professionalism was combined with missed diagnoses, in 38 (18%) cases with insufficient medical examination, and in 19 (9%) cases with long waiting time for care.

Table 3. Explanatory quotes about complaints pertaining to professionalism.

Themes	Explanatory quote
Not taken seriously	*"I am really angry that my complaint was not taken seriously." (1130)* *"I am very angry that I was not taken seriously and have been dismissed as a hysterical person." (0913)* *"Then, the doctor said: "and what was the urgent problem again?"" (1108)* *"What are you doing here? You have only had troubles for a few days now, and the OOH GP is only for emergency care." (1452)* *"The doctor cannot find anything wrong and said: "You just have a cry-baby."" (1136)*
Patronised	*"Then, we were told that we were absolutely not allowed to consult the OOH GP for these complaints." (0919)*
Spoken to unpleasantly	*"The doctor did not answer my questions, but barked at me." (1008)*

Inappropriate comment	*"This comment was extremely out of place at that time." (1305)*
Lack of empathy	*"She examined her with a total lack of empathy." (1105)*
Rushed	*"I got the feeling that she was in a great hurry." (1311)*
No introduction	*"The doctor did not introduce himself." (1754)*
Not shaking hands	*"He did not shake my hand upon entering." (1106)*
Arrogant	*"The doctor's attitude was arrogant and disrespectful." (1413)*
Uninterested	*"The doctor was sleepy, inattentive, and uninterested." (1763)*
Physical harshness	*"The doctor was very hard-handed." (0901)*
Unwanted intimacy	*"My daughter felt she was touched in an unpleasant way." (1435)*

Discussion

Summary

All patient complaint letters lodged at an OOH GP centre were thoroughly analysed with a special focus on perceived unprofessional behaviour of physicians. It was found that 746 996 OOH GP consultations over a 10-year period resulted in 484 complaint letters pertaining to healthcare professionals. Over one-third (35%) of the patient complaints concerned perceived lapses in physicians' professionalism. A rich diversity in the wording of professionalism lapses was found, of which not being taken seriously was mentioned most often.

Strengths and limitations

To the authors' knowledge, the present study is the first to use content analysis of patient complaints in the context of primary care focused on GPs' professionalism lapses. Moreover, the study period of a decade and the large number of complaint letters that could be analysed are unique. The OOH GP centre under study covers a large, diverse, and representative population of patients, which contributes greatly to generalisability of the results.

A few limitations should be noted. Notwithstanding the robust complaint system, not all adverse events or instances of patient dissatisfaction may lead to complaints(20, 21). Moreover, complaints may be biased by negative health outcomes, as these outcomes may lead to patient dissatisfaction even when provided care has been exemplary(20, 21). As in every analysis, information can get lost in translation to abstract themes. However, using a two-step analysis using both inductive and deductive methods and multiple coding added to the rigour of this study.

Comparison with existing literature

The data show a steady increase in patient complaints since 2013. This is in contrast with a recent study by Wallace et al. on patient complaints in OOH GP in which a relatively stable annual rate was seen of around 0.061% over a 5-year period, but it is in line with other studies(19, 50, 51). Reasons for a potential increase, as mentioned in the literature, include a broader cultural change in society, including: changing expectations, nostalgia for a 'golden age' of healthcare, and the desire to raise grievances altruistically(52, 53). This is in line with

the many statements made in the complaint letters in our study about the 'desire for openness' and the 'hope that this won't happen to others in the future'. The other general characteristics (medium, complainant and aim) are consistent with the existing literature(4, 6, 9, 10, 19). This also applies to the frequency distribution we found, with most complaints being about the medical expert role followed by complaints about professionalism and management(5, 7, 10, 13).

The results match well with Reader et al's taxonomy for patient complaints and their ensuing Healthcare Complaints Analysis Tool (HCAT)(10, 22). Previous research using the HCAT for patient complaints in an OOH GP setting confirms the usability of this taxonomy in the (OOH) GP setting, although it is primarily based on research in hospital settings(10, 19, 51). However, the 290 complaints about perceived lapses in physicians' professionalism could be placed in at least four categories of the HCAT (respect and patient rights, listening, communication, and quality)(10, 22). Therefore, a deeper analysis of patients' rich vocabulary regarding professionalism was performed, which aimed to explore what people expect of physicians regarding professionalism and what they consider lapses in professionalism. The authors aimed to stay close to the words that patients used (not being taken seriously, being patronised, being unpleasantly spoken to etc.) to avoid losing the essence of the complaint in the translation to more abstract predefined themes. This provided unique and important insights into patients' expectations and their feelings about the provided care, especially concerning professionalism, which allows us to learn from these complaints(4, 6, 7, 9-12, 19, 20).

The percentage of what were considered lapses in professionalism (35%) is average and in line with the existing literature. Mattarozzi et al. found relationship aspects to be the cause of complaint in 52.8% cases(7). Wofford et al. found disrespect, with 36%, their most identified category(4). In their extensive review on 59 studies, reporting 88,069 patient complaints, Reader et al. found that 29.1% related to healthcare staff-patient relationships. Contrarily, Schnitzer et al. found that only a relative proportion of 9.3% of complaints were about the physician-patient relationship(9). However, it is thought the percentage of lapses in professionalism might even be higher because professionalism can be expressed via the

performance of other competences(54). This could explain the relatively high percentage of combinations of competencies that were complained about in one complaint letter.

Implications for research and practice

In line with most of the other literature on patient complaints, the current study found that unmet expectations were a driver for many complaints(5-7, 11, 13, 19, 41, 44, 55). Therefore, GPs and future GPs have to be informed that they need to actively address patient expectations during consultations. They need to communicate about examination, treatment, potential complications and prognosis(19).

In postgraduate medical education and continuing medical education training, attention should be paid to the fact that professionalism lapses often occur and that these lapses can have a wide range of devastating consequences(1-8). By analysing patient complaints using the CanMEDS framework, we want to facilitate the implementation in GP training. The findings of this study provide direction and underline the utter importance of (bidirectional) direct observation of residents by their supervisors in the OOH GP setting(56).

Further research should focus on deeper analysis of complaints concerning the container concept professionalism, because perceived lapses in professionalism are frequently complained about but are articulated by patients in different ways. In-depth interviews are needed to further investigate the subtilties of how lapses in professionalism are perceived(54).

References

1. Cruess RL, Cruess SR, Steinert Y. Teaching medical professionalism: supporting the development of a professional identity: Cambridge University Press; 2016.
2. 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;55(3), 22-26.
3. Catron TF, Guillamondegui 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.
4. Wofford MM, Wofford JL, Bothra J, Kendrick SB, Smith A, Lichstein PR. Patient complaints about physician behaviors: a qualitative study. Academic medicine. 2004;79(2):134-8.
5. Montini T, Noble AA, Stelfox HT. Content analysis of patient complaints. International Journal for Quality in Health Care. 2008;20(6):412-20.
6. 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.
7. 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. 2017;*29*(1):83-89.
8. Aguilar AE, Stupans L, Scutter S. Assessing students' professionalism: considering professionalism's diverging definitions. Educ Health (Abingdon). 2011;24(3):599.
9. Schnitzer S, Kuhlmey A, Adolph H, Holzhausen J, Schenk L. Complaints as indicators of health care shortcomings: which groups of patients are affected? International Journal for Quality in Health Care. 2012;24(5):476-82.
10. 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.
11. Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. Prevalence and sources of patients' unmet expectations for care. Annals of internal medicine. 1996;125(9):730-7.
12. Koetsier E, Boer C, Loer SAJEJoA. Complaints and incident reports related to anaesthesia service are foremost attributed to nontechnical skills. 2011;28(1):29-33.
13. Owen C. Formal complaints against general practitioners: a study of 1000 cases. British Journal of General Practice. 1991;41(344):113-5.
14. Tazzyman A, Bryce M, Walshe K, Boyd A. Identifying and managing concerns about GPs in England: an interview study and case-series analysis. British Journal of General Practice. 2019; 69(684), e499-e506
15. Liu JJ, Alam AQ, Goldberg HR, Matelski JJ, Bell CM. Characteristics of internal medicine physicians disciplined by professional colleges in Canada. Medicine. 2015;94(26).
16. Cunningham W, Crump R, Tomlin A. The characteristics of doctors receiving medical complaints: a cross-sectional survey of doctors in New Zealand. N Z Med J. 2003;116(1183).
17. 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.
18. Behrens RC. Handling complaints: harnessing feedback to improve services. Br J Gen Pract. 2018;68(675):483.
19. 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.
20. Cunningham W, Wilson H. Complaints, shame and defensive medicine. BMJ Qual Saf. 2011;20(5):449-52.

21. Bismark MM, Brennan TA, Paterson RJ, Davis PB, Studdert DM. Relationship between complaints and quality of care in New Zealand: a descriptive analysis of complainants and non-complainants following adverse events. Qual Saf Health Care. 2006;15(1):17-22.
22. Gillespie A, Reader TW. Healthcare Complaints Analysis Tool, version 3, 2015, The London School of Economics and Political Science. 2015:1-20.
23. Barnhoorn PC. Professional Behavior: To Define Is to Limit. Academic medicine. 2016;91(9):1192-3.
24. Barnhoorn PC, van Mook WN. Professionalism or professional behaviour: no reason to choose between the two. Medical education. 2015;49(7):740.
25. Barnhoorn PC, Youngson C. Refining a definition of medical professionalism. Academic medicine. 2014;89(12):1579.
26. DeAngelis CD. Medical professionalism. JAMA. 2015;313(18):1837-8.
27. Irby DM, Hamstra SJ. Parting the clouds: three professionalism frameworks in medical education. Academic Medicine. 2016;91(12):1606-11.
28. Ong YT, Kow CS, Teo YH, Tan LHE, Abdurrahman A, Quek NWS, et al. Nurturing professionalism in medical schools. A systematic scoping review of training curricula between 1990-2019. Medical teacher. 2020;42(6), 636-649.
29. Wynia MK, Papadakis MA, Sullivan WM, Hafferty FW. More than a list of values and desired behaviors: a foundational understanding of medical professionalism. Academic medicine. 2014;89(5):712-4.
30. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Defining professionalism in medical education: a systematic review. Medical teacher. 2014;36(1):47-61.
31. Barnhoorn PC. Shared decision making seen through the lens of professional identity formation. Patient education and counseling. 2020;103(7), 1446-1447
32. Council GM. Good medical practice https://wwwgmc-ukorg/ethical-guidance/ethical-guidance-for-doctors/good-medical-practice. 2014
33. CanMEDS: Better standards, better physicians, better care. http://wwwroyalcollegeca/rcsite/canmeds/canmeds-framework-e. Accessed September 22th 2020.
34. Mak-Van Der Vossen M, Van Mook W, Van Der Burgt S, Kors J, Ket JC, Croiset G, et al. Descriptors for unprofessional behaviours of medical students: a systematic review and categorisation. BMC medical education. 2017;17(1), 1-12.
35. 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), 372-379.
36. Hodges BD, Ginsburg S, Cruess R, Cruess S, Delport R, Hafferty F, et al. Assessment of professionalism: recommendations from the Ottawa 2010 Conference. Medical teacher. 2011;33(5), 354-363.
37. Veen M, Skelton J, de la Croix A. Knowledge, skills and beetles: respecting the privacy of private experiences in medical education. Perspectives on Medical Education. 2020;9(2), 111-116.
38. 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. 2019;41(3):303-8.
39. Rothlind E, Fors U, Salminen H, Wandell P, Ekblad S. The informal curriculum of family medicine - what does it entail and how is it taught to residents? A systematic review. BMC family practice. 2020;21(1):49.
40. Jha V, Brockbank S, Roberts T. A Framework for Understanding Lapses in Professionalism Among Medical Students: Applying the Theory of Planned Behavior to Fitness to Practice Cases. Academic medicine. 2016;91(12):1622-7.
41. 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.

42. Birkeland S, Christensen R, Damsbo N, Kragstrup J. Patient complaint cases in primary health care: what are the characteristics of general practitioners involved? Biomed Res Int. 2013.
43. Van Leusden M, Jongerius PH, Hubben JHAM. Huisarts en tuchtrecht 1997-2007: Sdu Uitgevers; 2008.
44. 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.
45. Hendriks A, van der Meer H. Lessen uit het tuchtrecht voor de huisarts. Huisarts en wetenschap. 2015;58:178-82.
46. 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.
47. 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.
48. Giesen P, Smits M, Huibers L, Grol R, Wensing M. Quality of after-hours primary care in the Netherlands: a narrative review. Annals of internal medicine. 2011;155(2):108-13.
49. Vandenbroucke JP, von Elm E, Altman DG, Gotzsche PC, Mulrow CD, Pocock SJ, et al. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): explanation and elaboration. Annals of internal medicine. 2007;147(8):W163-94.
50. Vogel L. Patient complaints about Canadian doctors on the rise. Can Med Assoc; 2018.
51. van Dael J, Reader TW, Gillespie A, Neves AL, Darzi A, Mayer EK. Learning from complaints in healthcare: a realist review of academic literature, policy evidence and front-line insights. BMJ Qual Saf. 2020.
52. Moberly T. Rising complaints against doctors due to changed patient expectations, researchers say. British Medical Journal Publishing Group; 2014.
53. Archer J, Regan de Bere S, Bryce M, Nunn S, Lynn N, Coombes L, et al. Understanding the rise in Fitness to Practise complaints from members of the public. 2014.
54. Verkerk MA, de Bree MJ, Mourits MJ. Reflective professionalism: interpreting CanMEDS' "professionalism". J Med Ethics. 2007;33(11):663-6.
55. Harrison R, Walton M, Healy J, Smith-Merry J, Hobbs C. Patient complaints about hospital services: applying a complaint taxonomy to analyse and respond to complaints. Int J Qual Health Care. 2016;28(2):240-5.
56. Rietmeijer CB, Huisman D, Blankenstein AH, de Vries H, Scheele F, Kramer AW, et al. Patterns of direct observation and their impact during residency: general practice supervisors' views. 2018;52(9):981-91.

With every mistake, we must surely be learning.

George Harrison

Chapter 3

Unprofessional behaviour of GP residents and its remediation: a qualitative study among supervisors and faculty

Barnhoorn, P. C., Nierkens, V., Mak-van der Vossen, M. C., Numans, M. E., van Mook, W. N. K. A., & Kramer, A. W. M. (2021). Unprofessional behaviour of GP residents and its remediation: a qualitative study among supervisors and faculty. BMC Family Practice, 22(1), 1-11.

Abstract

Background: Lapses in professionalism have profound negative efects on patients, health professionals, and society. The connection between unprofessional behaviour during training and later practice requires timely identifcation and remediation. However, appropriate language to describe unprofessional behaviour and its remediation during residency is lacking. Therefore, this exploratory study aims to investigate which behaviours of GP residents are considered unprofessional according to supervisors and faculty, and how remediation is applied.

Methods: We conducted eight semi-structured focus group interviews with 55 broadly selected supervisors from four Dutch GP training institutes. In addition, we conducted individual semi-structured interviews with eight designated professionalism faculty members. Interview recordings were transcribed verbatim. Data were coded in two consecutive steps: preliminary inductive coding was followed by secondary deductive coding using the descriptors from the recently developed 'Four I's' model for describing unprofessional behaviours as sensitising concepts.

Results: Despite the diferences in participants' professional positions, we identifed a shared conceptualisation in pinpointing and assessing unprofessional behaviour. Both groups described multiple unprofessional behaviours, which could be successfully mapped to the descriptors and categories of the Four I's model. Behaviours in the categories 'Involvement' and 'Interaction' were assessed as mild and received informal, pedagogical feedback. Behaviours in the categories 'Introspection' and 'Integrity', were seen as very alarming and received strict remediation. We identifed two new groups of behaviours; 'Nervous exhaustion complaints' and 'Nine-to-fve mentality', needing to be added to the Four I's model. The diagnostic phase of unprofessional behaviour usually started with the supervisor getting a 'sense of alarm', which was described as either a 'gut feeling', 'a loss of enthusiasm for teaching' or 'fuss surrounding the resident'. This sense of alarm triggered the remediation phase. However, the diagnostic and remediation phases did not appear consecutive or distinct, but rather intertwined.

Conclusions: The processes of identifcation and remediation of unprofessional behaviour in residents appeared to be intertwined. Identifcation of behaviours related to lack of introspection or integrity were perceived as the most important to remediate. The results of this research provide supervisors and faculty with an appropriate language to describe unprofessional behaviours among residents, which can facilitate timely identifcation and remediation.

Background

Unprofessional behaviour by physicians compromises patient-physician relationships, patient safety, and quality of care. Consequently, it can harm patients' trust in the medical profession(1-6). Professional behaviour – defined as "placing the best interests of patients at the center of everything you do"(7, 8) - on the other hand, positively affects patient-physician relationships, patient and physician satisfaction, as well as healthcare outcomes(9, 10).

Although lapses in professionalism are a part of learning(11, 12), research has also revealed a clear association between unprofessional behaviour during undergraduate and postgraduate training and unprofessional behaviour in later practice(13-17). The positive approach of teaching and assessing professionalism and supporting Professional Identity Formation (PIF) is increasingly receiving attention(7, 18-20). Nonetheless, the complementary approach of identifying and remediating unprofessional behaviour remains indispensable(7, 21). Since unprofessional behaviour is a valuable signal indicating the stagnation of PIF, remediation is defined as "the process of facilitating corrections for physicians and trainees who are not on course to competence or a professional identity"(7, 22). However, timely and adequate remediation of lapses in professionalism can only occur if these lapses are indeed identified as such(11, 22).

One important reason why lapses in professionalism are not identified or are identified too late, (often termed as 'failure to fail'), is a lack of appropriate language to describe unprofessional behaviour and its remediation(12, 23). This 'failure to fail' implicitly promotes the idea that unprofessional behaviour is acceptable. To overcome this problem, the Four I's model for describing unprofessional behaviours was recently developed. The Four I's model consists of descriptors for unprofessional behaviour, classified into four distinct categories; lack of Involvement (failure to engage) Integrity (dishonest behaviour); Interaction (disrespectful behaviour); and Introspection (poor self-awareness)(12, 24). The descriptors and the four categories guide educators in how to document unprofessional behaviour, and in doing so, provide directions for effective remediation.

The Four I's 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, is thus far absent(25, 26). Nevertheless, PGME is a crucial period during which to support PIF, as

residency remains the forge that moulds and tempers the physician-to-be. Therefore, understanding the development of professional behaviour and the way in which that behaviour is supported is needed to detect improvements(21, 27, 28). Clear descriptors can assist in the timely identification of unprofessional behaviours observed in residents. Insight into the remediation process can identify efficacious remediation strategies and foster a culture in which residents' needs for extra guidance regarding their PIF are acknowledged. The multi-level professionalism framework for remediation is one of the few tools to guide and facilitate remediation of unprofessional behaviour. It was developed to encourage reflection on six levels influencing professionalism: (1) the environment in which the learner functions, (2) the displayed behaviour, (3) the potential for behaviour or competencies, (4) the conceptions or convictions the learner holds true regarding the medical profession and his or her place in it, i.e. beliefs & values, (5) the way one defines oneself, or one's identity, and at the model's centre, (6) mission, or what drives people(7).

General practice (GP) is a unique context in which to address this issue. In primary care, the physician is the first port of call for patients entrusted to them and, consequently, this is where the foundation for patient-physician relationships, patient safety, quality of care and patients' trust in the medical profession is laid.

Therefore, this exploratory study aims to:

1) investigate which behaviours of GP residents are considered unprofessional according to their GP clinical supervisors and faculty,

2) whether the Four I's model may be appropriate to describe these behaviours of GP residents and

3) how remediation of unprofessional behaviour is applied.

Methods

Study design

Based on a constructivist paradigm, we conducted a qualitative study applying thematic analysis of data derived from:

1. focus group interviews with GP clinical supervisors
2. individual interviews with designated professionalism faculty members(29-31).

We chose to collect data from GP clinical supervisors and designated professionalism faculty members as both are confronted with unprofessional behaviours of residents, however each with different roles in the processes of identification and remediation. We chose to interview the designated professionalism faculty members individually since this approach facilitated retrieving detailed, yet potential confidential information. The constructivist paradigm of the study means that participants and researchers co-created the outcome of this study. The authors form an interdisciplinary research group of educational researchers, medical educators and doctors. They all have expertise in medical education research and in the field of medicine. VN is a health scientist specialised in health behaviour. The other authors are GPs, except for WvM who is an intensivist. A sixth-year medical student (MS) acted as observer and independent analyser in the interviews with faculty. We applied the consolidated criteria for reporting qualitative research (COREQ)(32).

Study context

Before enrolling in a Dutch specialist GP training program, most recently graduated doctors work for some years in their field of interest to gain additional experience as a practicing physician. GP resideny training is offered at one of the eight Dutch GP training institutes and consists of three years of workplace-based learning, combined with formal training activities in a university setting. In years one and three of the program, GP-trainees work in a general practice where they are coached and instructed by a supervising senior GP. GP clinical supervisors are offered faculty development programmes in supervising and assessing GP-trainees. These compulsory programmes, in which the trainers are GP faculty and behavioural science teachers, are held multiple times annually at the affiliated GP training institute. Year two of GP residency training consists of rotations in hospitals, nursing homes and psychiatric outpatient clinics with various supervisors. Trainees typically work four days a week in their

training practice. On the fifth day, they participate in a so-called 'day release program' staffed by GP faculty and behavioural science teachers. On these days designed to facilitate and deepen learning from experiences in practice residents learn in small groups (10 to 15 residents) about case histories, protocols, skills and Entrustable Professional Activities (EPAs), with dedicated time for collaborative reflection. Residents' progress towards standard performance is monitored using the proven reliable and valid Competency Assessment List (Compass), of which professionalism is an integral part(33). Each of the eight Dutch GP training institutes has one designated professionalism faculty member – either a GP or behavioural scientist - responsible for attending to lapses in professionalism and remediation of unprofessional behaviour.

Participants and procedure

At four training institutes across the Netherlands we asked a contact person responsible for the training of GP clinical supervisors to select existing training groups of GP clinical supervisors to participate in focus group interviews. We included four groups from Leiden (LUMC); one from Rotterdam (ErasmusMC); one from Maastricht (MaastrichtUMC+); and two from Groningen (UMCG). Hence, we aimed for a broad sampling regarding practice location (urban versus rural context) as well as supervisor ethnicity, gender and seniority(32, 34). For the interviews with faculty, we invited all eight designated professionalism faculty members. The main researcher (PB) conducted all focus group and individual interviews using a standardised interview guide. The semi-structured interviewguide (see appendix) was based on a topic list derived from prevailing literature and pilot interviews with both GP clinical supervisors and faculty who did not participate in the main study. The main, open questions explored which behaviours the participants perceived as unprofessional and how remediation of these behaviours was undertaken. To facilitate openmindedness and to facilitate interplay among participants, the terms 'professionalism' and 'remediation' were not predefined. Before initiating each interview, a brief explanation of the aim of the study was provided. An observer was present to observe the interactions between interviewer and interviewees and between the participants, to better understand social norms and values of the topic. When needed, the observer asked questions to clarify and to drill down further in the detail. All interview recordings were transcribed verbatim.

Data analysis

Data analysis began as soon as the first data were gathered. PB, VN and MS independently performed coding and analysis of the individual interviews and focus group interviews separately.

Because unprofessional behaviours among GP residents as well as the remediation strategies were not described previously and because we wanted to be sure to include all types of behaviour and strategies, we started with open, inductive coding. The process of analysis started with PB, VN and MS familiarising themselves with the data and providing line-by-line open coding, using a constant comparative approach to jointly develop codes and themes. To avoid individual biases, we took an interactive and reflective approach throughout the cyclic process of data gathering, coding and analysis(35, 36). PB, VN and MS developed an initial preliminary codebook, which was discussed within the team.

Coding and analysing in an interdisciplinary team facilitated the creation of unique insights from diverging perspectives and multiple interpretations of the data. Differences in interpretation were discussed in regular team meetings with special attention to divergent codes. On key themes, consensus with the entire team was sought and found.

After completing this first round of open coding, and through comparison of the coding results to the relevant literature, the descriptors from the Four I's model appeared suitable for describing the aforementioned unprofessional behaviours. The professionalism framework appeared suitable to analyse on which level remediation took place. Therefore, in a new round of coding, we adopted a deductive approach. Concerning unprofessional behaviours we used the descriptors from the Four I's model as sensitising concepts and paid special attention to text fragments that did possibly not fit in the descriptors of this model(12, 24). Concerning remediation we used the professionalism framework to differentiate what remediaton level was involved in the remediation when participants were confronted with professional behaviour.

Results

Eight focus group interviews with 55 GP clinical supervisors (27 female, 28 male) from four different Dutch GP training institutes in Leiden (LUMC), Rotterdam (ErasmusMC), Maastricht (MaastrichtUMC+), and Groningen (UMCG) were held. Group sizes ranged from four to nine participants, with a mean of 7 participants. Designated professionalism faculty members responsible for attending to lapses in professionalism from all eight Dutch GP training institutes participated in the individual interviews (4 female, 4 male; 5 GPs, 3 psychologists). The interviews were held between summer 2018 and fall 2019.

During the focus group interviews, the GP clinical supervisors discussed what they perceived as unprofessional behaviours and the likelihood that they could address and correct this behaviour. The designated professionalism faculty members painted a similar picture regarding what they viewed as unprofessional behaviour. However, designated professionalism faculty members were confronted with more egregious behaviours, as milder unprofessional behaviours had already been remediated by the GP clinical supervisors. An impression of the discussions is given below. Illustrative quotes are used where appropriate and their source coded to denote; supervisor/faculty (S/F); gender (M/F); and interview number (n). First, GP residents' behaviours that were considered unprofessional are described, then the remediation process that followed.

Unprofessional behaviours

Despite the differences in participants' formal positions (GP clinical supervisor or designated professionalism faculty member), we identified a shared conceptualisation in pinpointing and assessing unprofessional behaviour. During the first round of open coding of the data it became clear that most unprofessional behaviours paralleled the descriptors of the Four I's model. In the subsequent deductive coding round, we were able to map all initial codes to the categories of the Four I's model; Involvement; Integrity; Interaction; and Introspection.

When asked which behaviours of GP residents they considered 'unprofessional', most GP clinical supervisors and faculty started with the umbrella term 'being unteachable'. Asked to elaborate on this term, they referred to residents who were unable to reflect on their own behaviour and adjust it accordingly. They listed behaviours including blaming external factors when receiving critical feedback, not accepting feedback, resisting change, not being aware

of own limitations, or acting beyond their level of competence (see Table 1). According to the participants, these behaviours all illustrated a lack of introspection. GP clinical supervisors and faculty assessed behaviour from this category as very problematic, since they viewed introspection as indispensable for change. Therefore, they were very outspoken and decisive in their judgement when they suspected a lack of introspection.

"People who actually have no introspection or cannot show it, you shouldn't let them enter the GP profession, because they will end up unhappy. That's neither good for future patients nor for the residents themselves." SM6

"They of course receive feedback like, "What you are doing now is incorrect, do it this way." Then they will try to learn the 'trick' and they often succeed quite well, but if the setting is different, the 'trick' won't work. The feedback is not internalised. Explaining to this kind of residents why they cannot become a GP, is the most difficult." FF4

We found two new behaviours that did not match the descriptors of the Four I's model: 'Nervous exhaustion complaints' and 'Nine-to-five mentality'. Nervous exhaustion complaints are often referred to by GP clinical supervisors as 'overload complaints'. These include behaviours like burn-out-related symptoms, e.g. being insecure or anxious, and unclear conditions that cause residents to drop out for a shorter or longer period of time.
According to both GP clinical supervisors and faculty, those behaviours illustrated a lack of introspection, since they illustrated that residents failed to acknowledge their poor fit to practice within the GP community. During their discussions about why they regarded this as unprofessional behaviour, GP clinical supervisors came to the conclusion that apparently the GP community has implicit expectations of what it takes to be a GP. Residents do not always notice these implicit expectations, as illustrated by the following focus group discussion between GP clinical supervisors:

"We have implicit expectations … implicit expectations of what it takes to be a GP. And if you do not meet these expectations, you are not entirely suited for the profession." SM2 … *"This also has to do with norms."* SM2 *"For example, being ill and then sending an app the next day:*

I will use this day to recover." SF2 *"I am never ill. What kind of nonsense is that?"* SM2 *"That's the younger generation mentality."* SM2

Behaviours illustrating a lack of integrity, like lying and acting without required consent (see Table 1), were also seen as very problematic, but were rarely seen. Besides these serious unprofessional behaviours, participants mentioned behaviours illustrating a lack of involvement or interaction that caused less concern, but which also needed to be addressed and corrected. Both GP clinical supervisors and faculty gave examples of behaviours which illustrated a lack of involvement or interaction.

The first category of behaviours considered to be of lesser concern was a lack of involvement. This was described as a failure to engage, or inadequate handling of one's tasks. GP clinical supervisors and faculty cited many examples from this category, for example, being absent or late for assigned activities, minimal acceptable level of performance and not meeting deadlines (see Table 1). However, they assessed these behaviours as being relatively unimportant. They even felt reluctant to qualify these behaviours as unprofessional, given the high probability that they could be corrected.

"You know, those smaller things like not being on time or being a bit shy and therefore difficult in interaction, or time management, that's also part of it ... those are all things that we discuss, but then, at least, there are no doubts whether they can do it." FM1

Behaviours illustrating a lack of interaction occurred more often, but were still rare. Behaviours in this category included poor verbal/non-verbal communication, discrimination, showing a lack of empathy and overly informal behaviour (see Table 1). Behaviours illustrating a lack of involvement or interaction were primarily viewed as problematic only when combined with a lack of introspection. But, when lack of involvement or interaction appeared in isolation, both GP clinical supervisors and faculty assessed them as teaching opportunities and considered them part of the resident's regular learning process.

"Professionalism, of course is also a learning point. So, in that sense you don't have to qualify behaviour as unprofessional right away. It is also a competence. So, you can grow into it, you can also learn things. Then it doesn't have to be qualified as unprofessional immediately." SF1

The focus group interviews with GP clinical supervisors yielded 29 different descriptions of unprofessional behaviours, which were coded into 17 different descriptors. The interviews with faculty yielded 34 different descriptions, which were coded into 21 different descriptors. Both groups of descriptors largely overlapped, resulting in 24 unique descriptors of unprofessional behaviours. Through discussions within the research team, we concluded that all descriptors expect for two ('Nervous exhaustion complaints' and 'Nine-to-five mentality'), almost seamlessly fitted the original descriptors of the UGME Four I's model. (Table 1).

Table 1. Twenty-four descriptors for unprofessional behaviour observed in GP residents, mapped to the Four I's model.

Involvement	**Integrity**
Absent or late for assigned activities[3]	Lying[3]
Poor reliability[3]	Acting without required consent[2]
Poor responsibility[3]	
Poor availability[3]	
Lack of conscientiousness[3]	
Tardiness[1]	
Cutting corners[2]	
Minimal acceptable level of performance[3]	
Poor teamwork[1]	
Not meeting deadlines[1]	
Language difficulties[1]	
Interaction	**Introspection**

Poor verbal/non-verbal communication[2]	Blaming external factors rather than own inadequacies[1]
Discrimination[2]	Not accepting feedback[1]
Showing a lack of empathy[1]	Resisting change[1]
Overly informal behaviour[2]	Not being aware of own limitations[1]
	Acting beyond own level of competence[1]
	Nervous exhaustion complaints[3]
	Nine-to-five mentality[1]

(behaviours mentioned by both groups, GP clinical supervisors alone or faculty alone are indicated with superscripts [1], [2] and [3])

Insight into how descriptors were derived from the data, using examples of the two new descriptors that were added are shown in Table 2.

Table 2. Examples of how descriptors were derived from the data.

Quote	Description	Descriptor
… being unable to persist the practice of the profession [which is reflected in being] insecure, anxious, and in the end burn-out. FF4	Burn-out-related symptoms	Nervous exhaustion complaints
… illness after illness and then a pregnancy, with the result that after 2.5 years she still had not completed her first year of GP internship. FF6	Unclear conditions	Nervous exhaustion complaints
… she immediately puts her agenda on the table and says: "I want this… I have to pick up the children, so I have to leave at five. And I want this. And I am entitled to compensation" ... SM6	Work according to collective labour agreements mentality	Nine-to-five mentality
I had a resident who was very much a collective labour agreements resident. He wouldn't do anything extra. He was in the training practice only for a short time, because then he would be off to a festival again … That's a generational thing, I think. SM2	Work according to collective labour agreements mentality Younger generation mentality	Nine-to-five mentality

Remediation

For both GP clinical supervisors and designated professionalism faculty members, it appeared difficult to separate the diagnostic phase, in which the participants try to explore and understand the unprofessional behaviour, from the remediation phase. They described how exploring the unprofessional behaviour in a conversation with the resident often already had

a remediating effect. And vice versa: it is not uncommon that the way in which residents cope with the remediation phase gives new input for the diagnostic phase.
GP clinical supervisors commented that they use the same tools to come to a diagnosis of unprofessional behaviour as GPs use in their diagnostic reasoning. Most GP clinical supervisors described the identification of unprofessional behaviour as a process that starts with getting a 'sense of alarm'. We distinguished three types of senses of alarm. The first type is described as a 'gut feeling'. GP clinical supervisors equate this type of alarm with the gut feeling they sometimes experience in diagnostic reasoning. There seems to be something wrong, but one cannot say exactly what it is.

"It is just your basic GP-skills… It's the same as with your patients, it's a gut feeling. Really the same feeling you have with these residents." SM4

The second sense of alarm is described as 'a loss of enthusiasm for teaching'. GP clinical supervisors who experienced these feelings described the resident as being different from previous trainees they had supervised. Guiding such a resident cost a lot more energy, resulting in GP clinical supervisors questioning their commitment to the training of residents in general.

"But if it doesn't go very smoothly, then the whole point of the enthusiasm I had in the beginning is gone ... I had four trouble-free residents with whom I had a great relationship, I could talk to them and discuss difficult issues, you name it. But, when that's not the case then I think: how much do I even like this?" SM1

The third type of alarm can be described as 'fuss surrounding the resident'. Sometimes, other stakeholders working closely with the resident complain about them to the GP clinical supervisor.

"People at the pharmacy were grumbling at him. The psychologist at our practice said: "I hear stories about that guy." Our assistants also told us: "I get stories about that guy". It really came from all sides." SF4

When the GP clinical supervisor has become fully aware of the sense of alarm, the diagnostic and remediation phases appeared to be intertwined. What follows varies from an informal 'cup of coffee conversation' to formally planned meetings. Further exploration and understanding, as well as assigning and assessing tasks often go hand in hand.

"You need to schedule a lot of meetings. A lot of writing. So, it really is a lot of work. … Then you can show what's wrong. It doesn't make sense here and it doesn't make sense there." SF4

This approach to remediation has a rather informal character until GP clinical supervisors discover that the remediation process goes beyond the usual supervision and coaching. When informal or 'pedagogical' feedback did not improve the situation, most GP clinical supervisors suspected a lack of introspection as the underlying problem. In these cases, the GP clinical supervisor made more explicitly use of the Compass – to exactly pinpoint and assess on which competency domain the resident was underperforming - and consulted faculty of the day release program to collaborate on a remediation plan. When lapses in professionalism persisted, the designated professionalism faculty member was consulted.
Unlike residents showing unprofessional behaviour in the categories Integrity, Involvement and Interaction, residents showing unprofessional behaviour in the Introspection category often seemed resistant to remediation on deeper levels than just behaviour, namely beliefs, values and identity. When introspection falls short and official remediation is needed, GP clinical supervisor and faculty seem to feel compelled to tighten the reins and remediate mainly on the more quantifiable level of behaviour and competencies, as they feel introspection to be a prerequisite for addressing deeper issues.

"In conversations together with faculty from the institute, we simply set a certain threshold: you really have to be able to do this, for example, in order to be able to be a GP." SM1

Along the way from informal to formal feedback and from 'pedagogical' to stricter feedback, both GP clinical supervisors and faculty feel that their role changes from that of a supportive coach, which they enjoy, to a gatekeeper of the profession or even a police officer, which they do not enjoy at all.

Discussion

Principal findings

In this study we found that GP clinical supervisors and designated professionalism faculty members have closely corresponding conceptualisations regarding unprofessional behaviour among residents, and its remediation. Furthermore, most unprofessional behaviours paralleled the descriptors of the original Four I's model and could be mapped to the categories of the Four I's model. When GP clinical supervisors were confronted with unprofessional behaviour in residents, the diagnostic and remediation phases appeared to be non-consecutive, and intertwined. GP clinical supervisors and faculty considered behaviours from the categories Involvement and Interaction as needing an informal or 'pedagogical' type of remediation. However, if lack of Introspection or Integrity were assumed to be the underlying problem (both of which were seen as very alarming), then both GP clinical supervisors and faculty felt compelled to move to strict remediation on the more quantifiable levels of behaviour and competencies.

Comparison with existing literature

Unprofessional behaviours

When GP clinical supervisors and faculty are confronted with unprofessional behaviour in residents, they use descriptions of unprofessional behaviours which to a large extent correspond to the descriptors outlined in the Four I's model(12, 24).

This Four I's model originated in the UGME setting. The work we have carried out confirms the continued value and validity of this model and indicates that only two new descriptors need to be added to adapt the original model to a PGME setting. Our results expand upon the Four I's model by adding the descriptors: 'Nervous exhaustion complaints' and 'Nine-to-five mentality'. These two novel descriptors reflect earlier literature findings that the current generation of physicians makes different behavioural choices compared to their older colleagues when certain values are at stake. This is especially the case in the postgraduate setting. In this phase of a physician's career, work-life interference can be experienced as especially demanding. As a reaction, focus can shift from other to self(37-39). The descriptors and their categorisation in the Four I's (Involvement, Integrity, Interaction and Introspection

and), can facilitate timely identification of this behaviour and in that way reduce the problem of 'failure to fail'(12, 23).

Our study further expands on the original Four I's model by adding difference in assessment when confronted with different I's. Behaviours from the categories Involvement and Interaction are seen as mild and as requiring informal pedagogical feedback. In contrast, behaviours from the Introspection and the Integrity categories are seen as very alarming and as requiring strict remediation. This difference is in line with the literature, as many earlier studies in medical education underline introspection as an absolute prerequisite for sustainable change(12, 19, 40-43). Furthermore, the reluctance of GP clinical supervisors and faculty to qualify behaviours in the categories Involvement and Interaction as unprofessional, their emphasis on 'professionalism being a competence in which growth can occur' and their informal pedagogical approach to behaviour in these two categories is in line with the literature on PIF(19, 44, 45). Because reflectiveness is a prerequisite for change, GP clinical supervisors halt their development-oriented PIF approach when confronted with behaviour in the Introspection category and ask for expert faculty's help in further remediation(40, 42).

The interweaving of diagnosis and remediation

The tools used by both GP clinical supervisors and designated professionalism faculty members to identify unprofessional behaviours are very similar to those used by GPs in their diagnostic reasoning: that is, a combination of non-analytic and analytic reasoning(46). GP clinical supervisors describe the identification of unprofessional behaviour as a process that starts with getting a 'sense of alarm'. We found three types of such a sense of alarm: a 'gut feeling', a 'loss of enthusiasm for teaching' and 'fuss surrounding the resident'. These automatic, fast-emerging feelings of 'something is wrong with this resident but I cannot figure out what it is yet' parallels the non-analytic diagnostic reasoning processes(46). This difficulty to provide detailed and focused descriptions of what is actually wrong reflects the experience that unprofessional behaviour often is difficult to pinpoint(12, 21, 24). However, GPs are experienced in working with uncertainty: they use their gut feeling and apply the same methods as when gut feeling plays a role in the diagnostic processes of a patient's complaints(46, 47). When GP clinical supervisors recognise a sense of alarm, they slow down and 'switch to analytical reasoning', in precisely the same way as when gut feeling emerges in medical decision-making(46). In this analytic process, information is gathered, also using

Compass and conversations are planned with other stakeholders: faculty of the day release program are then consulted to collaborate on a remediation plan. When lapses in professionalism persist, the 'designated professionalism faculty member' is consulted. In contrast to earlier reports in the medical education literature, we found that identification of unprofessional behaviour and its remediation appear not to be consecutive, but rather intertwined phases(11, 12, 48).

Remediation plans

Remediation plans for GP trainees having difficulties are mostly formulated in consultation with faculty. During our interviews, most statements about remediation were made at the level of behaviour and competencies. This can be partly explained by the fact that participants were primed by the terms 'unprofessional behaviour' and 'remediation', used by the interviewer. Another explanation could be that when we asked participants about remediation, 'official' remediation is what came to mind: this is the kind of remediation they felt was only needed to guide residents with a lack of introspection. When introspection is missing, questions addressing deeper issues like beliefs and values, identity and mission usually don't find fertile soil, because for a discussion on those levels, introspection is an absolute prerequisite(7, 49). A last explanation could be that in the past two decades competencies have become the dominant language of GP training, making it difficult to work with a richer vocabulary and a more holistic view(50).

Strengths and limitations

Where previous studies have explored unprofessional behaviours and remediation in the UGME setting, the present study is the first to explore these topics in the PGME setting. The major strengths of our study include its open, exploratory nature and its use of a large, diverse and broadly selected group of participants. Although we deliberately did not provide the participants with definitions of the concepts of professionalism and remediation, the open, exploratory nature of the study can also be seen as a limitation, as the participants may have interpreted these concepts in different ways. Further, we limited this study to Dutch GP training institutes. Although the goal of qualitative studies is not to generalise, having interviewed a diverse group of 55 GP clinical supervisors in eight focus groups from four different Dutch GP training institutes and having interviewed all eight Dutch designated

professionalism faculty members, we provide a rich but contextualised understanding of unprofessional behaviours and remediation in a PGME setting. Therefore, we think our study has implications for practice and further research in PGME.

Being interviewed by a colleague (PB) could have negatively affected data collection(31): the participants might have provided 'socially desirable' answers. However, the interviewer kept a research journal in which he reflected on his role in each interview and discussed this in the research group, which added to the rigour of the study. Being interviewed by an intrinsically interested and trustworthy colleague could equally have a positive influence: participants seemed to experience a confidential atmosphere with an interviewer who recognised their daily challenges and thus provided rich 'inside information'.

Implications for research and practice

The results of this research provide GP clinical supervisors and faculty with an appropriate language to describe unprofessional behaviours among residents. The descriptors and their categories can facilitate timely identification and thus reduce the problem of 'failure to fail'(12, 23). Further research is needed on the two novel descriptors: 'Nervous exhaustion complaints' and 'Nine-to-five mentality'. Especially the viewpoint of the residents needs to be explored as well as whether the current generation of physicians makes different behavioural choices compared to their older colleagues when certain values are at stake. Moreover, our findings shed light on how GP clinical supervisors and faculty remediate these behaviours as well as on areas of potential improvement and further reduction of the 'failure to fail' problem(12, 23). Firstly, that a 'sense of alarm' concerning a resident always deserves to be reflected upon by GP clinical supervisors and faculty. Signs of unprofessional behaviours should be discussed with the resident as early as possible, giving the resident the opportunity to adjust the formation of their professional identity in time. This is especially the case when a lack of introspection is suspected, as introspection is a prerequisite for learning, and improving the capacity for introspection takes time. Secondly, there appears to be scope for GP clinical supervisors to develop their remedial skills, especially when confronted with residents whose introspection is hampered and for whom the usual PIF approach is insufficient. The comprehensive multi-level professionalism framework might be of help here. This framework can serve to guide the remediation of unprofessional behaviour by encouraging reflection on all important levels that influence professionalism(7). Furthermore,

in faculty development courses on professionalism, attention might be paid to the finding that most GP clinical supervisors suspected a lack of introspection as the underlying problem when informal feedback was not followed by improvements. Supervisors have to be trained in how to distinguish between residents having a problem in introspection, or supervisors themselves are insufficiently aware of their own limitations.

Further research is needed to identify the best way to remediate unprofessional behaviours, especially when introspection is hampered, as well as the suspected beneficial role of 'deeper' levels of the professionalism framework(7).

Conclusions

The results of this study provide appropriate language as well as a better understanding of unprofessional behaviours among GP residents, as well as remediation of those behaviours, according to GP clinical supervisors and faculty. Most unprofessional behaviours parallel the descriptors of the original Four I's model and can be mapped to the categories of the Four I's model. The results expand upon the Four I's model by adding the descriptors: 'Nervous exhaustion complaints' and 'Nine-to-five mentality'. The diagnostic and remediation phases appear non-consecutive and intertwined. Behaviours from the categories Involvement and Interaction receive an informal or 'pedagogical' type of remediation. Lack of Introspection or Integrity receives strict remediation on the more quantifiable levels of behaviour and competencies. The findings of this study can assist timely identification and remediation in the future.

References

1. Reader TW, Gillespie A, Roberts J, safety. Patient complaints in healthcare systems: a systematic review and coding taxonomy. BMJ quality & safety. 2014; 23(8): 678-689
2. Schnitzer S, Kuhlmey A, Adolph H, Holzhausen J, Schenk L. Complaints as indicators of health care shortcomings: which groups of patients are affected? International Journal for Quality in Health Care. 2012;24(5):476-82.
3. 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. JAMA internal medicine. 2018;178(10):1317-31.
4. 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.
5. Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. Jama. 2002;287(22):2951-7.
6. Cruess R, Cruess S. Updating the Hippocratic Oath to include medicine's social contract. Medical education. 2014;48(1):95-100.
7. 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; 41(3), 303-308.
8. Barnhoorn PC, Youngson CC. Defining professionalism: Simplex sigillum veri! Medical teacher. 2014;36(6):545.
9. 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
10. 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.
11. Mak-van der Vossen MC, de la Croix A, Teherani A, van Mook W, Croiset G, Kusurkar RA. A Road Map for Attending to Medical Students' Professionalism Lapses. Academic medicine. 2019;94(4):570-8.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. Irby DM, Hamstra SJ. Parting the clouds: three professionalism frameworks in medical education. Academic Medicine. 2016;91(12):1606-11.

19. 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.
20. Barnhoorn PC. Shared decision making seen through the lens of professional identity formation. Patient education and counseling. 2020;103(7):1446-7.
21. 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. 2015;20(2):559-74.
22. van den Goor M, Silkens M, Heineman MJ, Lombarts K. Investigating Physicians' Views on Soft Signals in the Context of Their Peers' Performance. The Journal for Healthcare Quality. 2018;40(5):310-7.
23. 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.
24. 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.
25. 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.
26. 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.
27. Cooke M, Irby DM, O'Brien BC. Educating physicians: a call for reform of medical school and residency: John Wiley & Sons; 2010.
28. Chaou C-H, Monrouxe LV, Chang L-C, Yu S-R, Ng C-J, Lee C-H, et al. Challenges of feedback provision in the workplace: A qualitative study of emergency medicine residents and teachers. Medical teacher. 2017;39(11):1145-53.
29. Bergman E, de Feijter J, Frambach J, Godefrooij M, Slootweg I, Stalmeijer R, et al. AM last page: A guide to research paradigms relevant to medical education. Academic Medicine. 2012;87(4):545.
30. Kiger ME, Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. Medical Teacher. 2020:1-9.
31. Richards H, Emslie C. The 'doctor'or the 'girl from the University'? Considering the influence of professional roles on qualitative interviewing. Family practice. 2000;17(1):71-5.
32. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International journal for quality in health care. 2007;19(6):349-57.
33. Tromp F, Vernooij-Dassen M, Grol R, Kramer A, Bottema B. Assessment of CanMEDS roles in postgraduate training: the validation of the Compass. Patient education and counseling. 2012;89(1):199-204.
34. Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. Medical education. 2017;51(1):40-50.
35. Tai J, Ajjawi R. Undertaking and reporting qualitative research. The clinical teacher. 2016;13(3):175-82.
36. Starks H, Brown Trinidad S. Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. Qualitative health research. 2007;17(10):1372-80.
37. Zhou AY, Panagioti M, Esmail A, Agius R, Van Tongeren M, Bower P. Factors Associated With Burnout and Stress in Trainee Physicians: A Systematic Review and Meta-analysis. JAMA network open. 2020;3(8):e2013761-e.
38. Langballe EM, Innstrand ST, Aasland OG, Falkum EJS, Health. The predictive value of individual factors, work-related factors, and work–home interaction on burnout in female and male physicians: a longitudinal study. Stress and Health. 2011;27(1):73-87.

39. Thaxton RE, Jones WS, Hafferty FW, April CW, April MD. Self vs. Other Focus: Predicting professionalism remediation of emergency medicine residents. Western Journal of Emergency Medicine. 2018;19(1):35.
40. Mak-van der Vossen MC, de la Croix A, Teherani A, van Mook WN, Croiset G, Kusurkar RA. Developing a two-dimensional model of unprofessional behaviour profiles in medical students. Advances in Health Sciences Education. 2019;24(2):215-32.
41. Mak-van der Vossen MC, van Mook WN, Kors JM, van Wieringen WN, Peerdeman SM, Croiset G, et al. Distinguishing Three Unprofessional Behavior Profiles of Medical Students Using Latent Class Analysis. Academic medicine. 2016; *91*(9), 1276-1283.
42. Verkerk MA, de Bree MJ, Mourits MJ. Reflective professionalism: interpreting CanMEDS' "professionalism". J Med Ethics. 2007;33(11):663-6.
43. Berger AS, Niedra E, Brooks SG, Ahmed WS, Ginsburg S. Teaching professionalism in postgraduate medical education: A systematic review. Academic Medicine. 2020;95(6):938-46.
44. Cruess RL, Cruess SR, Steinert Y. Amending Miller's Pyramid to Include Professional Identity Formation. Academic medicine. 2016;91(2):180-5.
45. Sawatsky AP, Santivasi WL, Nordhues HC, Vaa BE, Ratelle JT, Beckman TJ, et al. Autonomy and professional identity formation in residency training: a qualitative study. Medical education. 2020;54(7):616-27
46. Stolper E, Van de Wiel M, Van Royen P, Van Bokhoven M, Van der Weijden T, Dinant GJ. Gut feelings as a third track in general practitioners' diagnostic reasoning. Journal of general internal medicine. 2011;26(2):197-203.
47. Stolper E, Van Royen P, Van de Wiel M, Van Bokhoven M, Houben P, Van der Weijden T, et al. Consensus on gut feelings in general practice. BMC Family Practice. 2009;10(1):1-6.
48. Domen RE. Resident remediation, probation, and dismissal basic considerations for program directors. American journal of clinical pathology. 2014;141(6):784-90.
49. Korthagen FA. In search of the essence of a good teacher: Towards a more holistic approach in teacher education. Teaching and teacher education. 2004;20(1):77-97.
50. Jarvis-Selinger S, Pratt DD, Regehr G. Competency is not enough: integrating identity formation into the medical education discourse. Academic medicine. 2012;87(9):1185-90.

L'enfer, cést le manque des autres.

Dirk de Wachter

Chapter 4

General Practice residents' perspectives on their professional identity formation: a qualitative study

Barnhoorn, P. C., Nierkens, V., Numans, M. E., Steinert , Y., Kramer, A. W. M., & van Mook, W. N. K. A. (2022). General Practice residents' perspectives on their professional identity formation: A qualitative study.
BMJ Open, 2022;12(7), e059691.

Abstract

Objectives: To move beyond professionalism as a measurable competency, medical educators have highlighted the importance of forming a professional identity, in which learners come to "think, act, and feel like physicians". This socialisation process is known as professional identity formation (PIF). Few empirical studies on PIF in residency have been undertaken. None of these studies focused on PIF during the full length of GP training as well as the interplay of concurrent socialising factors. Understanding the socialisation process involved in the development of a resident's professional identity and the roles of influencing factors, and their change over time, could add to a more purposeful approach to PIF. Therefore, we aimed to investigate the process of PIF during the full length of GP training and which factors residents perceive as influential.

Design: A qualitative descriptive study employing focus group interviews.

Setting: Four GP training institutes across the Netherlands.

Participants: Ninety-two GP residents in their final training year participated in 12 focus group interviews.

Results: Study findings indicated that identity formation occurs primarily in the workplace, as residents move from doing to becoming and negotiate perceived norms. A tapestry of interrelated influencing factors – most prominently clinical experiences, clinical supervisors, and self-assessments – changed over time and were felt to exert their influence predominantly in the workplace.

Conclusions: This study provides deeper empirical insights into PIF during GP residency. Doing the work of a GP exerted a pivotal influence on residents shift from *doing* as a GP to thinking, acting, and feeling like a GP, i.e., *becoming* a GP. Clinical supervisors are of utmost importance as role models and coaches in creating an environment that supports residents' PIF. Implications for practice include faculty development initiatives to help supervisors be aware of how they can perform their various roles across different PIF stages.

Strengths and limitations of this study

- This is the first study exploring the process of PIF during the full length of GP training as well as the interplay of concurrent socialising factors.
- The researchers were able to include a relatively large and diverse group of residents, which made it possible to discern different perceptions on PIF.
- The researchers used the conceptual framework of PIF developed by Cruess et al. as a sensitising framework for designing the interview guide as well as for conducting the deductive part of the analysis, which added rigor to our study, whilst the exploratory approach left open the possibility of finding complementary factors and themes.
- The researchers only interviewed participants once, asking them to look back on their PIF; hence, we might have missed subtleties in identity formation over time.
- This study was limited to the GP context; therefore, the transferability to other residency contexts may be limited.

Introduction

Becoming a physician involves more than just the acquisition of knowledge and skills(1). To move beyond professionalism as a measurable competency, medical educators have highlighted the importance of forming a professional identity(2-4). Our identity - who we are - guides our behavior. Our professional identity - who we are as professionals - guides our behavior as professionals and is the cornerstone of professionalism(5). This renewed emphasis on professional identity allows medical education to move away from "an exclusive focus on *doing* the work of a physician towards a broader focus that also includes *being* a physician"(2). Moreover, as both patients and physicians have come to believe that medicine's professionalism is under threat, medical educators have highlighted the importance of forming a professional identity aligned with the values and norms of the profession(6-9).

Professional identity formation (PIF), defined as the development of professional values, actions and aspirations(10), is a process happening at : (1) the level of the individual, involving the psychological development of a person, and (2) the collective level, involving a socialisation process(2). Through these processes learners ultimately come to "think, act, and feel like physicians"(9, 11, 12). Residency has often been identified as a key stage in PIF, as a more "permanent" professional identity is formed during this stage of training, in which residents cross the boundary from student to practitioner, and begin their journey towards independent practice(10, 13, 14).

Whereas many studies have explored PIF in undergraduate medical education (UGME), little is known about PIF in postgraduate trainees(15-24). The few empirical studies on PIF in postgraduate medical education (PGME) have explored clinical teachers' perceptions of their role in PIF(6); the role of autonomy in the PIF of internal medicine residents(14); PIF in medical residents from different specialties(13); and PIF in GP settings(25, 26). The latter two focused on the supervisory relationship in a 12-week GP intern placement before residency(25), and on the alignment of previously defined Family Medicine constructs with PIF among first-year GP residents(26). None of the five studies on PIF in PGME focused on the process of PIF during the full length of residency as well as the interplay of concurrent socialising factors.

Understanding the socialisation process involved in the development of a resident's professional identity and the roles of influencing factors and their change over time, could add to a more purposeful approach to PIF(5, 11, 12, 25). For example, this could be an approach in which resident's needs for support in PIF is acknowledged, the best means for forming a professional identity are sought, and supervisors and faculty members acquire tools for intervening in the process of PIF, if necessary. Moreover, fostering residents' insights into both the process and the multiple factors involved in PIF may encourage them to be more proactive in forming a professional identity aligned with their own values and aspirations(3, 9, 11, 14, 25, 27).

We chose the unique context of GP training to study PIF in residency for two reasons. First, general practice plays an important gatekeeper role in health care, as the GP is the first "port of call" for patients entrusted to them. Second, both the relationship between the GP resident and patient, and the relationship between the resident and supervisor, are long-term. These relationships offer a valuable opportunity for the formation and support of a professional identity over an extended period of time.

In view of the sparse data on PIF in PGME, we aim to explore the process of PIF during GP residency and which factors GP residents perceive as influential.

Methods

Study design and theoretical framework

We chose qualitative description as our research design, as we wanted to stay close to the words of the participants and be as non-interpretative as possible(28). We used an exploratory approach, from a constructivist perspective, implying that our view on reality is socially and experientially based and that multiple realities exist(29). We conducted focus groups with GP residents of four institutes across the Netherlands which were purposefully sampled regarding GP practice site (rural vs urban). Because PIF is a social process(2), we selected focus groups as our method for data collection to facilitate interaction between participants about influences, experiences and normative beliefs regarding PIF(30).

We used the conceptual framework of PIF developed by Cruess et al. as a sensitising framework for designing the interview guide as well as for conducting the deductive part of the analysis(11). This model, which describes the gradual shift of learners from peripheral to full participation in a community of practice(9, 11, 12, 31), highlights a number of factors that interact with learners' pre-existing identities, including clinical and non-clinical experiences and role models(11). Learners have to negotiate the influence of these factors as their new identities are being formed(11).

To appreciate different perspectives, we formed an interdisciplinary research team. VN is a health scientist, YS a clinical psychologist and WvM works as an intensivist. The other authors are GPs. All are experienced educational researchers. We applied the Standards for Reporting Qualitative Research (SRQR) guidelines(32).

Context

Before enrolling in a Dutch specialist GP training program, most recently graduated doctors work for some years in their field of interest to gain additional experience as a practicing physician. GP residency training is offered at eight Dutch GP training institutes and consists of three years of workplace-based learning, combined with formal training activities in a university setting. In years one and three of the program, GP-trainees work in a general practice where they deliver outpatient care and where they are supervised by a senior GP.

Year two of GP residency training consists of rotations in hospitals, nursing homes and psychiatric clinics where GP-trainees predominantly deliver inpatient care and where they are supervised by various supervisors. Trainees typically work four days a week in their training practice. On the fifth day, they participate in a 'day release program' staffed by GP faculty and behavioural science teachers. On these days - designed to facilitate and deepen learning from experiences in practice - residents learn in small groups (10 to 15 residents) about case histories, protocols and skills, with dedicated time for collaborative reflection and practical training. Residents' progress towards standard performance is monitored three times a year using the Competency Assessment List (Compass), of which professionalism is an integral part(33).

Participants and procedure

We asked a contact person at four training institutes across the Netherlands - Leiden (LUMC); Rotterdam (ErasmusMC); Maastricht (MaastrichtUMC+); and Groningen (UMCG) - to select existing training groups of residents in their final year. We selected these four institutes aiming for a purposeful sample of rural and urban GP-practices, as both work content and processes, as well as socialisation processes, might differ in different kind of GP-practices sites(13). We organised the focus groups at regular group meetings during the day-release program at the university. Residents were asked to participate after informing them of the research goal, voluntary nature of the study, and confidentiality. The main researcher (PB) moderated all focus groups, lasting approximately one and a half hours. In each group, an educational researcher was present to observe interactions, take field notes and, if necessary, ask clarifying and deepening questions.

We used a semi-structured interview guide (See Appendix 1) derived from the prevailing literature(2, 4-9, 11-19, 21, 24, 25, 27, 34-38), with an emphasis on the aforementioned conceptual framework(9, 11, 12, 31) of PIF, and pilot interviews. This semi-structured interview was not altered after piloting and the content of the guide was applied during all 12 interviews. All interviews were audiotaped and transcribed verbatim. Theoretical sufficiency was achieved after eight out of twelve focus groups conducted(39).

Patient and public involvement

No patient was involved in this study.

Analysis

We choose an abductive approach to analysis in which we integrated inductive data-driven coding with deductive theory-driven interpretation(40). We conducted a thematic analysis in which first PB and VN performed inductive coding independently from each other(32). Together they developed an initial codebook, which was then discussed with the team. Thereafter, in a deductive theory-driven approach, the inductively gathered codes were mapped onto the factors identified by Cruess et al. as sensitising concepts(11). During iterative discussions within the team, and through comparison to the relevant literature, relations between codes and factors were discussed and themes were constructed. During analysis, PB and VN kept memos to document coding and analysis. By taking a cyclical, interactive, and reflective approach to data gathering, analysis and comparison to the relevant literature, we ensured that theory was used in an exploratory way and that individual biases were reduced(41, 42).

Results

All selected training groups were willing to participate in this study. Twelve focus groups with 92 third-year GP residents at four training institutes across the Netherlands were conducted. Sixty-seven residents were female (73%).

Our analysis revealed three major themes, which together provided insight into the process of PIF among GP residents:

- it all happens in the workplace
- from doing to becoming
- negotiating perceived norms

Below we describe these themes and delineate the influencing factors and their interplay, illustrated with quotes (identified by gender (F/M), and interview number (n)).

It all happens in the workplace

Residents reported that their professional identity primarily developed in the workplace. In their GP training practices, multiple interrelated factors - including clinical experiences, clinical supervisors, and residents' self-assessment - were found to be at play in forming this professional identity. These factors and their interplay are explored below.

Clinical experiences were perceived as "the way towards becoming a GP" (F2). Residents repeatedly articulated that they became GPs by "just doing the work of a GP" (F6), as "practice makes perfect" (F5). Residents described that by "seeing many patients [and] gaining experience" (M11) in an increasingly independent way, they gradually moved to full participation in the GP training practice. This sense of full participation culminated during the independent clinical weeks, during which residents worked without the support of their supervisors. These weeks appeared to be important milestones in feeling like a GP, as they were said to "boost [their] self-confidence"(F5), and allowed residents to manage the GP practice independently.

"[during the independent clinical weeks] you learn more about what is really going on in practice, because if you work together with your supervisor, he still catches quite a few things.

When you are really alone, you get everything. So, then you just really feel like you are the spider in the web." (F3)

In addition to clinical experiences, residents saw their *clinical supervisors* as critically important to their PIF. Residents said their supervisors were essential in providing an environment in which they could feel free to "explore" (M11) what type of GP they wanted to become. "Personal chemistry" (F3,4,7,8) and "being trusted" (F4,6,7) were frequently mentioned as prerequisites for "feeling free to try out" different GP styles (M11). Most residents saw their supervisors as "role models who bring about your formation" (F7) and indicated that closely "observing supervisors" (F5, M10) contributed to exploring what type of GP they wanted to become. Supervisor's confirmatory feedback about whether residents were on the right track towards becoming a GP was seen as very important in identifying with the community of GPs.

"What helps me a lot is feedback by my supervisor … him saying: 'Well, this es exactly how a GP should do this.'" (F4)

A third important ingredient influencing PIF, related to the workplace, was *'self-assessment'.* Residents tended to self-assess their professional development through "reflecting on [their] medical practice" (F5), in terms of whether they ran out of time, whether their patients were satisfied, whether their diagnoses and therapy were right – "checking your hypotheses" (F5) - and whether they were managing to cope with uncertainty. Residents also appeared to self-assess their PIF outside the workplace by comparing their own experiences in the workplace with "the stories and experiences of [their] peers" (F2) during the day-release program.

From doing to becoming

Residents observed that over the years of training, their identity formation reflected their move from *doing* the work of a GP to *becoming* a GP. During this process, a range of influences, which changed over time, contributed.

In the first phase of training, residents perceived that they were absorbed in mastering the *practical* aspects of general practice, ranging from "making your own diagnoses, doing your

own visits" to "doing independent surgeries" (F2). During this stage, residents were primarily focused on the biomedical and technical aspects of clinical experience, and they felt that they had to "gather medical knowledge and skills" (F4,7).

"The entire first phase of training, was more about the content, about medical matters … knowledge and skills. And as a first-year resident you don't have too much responsibility either." (F1)

However, when residents had gained enough confidence in their practical medical skills, they felt they gained space to give attention to what they saw as a core value of GP medicine. By being able to view patients holistically, rather than as people with diseases, residents felt "they had become more of a real GP" (F2).

"I noticed that in my third year I looked further … Now, I sometimes don't even start [in consultations] with a question about the complaint … We actually first have a chat for a few minutes before we discuss that. And I realise I like that." (F5)

The role of the supervisor, as perceived by the residents, also changed. Residents frequently described a process from observing and imitating their supervisor (especially when practical aspects had to be mastered) and reflecting with the supervisor, to gradually finding their own way to practice.

"That has been my style in the first year; a lot of copying. And now I think, well you do it this way. I don't think that is useful at all. I like to do it my way." (F4)

In the final year, residents experienced their relationship with their supervisors as being more "equal" and different subjects were touched upon during learning conversations.

"You also have different learning conversations with your supervisor … In the first year, you are more focused on the practical, theoretical aspects, and in the third year you are now also sparring with each other more, about what kind of GP you want to become." (F3)

During the process of moving from 'doing to becoming', residents also experienced a change in how they were viewed by both GP-assistants and patients. Increasingly they were seen as a GP, which appeared to strengthen their professional identity.

"One day another GP came to visit [this patient], so he [the patient] said: 'Where is my own GP?'. And he meant me, while I was actually still in training. This was an important moment for me as I realised that now I'm seen by patients as a GP." (F1)

Negotiating perceived norms

In all focus groups, the multiple personal and professional roles residents have, and how they expected to balance personal roles with their role as a GP, appeared important aspects of their identity development. Residents across all focus groups agreed on GP values about "best possible care," including "continuity of care" (F1), "commitment" (M2) and "being available for patients" (M6), but differed with their supervisors about how to operationalise these values.

Residents said they didn't see their supervisors as role models in operationalising these values in a healthy way. Residents perceived that their supervisors expected that these values could only be reached by "running your own GP practice" (F1) and always being accessible for patients, which for residents would conflict with the fulfillment of their other roles. Hence, these perceived norms caused internal negotiations about how to balance their professional roles with their personal roles. However, residents perceived no room to discuss these challenges with their supervisors.

"It's a generational problem too. The older generation thinks: responsibility is continuity. Responsibility for them is seven days a week, 24 hours a day … They cannot teach us very well how to take care of patients as a team, because they mostly worked on their own. They have been limitless; always working in the evenings; doing everything by themselves, administration in the wee hours; giving their cell phone numbers to many of their patients. We are going to do that differently because we have a lot of plates spinning. We have multiple roles … We have to figure out how. It will be different, but it won't necessarily be worse."(F1)

In all focus groups, residents talked about the multiple personal and professional roles they have and how they expected to balance these roles with being a GP. For most residents, “freedom to shape your own way of working” (M2) as a GP, which creates the possibility of a “healthy work-life balance” (F1 F3), was an important “reason to aspire to a job outside the hospital” (M8). Residents also said they hoped to combine their future role as a GP with other important roles (e.g., parent and partner).

Differing perspectives on the execution of GP practice arose particularly in the last year of residency, when residents tried to work out “what kind of doctor [they] wanted to become and how to organise [their] work as a GP” (M6). Residents expressed a profound desire to discuss the implementation of a sustainable, healthy GP practice with their supervisors. They wished for their supervisors not to impose their norms but rather to take a coaching role here as well.

Discussion

In this study we sought to gain insights into both the process of PIF during GP residency as well as which factors GP residents perceive as influential to their PIF. Study findings indicated that identity formation occurs primarily in the workplace, as residents move from doing to becoming and negotiate perceived norms. A tapestry of interrelated influencing factors, which changed over time, were felt to exert their influence predominantly in the workplace. Below, we will discuss these themes and how our findings add to the existing PIF-literature.

It all happens in the workplace

Our study highlights the GP training practice as the place where the PIF of GP residents was mostly formed, with clinical experience, clinical supervisors, and self-assessment as the most influential factors.

Clinical experiences gained during progressively independent practice were perceived by residents as the cornerstones of their PIF. This is in line with earlier studies on PIF in UGME (21, 43) which revealed the importance of experience gained from direct encounters with patients; it also echoes what is known about how residents learn(44-46). Our findings about residents' learning *on* the job and *from* the job, and their move to full participation, provides empirical evidence for what has been theorised on PIF previously(9, 11, 12, 36). It supports the assertion that PIF is most effectively influenced through "situations, not subjects", i.e. that residents' professional identity is more likely to be influenced by doing the work than by being taught about it(26). Moreover, it shows the overlap between PIF and learning in general, and embraces the concept that PIF can be better understood as "becoming" as opposed to "acquisition" and "participation"(47).

Clinical supervisors appeared to have essential roles in residents' PIF, changing over time from role modelling to coaching. Residents mentioned clinical supervisors' critical contribution in creating a safe environment in which residents could feel free to explore their (future) professional identity, which created the need for "chemistry" between resident and supervisor. This echoes the importance of the supervisory relationship as the most important factor in the effectiveness of supervision(25, 48, 49). The specific GP setting, with few

supervisors - often only one - may foster a relationship that facilitates PIF(50), although when "chemistry" isn't felt it also might endanger PIF.

Our study also indicated that in addition to supervisors and clinical experiences, residents' *self-assessment* is an important influence in PIF. This kind of self-assessment is closely related to what Cruess et al. called "conscious reflection" in their model(11). Residents' first focus is on *doing* the work of a GP well: they checked their diagnoses and therapy, whether their patients were satisfied and whether they were on course regarding time management. This echoes the process of self-entrustment as described by Sagasser et al(51). Then, when residents have gained enough self-confidence in 'doing', their self-assessment focuses on *becoming* a GP: coping with uncertainty and comparing workplace-based experiences with peers. For the latter, they used the day-release program, in particular the parts where they engaged in collaborative reflection and compared their own experiences with their peers' stories and experiences, as described previously in the literature(52-54).

From doing to becoming

To conceptualise PIF as a movement from doing to becoming has been theorised upon previously(2). This study, however, is the first to provide empirical evidence on this change in PIF during residency. Our study builds on the literature about PIF by Pratt et al., especially where they describe the process of "identity enriching", whereby the basic tenets of a professional identity remain the same, but the identity becomes deeper and more nuanced(13). Our finding, that when residents felt competent about their practical medical skills they could focus more on holistic care for patients entrusted to them, can be seen as an example of this "identity enriching".

Clinical supervisors also appeared to have a pivotal role in the movement from doing to becoming. Residents attributed different roles to their clinical supervisors, which changed over time. In the first period of training, clinical supervisors seemed to function primarily as role models for the practical aspects of medicine. When residents gained enough self-confidence in *doing* the work of a GP, they seemed to value their supervisors as role models in *being* a GP and providing holistic care. In the final period of training, however, they needed their supervisors as coaches with whom they could discuss their perspectives on how to execute GP practice and what kind of GP they wanted to become. Thus, during the years of

training, there seemed to be a reciprocal change in the supervisory relationship: that is, the supervisor needed to change roles in response to the changing needs of the resident. This is in line with recent research(3, 14, 25, 48). For example, Brown et al. found that residents and supervisors adopted reciprocal identities during a 12-week GP intern placement(25). Our study adds that this reciprocal identity change not only concerns the practical aspects of medicine, but also PIF.

Negotiating perceived norms

According to the residents in our study, supervisors did not always seem to make this change. The latter became particularly evident near the end of residency, when residents felt a need to discuss their perspective on the execution of GP practice. Although, residents mentioned that observing their supervisors on the job contributed to exploring what type of GP they wanted to become, they also needed their clinical supervisors as coaches to reflect on this. However, instead of that, they oftentimes felt that their supervisors imposed their own norms on them. Imposing norms seems to contrast the earlier described need for "chemistry" between resident and supervisor as an important factor in guiding PIF.(25, 48, 49) Here lies a great challenge for supervisors, one that has recently been elaborated by Sawatsy et al., who detailed the tension between competency-based medical education and PIF(3). Guiding residents' PIF seems to require different supervisor competencies(3, 4, 55).

Strengths and limitations

For this study, we used the factors identified by Cruess et al. as sensitising concepts for both the interview guide and the deductive part of the analysis(11). This added rigor to our study, whilst our exploratory approach left open the possibility of finding complementary factors. Moreover, we were able to include a relatively large and diverse group of final-year residents. This, taken together with the interdisciplinary nature of our research team, made it possible to discern different perceptions on PIF.

There are, however, some limitations to this study. First, we included third year trainees. Therefore, their perceptions about the first two years may have been restricted due to recall bias. Moreover, residents seldom spoke about their second year of training outside the GP training practice without prompting. What this means in the light of PIF is unclear and would

merit further study. Third, because this study was limited to the GP context, the transferability to other residency contexts may be limited. Fourth, being interviewed by a colleague (PB) could have negatively affected data collection; the participants might have provided 'socially desirable' answers. However, the interviewer kept a research journal in which he reflected on his role in each interview and discussed this in the research group.

Implications for future research and practice

To allow for a more purposeful approach to PIF in residency, a richer picture of PIF in residency is needed. Future exploratory studies should, therefore, focus on PIF in other residency contexts and examine other stakeholders' perspectives, including clinical supervisors, educators outside the clinical workplace and patients. Because PIF is a long-term process, further research is also needed to examine PIF in the context of GP experiences during undergraduate training.

Our results begin to help make explicit what PIF in GP residency comprises. Now that some of the factors in GP residency PIF are better known, translating this knowledge into ways to actively support residents' PIF would be worthwhile.

First, supervisors should acknowledge the very important role they play in PIF by building on a safe, reciprocal and changing supervisory relationship. As residents' PIF is a movement from doing to becoming, guiding residents' PIF requires different supervisor competencies across the different PIF stages(3, 4, 55). Especially in the last period of residents' training, supervisors should devote themselves to their role as a coach and give residents room to negotiate perceived norms around providing care, as advocated earlier(3, 4). Faculty development is also needed to make supervisors aware of their different roles across the different PIF stages and enhance their competence in these roles(12). Second, the demonstrated importance of peers during the day-release program could promote an even stronger emphasis on collaborative reflection during a day-release program(53, 54). Third, our finding that residents' professional identity is more likely to be influenced by doing the work than by being taught might open a debate on time distribution between days in practice and a day-release program.

Conclusion

This study is the first to explore both the process of PIF during the whole residency period as well as concurrent socialising factors and their interplay. Themes found to be important in the process of PIF during GP residency revolve around the workplace as the most important place for PIF, PIF as a movement from doing to becoming, and perceived norms about the execution of GP practice, which residents wish to discuss with their supervisors. A tapestry of interrelated influencing factors – most importantly, clinical experience, clinical supervisors, and self-assessment - changed over time and were felt to exert their influence predominantly in the workplace. Our findings have implications for all stakeholders in the PIF of residents – supervisors and other educators as well as residents themselves.

Acknowledgments

The authors would like to thank all the participants who gave their valuable time and participated in this study. The authors would also like to thank Andy Bailey for his valuable help in editing the manuscript.

Ethical approval and consent to participate

All methods were carried out in accordance with relevant guidelines and regulations. Participants were informed that their involvement was voluntary, and that data would be treated confidentially. Subsequently, they were asked to provide informed consent. The Ethical Review Board of the Netherlands Association for Medical Education (NVMO-ERB) approved the study (dossier number 1032).

References

1. Biesta GJ, van Braak M. Beyond the medical model: thinking differently about medical education and medical education research. Teaching and Learning in Medicine. 2020;32(4):449-56.
2. Jarvis-Selinger S, Pratt DD, Regehr G. Competency is not enough: integrating identity formation into the medical education discourse. Academic Medicine. 2012;87(9):1185-90.
3. Sawatsky AP, Huffman BM, Hafferty FW. Coaching versus competency to facilitate professional identity formation. Academic Medicine. 2020;95(10):1511-4.
4. Parsons AS, Kon RH, Plews-Ogan M, Gusic ME. You can have both: Coaching to promote clinical competency and professional identity formation. Perspectives on Medical Education. 2021;10(1):57-63.
5. 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.
6. Sternszus R, Boudreau JD, Cruess RL, Cruess SR, Macdonald ME, Steinert Y. Clinical Teachers' Perceptions of Their Role in Professional Identity Formation. Academic Medicine. 2020;95(10):1594-9.
7. Holden M, Buck E, Clark M, Szauter K, Trumble J, editors. Professional identity formation in medical education: the convergence of multiple domains. HEC forum; 2012: Springer.
8. Crigger N, Godfrey N. From the inside out: A new approach to teaching professional identity formation and professional ethics. Journal of Professional Nursing. 2014;30(5):376-82.
9. 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.
10. Cooke M, Irby DM, O'Brien BC. Educating physicians: a call for reform of medical school and residency: John Wiley & Sons; 2010.
11. 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.
12. Cruess SR, Cruess RL, Steinert Y. Supporting the development of a professional identity: general principles. Medical teacher. 2019;41(6):641-9.
13. Pratt MG, Rockmann KW, Kaufmann JB. Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. Academy of management journal. 2006;49(2):235-62.
14. Sawatsky AP, Santivasi WL, Nordhues HC, Vaa BE, Ratelle JT, Beckman TJ, et al. Autonomy and professional identity formation in residency training: a qualitative study. Medical education. 2020;54(7):616-27.
15. Yakov G, Riskin A, Flugelman AA. Mechanisms involved in the formation of professional identity by medical students. Medical Teacher. 2020:1-22.
16. Wong A, Trollope-Kumar K. Reflections: an inquiry into medical students' professional identity formation. Medical Education. 2014;48(5):489-501.
17. Monrouxe LV. Negotiating professional identities: dominant and contesting narratives in medical students' longitudinal audio diaries. Current Narratives. 2009;1(1):41-59.
18. Helmich E, Bolhuis S, Dornan T, Laan R, Koopmans R. Entering medical practice for the very first time: emotional talk, meaning and identity development. Medical Education. 2012;46(11):1074-86.
19. Kline CC, Park SE, Godolphin WJ, Towle A. Professional identity formation: a role for patients as mentors. Academic Medicine. 2020;95(10):1578-86.
20. Kay D, Berry A, Coles NA. What experiences in medical school trigger professional identity development? Teaching and learning in medicine. 2019;31(1):17-25.
21. Monrouxe LV, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Medical education. 2011;45(6):585-602.

22. Madill A, Latchford G. Identity change and the human dissection experience over the first year of medical training. Social Science & Medicine. 2005;60(7):1637-47.
23. Ratanawongsa N, Teherani A, Hauer KE. Third-year medical students' experiences with dying patients during the internal medicine clerkship: a qualitative study of the informal curriculum. Academic Medicine. 2005;80(7):641-7.
24. Désilets V, Graillon A, Ouellet K, Xhignesse M, St-Onge C. Reflecting on professional identity in undergraduate medical education: implementation of a novel longitudinal course. Perspectives on Medical Education. 2021:1-5.
25. 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.
26. Hansen S, Mathieu S, Biery N, Dostal J. The emergence of family medicine identity among first-year residents: a qualitative study. Family medicine. 2019;51(5):412-9.
27. Jarvis-Selinger S, MacNeil KA, Costello GR, Lee K, Holmes CL. Understanding professional identity formation in early clerkship: a novel framework. Academic Medicine. 2019;94(10):1574-80.
28. Sandelowski M. Whatever happened to qualitative description? Research in nursing & health. 2000;23(4):334-40.
29. Bergman E, de Feijter J, Frambach J, Godefrooij M, Slootweg I, Stalmeijer R, et al. AM last page: A guide to research paradigms relevant to medical education. Academic Medicine. 2012;87(4):545.
30. Stalmeijer RE, McNaughton N, Van Mook WN. Using focus groups in medical education research: AMEE Guide No. 91. Medical teacher. 2014;36(11):923-39.
31. Cruess RL, Cruess SR, Steinert Y. Teaching medical professionalism: supporting the development of a professional identity: Cambridge University Press; 2016.
32. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Academic Medicine. 2014;89(9):1245-51.
33. Tromp F, Vernooij-Dassen M, Grol R, Kramer A, Bottema B. Assessment of CanMEDS roles in postgraduate training: the validation of the Compass. Patient education and counseling. 2012;89(1):199-204.
34. 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.
35. 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.
36. Cruess RL, Cruess SR, Steinert Y. Amending Miller's pyramid to include professional identity formation. Academic Medicine. 2016;91(2):180-5.
37. Monrouxe LV. Identity, identification and medical education: why should we care? Medical education. 2010;44(1):40-9.
38. Monrouxe LV, Rees CE. Theoretical perspectives on identity: researching identities in healthcare education. Researching Medical Education. 2015:129-40.
39. Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. Medical education. 2017;51(1):40-50.
40. Fereday J, Muir-Cochrane E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. International journal of qualitative methods. 2006;5(1):80-92.
41. Tai J, Ajjawi R. Undertaking and reporting qualitative research. The clinical teacher. 2016;13(3):175-82.
42. Starks H, Brown Trinidad S. Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. Qualitative health research. 2007;17(10):1372-80.
43. MacLeod A. Caring, competence and professional identities in medical education. Advances in Health Sciences Education. 2011;16(3):375-94.

44. Yardley S, Teunissen PW, Dornan T. Experiential learning: AMEE guide No. 63. Medical teacher. 2012;34(2):e102-e15.
45. Teunissen P, Scheele F, Scherpbier A, Van Der Vleuten C, Boor K, Van Luijk S, et al. How residents learn: qualitative evidence for the pivotal role of clinical activities. Medical education. 2007;41(8):763-70.
46. de Bever S, van Rhijn SC, van Dijk N, Kramer A, Visser MR. Professionals' perspectives on factors affecting GP trainees' patient mix: results from an interview and focus group study among professionals working in Dutch general practice. BMJ open. 2019;9(12):e032182.
47. Kilbertus F, Ajjawi R, Archibald DB. "You're not trying to save somebody from death": learning as "becoming" in palliative care. Academic Medicine. 2018;93(6):929-36.
48. Jackson D, Davison I, Adams R, Edordu A, Picton A. A systematic review of supervisory relationships in general practitioner training. Medical education. 2019;53(9):874-85.
49. Bonnie LHA, Visser MRM, Kramer AWM, van Dijk N. Insight in the development of the mutual trust relationship between trainers and trainees in a workplace-based postgraduate medical training programme: a focus group study among trainers and trainees of the Dutch general practice training programme. BMJ Open. 2020;10(4):e036593.
50. Van der Zwet J, Hanssen V, Zwietering P, Muijtjens A, Van der Vleuten C, Metsemakers J, et al. Workplace learning in general practice: supervision, patient mix and independence emerge from the black box once again. Medical teacher. 2010;32(7):e294-e9.
51. Sagasser MH, Kramer AW, Fluit CR, van Weel C, van der Vleuten CP. Self-entrustment: how trainees' self-regulated learning supports participation in the workplace. Advances in Health Sciences Education. 2017;22(4):931-49.
52. van Braak M, Giroldi E, Huiskes M, Diemers AD, Veen M, van den Berg P. A participant perspective on collaborative reflection: video-stimulated interviews show what residents value and why. Advances in Health Sciences Education. 2021:1-15.
53. Veen M, de la Croix A. The swamplands of reflection: using conversation analysis to reveal the architecture of group reflection sessions. Medical education. 2017;51(3):324-36.
54. Veen M, de la Croix A. Collaborative reflection under the microscope: Using conversation analysis to study the transition from case presentation to discussion in GP residents' experience sharing sessions. Teaching and learning in medicine. 2016;28(1):3-14.
55. Lin J, Reddy RM. Teaching, mentorship, and coaching in surgical education. Thoracic surgery clinics. 2019;29(3):311-20.

You gotta make your own kind of music,

sing your own special song.

Cass Elliot

Chapter 5

“What kind of doctor do you want to become?”: Clinical supervisors’ perceptions of their roles in the professional identity formation of General Practice residents

Barnhoorn, P. C., Nierkens, V., Numans, M. E., Steinert, Y., & van Mook, W. N. K. A. (2022). “What kind of doctor do you want to become?”: Clinical supervisors’ perceptions of their roles in the professional identity formation of General Practice residents. Medical Teacher, 1-7.

Abstract

Purpose: Supporting the development of a professional identity is a primary objective in postgraduate education. Few empirical studies have explored professional identity formation (PIF) in residency, and little is known about supervisors' perceptions of their roles in residents' PIF. In this study, we sought to understand how supervisors perceive their roles in the PIF of General Practice (GP) residents.

Materials and methods: Guided by principles of qualitative description, we conducted eight focus groups with 55 supervisors at four General Practice training institutes across the Netherlands. Informed by a conceptual framework of PIF, we performed a thematic analysis of focus group transcripts.

Results: Three themes related to how GP supervisors described their roles in supporting residents' PIF: supervising with the desired goal of GP training in mind; role modeling and mentoring as key strategies to achieve that goal; and the value of developing bonds of trust to support the process.

Conclusions: To our knowledge, this study is the first to explore PIF in GP training from the perspective of clinical supervisors. The identified themes mirror the components of the therapeutic alliance between doctors and patients from a supervisor's perspective and highlight the pivotal roles of the supervisor in a resident's PIF.

Practice points

- GP supervisors see a pivotal role for themselves in guiding the PIF of residents.
- GP supervisors guide residents with an image in mind about what a GP should look like.
- Role modeling and mentoring are key strategies used by supervisors in supporting PIF among residents.
- Supervisors value a bond of trust with the resident, often described by them as the 'need for a click,' in order to guide residents' PIF.

Introduction

Supporting the development of a strong professional identity (PI) is a primary objective in specialist training programs(1-5). Professional Identity - who we are as professionals - guides our behavior as professionals and is the cornerstone of professionalism(1, 6). A weak PI is associated with poor resilience and burnout in junior doctors(7). In contrast, a strong PI is associated with wellbeing, life satisfaction and professionalism(7). Supporting the development of a PI, aligned with the values and norms of the profession, is increasingly highlighted in medical education (2, 8, 9). More recently, identity and its formation have become of even greater importance because of the dramatic change in both health care and medical education with the emergence of COVID-19(10). Professional identity formation (PIF) - the development of professional values, actions and aspirations(11) - is a process at two levels. At the individual level it involves a person's psychological development; at the collective level it involves a socialisation process(12). The renewed emphasis on PIF redirects medical educators to focus on the socialisation process, in which learners come to "think, act, and feel like physicians"(2, 4, 13).

Since residency is a key stage in the formation of the physician-to-be(11, 14, 15), insights into the process of PIF during residency are needed. While many studies have explored PIF in undergraduate medical education(16-25), few have explored PIF in postgraduate medical education (PGME)(9, 14, 15, 26-28). The latter studies in PGME have highlighted the pivotal relationship between resident and supervisor, and focused specifically on PIF from the resident's perspective(14, 15, 26, 28). Only one study focused on supervisors' perceptions of their roles in residents' PIF (9) and the authors identified caring for patients, role modeling, and providing graded autonomy as important ways for clinical teachers to support PIF. However, the primary care, or general practice (GP), setting has been left relatively unexplored. The GP setting is interesting because the relationship between residents and supervisors is generally more one-on-one; it is also more long-term than in many other healthcare settings, and the supervisor can consequently witness the unfolding of a resident's PIF over time.

In this exploratory study, we focus on an important factor in PIF - the supervisor - and aim to complement the sparse data on PIF in PGME by answering the following research question: How do supervisors perceive their roles in the PIF of residents?

Method

Study design

We conducted a qualitative study, based on qualitative description(29, 30).

Qualitative description is particularly useful in applied settings to answer questions of relevance to practice and policy. Qualitative description also aligns with a constructivist perspective, which we adopted in this study, and is considered to be effective in testing theoretical constructs, as we set out to do. As PIF is a social process which also takes place at the collective level(12), we chose focus groups for data collection to facilitate interaction among participants as they reflected on their experiences and normative beliefs regarding PIF. We applied the consolidated criteria for reporting qualitative research (COREQ)(31).

Conceptual framework

We used a conceptual framework of PIF developed by Cruess et al.(4) to inform the interview guide and initial deductive data analysis. This framework, which describes the gradual shift of learners from peripheral to full participation in a community of practice, highlights multiple factors that interact with learners' pre-existing identities, including clinical and non-clinical experiences and role models. From this perspective, learners have to negotiate the influence of these factors as their new identities are being formed, which may or may not align with their pre-existing identities.

Context and setting

Eight university medical centers offer GP training in the Netherlands. This training consists of providing patient care under the supervision of a single designated supervisor during the first and third (final) year of training. Year two consists of rotations in Accident & Emergency, nursing homes, and psychiatric outpatient clinics with different supervisors. Throughout, the training, four days of practice alternate with a day-release program at the university, staffed by GPs and behavioral science teachers, designed to deepen learning from experiences in practice. The days in GP practice expose residents to increasingly complex clinical experiences over time and allow them to consult their supervisors as needed(28). Residents' progress in their development as a GP is monitored and assessed in joint collaboration between clinical supervisors and GP staff and behavioral science teachers.

Clinical supervisors are also offered group-based faculty development training programmes in supervising and assessing residents at the university to which they are affiliated.

The research team

PB is a GP and chairman of both the local professionalism committee at Leiden University Medical Center (LUMC) and the national professionalism committee of the Netherlands Association of Medical Education. VN is a health scientist. YS is a clinical psychologist and professor of family medicine and health sciences education. MN is a GP and professor of general practice and head of department. WvM is an intensivist, chairman of Maastricht University Medical Centre+ (MaastrichtUMC+) professionalism committee and professor of professional development. All authors are experienced researchers and medical teachers and have published extensively about PIF and professionalism.

Participants and procedure

We asked the contact persons responsible for supervisor faculty development training at four institutes across the Netherlands: (Leiden (LUMC), Rotterdam (ErasmusMC), Maastricht (MaastrichtUMC+), and Groningen (UMCG)), to select one or more of their existing faculty development training groups of supervisors of final-year residents to participate in this study. We purposefully selected these institutes, aiming for a balance between rural and urban sites, as variations in work content and processes in different practice environments can impact the socialisation process(14). Focus groups were voluntary and planned during the faculty development training programmes. The main researcher (PB) moderated all in-person focus groups, each lasting approximately 90 minutes. In each group, an educational researcher, either a member of the team (VN) or an educational researcher from the research department, was present to observe interactions, take field notes and, when necessary, ask clarifying and deepening questions.

We used a semi-structured interview guide (see appendix 1) derived from pilot interviews and the prevailing literature, with an emphasis on the aforementioned conceptual framework(4). All interviews were audiotaped and transcribed verbatim.

Analysis

We chose an abductive approach to analysis in which we integrated inductive data-driven coding with deductive theory-driven interpretation(32). We conducted a thematic analysis in which first PB and VN performed open, inductive coding independently from one other. Together they developed an initial codebook, which was informed by the factors highlighted in the conceptual framework developed by Cruess et al.(4), and discussed codes within the team consisting of all authors. Thereafter, the team iteratively discussed relationships between codes to construct themes. During analysis, PB and VN kept memos to document coding and analysis.

Results

All selected supervisor groups participated willingly. Eight focus groups, with 4 to 8 participants in each, were conducted with 55 supervisors at four training institutes. Twenty-seven supervisors (49%) were female. Supervisors spoke openly about their pivotal roles in residents' PIF, but at times had difficulty articulating exactly how they could support PIF. The three themes we identified are discussed below, illustrated with quotes (identified by gender (F/M), and interview number (n)).

Supervising with the end in mind

Supervisors seemed to have an image in mind about *what* a GP should look like. Based on this image, which they saw as the goal of residency training, supervisors supported residents' PIF, using observable "signposts" to direct them toward that goal. For example, supervisors believed that third-year residents should switch from merely solving medical problems - treating symptoms or diseases - to delivering whole-person care, taking into account psychological and social factors.

"Often you see that development in how the consultations are done. In the beginning, consultations are very much focused on the medical problem and at a certain point they become much more patient-centered. So, it becomes much more of a social conversation, no longer a forced solving of a medical problem. And then you think ... there's a GP sitting here instead of a doctor solving a problem ... A GP emerges from this doctor."(M1)

Supervisors also observed that being a GP involves much more than taking care of individual patients, and that residents had to "feel responsible for GP-care in its entire scope"(M4); take responsibility for "managing tasks"(M7), provide "out-of-hours care"(F4), and ensure "continuity of care"(M1).

Supervisors described using three types of "signposts" to evaluate progress in residents' attainment of a PIF: patient safety; residents becoming a patient's primary physician; and a changing resident-supervisor relationship.

Supervisors stated that the first priority in PIF concerned patient safety, “it has to be safe”(M5). Only after supervisors felt that their patients were safe in the hands of the residents would they “dare to let [them] loose on patients”(F1). A second signpost was the emergence of “a small practice within the practice”(M1), with patients “reconsulting the resident”(F1) without needing a second opinion from the clinical supervisor. As residents became the patients’ main physician, supervisors often noticed that the resident “feels more at ease”(F1) and “behaves in a more relaxed manner”(M1), which was evidenced by “making jokes, but taking the job seriously”(F1) and “accepting you don’t know everything right away”(M1). This development toward “taking responsibility [and] independence”(M2) often yielded a change in the supervisor-resident relationship as well. Supervisors saw their changing relationship with residents, toward more “equality”(M8), as a third signpost of progress.

“When you interact as equals, [in] the last three months, I think that's always the most beautiful thing.”(F8)

Role modeling and mentoring

Supervisors also described *how* they supported residents in their PIF: through role modeling and mentoring. When role modeling, supervisors relied on rather informal, often unplanned ‘performance driven’(33) transfer of knowledge and skills based on the resident observing the supervisor. When mentoring, supervisors were more ‘development driven’(33) and offered their support beyond the biomedical context of knowledge and skills, helping residents find their place within the profession.

Supervisors voiced that one way to support residents’ PIF, was through “role modeling”(M2), especially because residents are trained in a “master-apprentice type setting”(M3). They said that they often preferred to “just show”(M8) residents what to do, and only sometimes tell, hoping residents would copy them. Many supervisors expressed this element of spontaneously copying the supervisor as an “implicit transfer of know-how”(M2).

"[Much is] implicit. You've got them on your tail all the time. … You're together for a year: you have lunch together, you sit in the car together. They observe you. Even without you consciously telling them things."(M4)

In contrast to this implicit role modeling, supervisors wanted to be explicit about their own mistakes and uncertainties, as they thought residents' PIF was best supported by "sharing what you don't know and how you figured that out."(M1).

"I have a number of people in my personal graveyard, and those stories … What I have learned from these cases, I share … So I share my biggest mistakes."(M2)

In the final year, supervisors felt that they had to address questions like "what kind of a doctor do you want to become?"(F4). To meet this objective, they felt that they had to adopt a mentoring role.

"In the third year ... The basics, they're all there. But what kind of GP do you want to become? What do you stand for? Much broader. Not just the responsibility of seeing the patient."(F4)

Many supervisors stressed that residents "already had a pre-existing [personal] identity"(F5) and that in their final year they had already mastered most professional aspects. Therefore, they saw that the supervisors' role was mainly to "fine-tune"(F7). In addition, supervisors saw "giving space"(F3) to the resident, combined with "giving confidence"(M3), as important ingredients for mentoring residents in their PIF.

"[Residents] are already formed. Those people coming into GP training are around thirty. And of course, they already have their own identity, so you can't shape them completely. At best, you can give them a certain direction."(F5)

Developing bonds of trust

To support residents' PIF as described above, many supervisors felt that they needed a bond of trust with the resident, often described as the "need for a click". Supervisors observed that in supporting residents' PIF, they had to be "transparent"(F2) and "vulnerable as a supervisor

and a human being"(M7), and that this transparency and vulnerability necessitated a bond of trust between supervisor and resident.

"You have to trust your resident. If that's not quite the case, then you can't give that openness needed, because then you don't feel safe yourself … I've been in situations where I thought: there is some kind of a barrier to discussing certain things with my resident. And then you can't really be a good supervisor."(F1)

Having "life experience"(F5) and "work experience"(M5) appeared to be important ingredients for the "click". Supervisors emphasised that "a connection or match"(M1), or "a certain communality"(M3) form the basis for the "click". When a connection or communality was felt, supervisors were able to "[give] space"(F3) and "[give] confidence"(M3) to the resident.

"But I think it becomes very difficult to pass on the profession in the way I want it to if I don't have that feeling [of trust] with the resident."(M1)

When a bond of trust was felt, supervisors didn't feel obligated to "stick to learning plans"(F7); rather, they felt they could support residents' PIF in a more spontaneous way, trusting that the most important learning goals would be achieved while the resident was doing his/her work as a GP.

"Often it's very serendipitous, and at very unexpected moments when you have intimate conversations. … it could be on the way to a patient or when you come back from a visit that you talk about it again. Or during a shift, which I always enjoy. Especially, when it's not busy for once. Those are often the moments that you have different conversations."(F5)

However, in case of a poor or absent bond of trust, supervisors felt they could not navigate "on serendipity" but instead had to "adopt a more active stance"(M7) and "do [the training] by the book" (M7). In those cases, supervisors changed their focus from supporting PIF to acquisition of competencies and assessed residents' performance in a manner that was as "concrete as possible"(M8). They then - often reluctantly – felt they had to make the implicit

explicit, and had to instruct the residents “as they had learned it at the training institute”(M7) by “direct observation”(M8), “video observation”(M7) or “doing consultation hours together”(M7). This way of working often caused “loss of energy”(M1) and made supervisors “doubt [their] commitment to resident training”(M1).

Discussion

In this study on supervisors' perceptions regarding their roles in the PIF of residents, we identified three themes: the desired goal of GP training (supervising with the end in mind), supervisors' ways of working toward that goal (role modeling and mentoring), and prerequisites for achieving that goal (developing bonds of trust). Below we will discuss these themes in the context of the literature and provide future avenues for research and practice.

Supervising with the end in mind

From the supervisors' perspective, residents had to transition from *doing* the work of a GP to *becoming* a GP. This resonates with the proposed amended version of Miller's pyramid(3) used to provide a structured approach to the assessment of medical competence. While the original version of Miller's pyramid consists of four layers - "Knows," "Knows How," "Shows How," and "Does," in the amended version a fifth level of "Is" is added at the apex, reflecting the presence of a professional identity. Although this study did not focus on assessment per se, the amended version of Miller's pyramid resonates with our findings. That is, we found that residents merely becoming medical problem-solvers was not enough for supervisors. Rather, they had an "Is" level in mind – reflecting the presence of a holistic PI – as the end goal. The move from doing to becoming also echoes theory on how learners move from the periphery toward full participation in a community of practice(4). Ultimately, this journey of becoming a GP ends in being seen as a trustworthy physician by both supervisors and patients. A progression toward equality in the resident-supervisor relationship was another signpost in evaluating progress in PIF, required for development and patient safety when supporting residents' PIF(34, 35).

Role modeling and mentoring

The way in which supervisors reported supporting residents' PIF came closest to the notions of role modeling and mentoring, processes conceptualised as important factors in PIF by Cruess et al. and others(4, 36). In the one study specifically focusing on supervisors' perceptions of their roles in residents' PIF(9), supervisors described role modeling as one of the most important ways in which they believed they could support PIF. In spite of different definitions of role modeling and mentoring, and how these processes effect PIF, there is

consensus about some central characteristics(4, 33, 36). Role modeling is mostly focused on performance, whereas mentoring is more developmentally driven(4, 33, 36). This distinction between 'performance' and 'development-driven' was also reflected in our findings. On the one hand, supervisors spoke about mostly unplanned, implicit transmission of knowledge and skills, which we categorised as role modeling. On the other hand, they also reported more explicitly supporting residents in conversations about what kind of a doctor they wanted to become, which we categorised as mentoring. Jackson et al. recently reviewed the multiple roles of GP supervisors(35). This review – although not focused on PIF – identified being both a role model and a mentor as important in supporting residents toward becoming GPs(35).

Developing bonds of trust

Becoming a GP takes place in supervised practice. Earlier studies have shown the importance of the supervisory relationship in residency(27, 35, 37, 38). Many of them focused on stepwise entrustment, defined as entrustment of professional activities(37, 38). In our study we found another type of trust; a bond of trust or 'click' appeared to facilitate both residents' PIF as well as entrustment of professional activities. When a bond of trust was felt, supervisors felt they could support residents' PIF in a spontaneous fashion, *trusting* that residents would achieve the most important learning goals independently, in the workplace. However, when the bond of trust was lacking, supervisors reported that they could not leave learning 'to chance'; rather they had to organise training 'by the book'. Earlier research on the development of mutual trust relationships endorses these finding(37, 39).

This bond of trust also mirrors the bond needed between doctors and patients, as an important ingredient of the therapeutic alliance(40), which includes three components: (1) a mutual understanding of the purpose or goal of therapy; (2) an agreement about how to work toward that goal or the tasks of therapy; and (3) the patient's liking, trusting, and valuing of the doctor. Telio et al. translated this therapeutic alliance for the educational setting into an educational alliance, and included the same three components(41). It should also be noted that the therapeutic alliance is defined as experienced by the patient, and the educational alliance, by the trainee. In our study, however, it was the supervisor who expressed the need for a bond of trust as a prerequisite for supporting PIF. This has potential risks. Just as clinicians are known to overestimate the quality of the therapeutic alliance and may therefore

not be able to assess when it breaks down, supervisors might also overestimate the quality of the educational alliance and be unaware of its failings(41). Although the specific GP setting, with a limited number of supervisors - often only one - may foster a relationship that facilitates PIF(42), it may, also put unwanted pressure on this interpersonal interaction.

Strengths and limitations

This study is the first to have been carried out among a large and diverse group of GP supervisors to explore how supervisors perceive their roles in the process of PIF of residents. Using the conceptual framework of PIF developed by Cruess et al. as a sensitising framework to design the interview guide as well as the initial data analysis added rigor to the study, as did analysis of these data using the different perspectives of an interdisciplinary team(4). However, this study has limitations. Because it was a single-country study limited to GP residency, the transferability to other countries and other residency contexts may be limited. Further, being interviewed by a colleague (PB) could have led participants to give 'socially desirable' answers. However, our findings provide insights into the process of PIF during residency, especially into the roles of supervisors in resident's PIF.

Implications for further research and practice

To further understand residents' PIF, future studies should focus on other stakeholder perspectives, including supervisors in other specialties, residents, educators outside the clinical workplace, and patients. Future research is also needed to explore the role of bonds of trust in PIF, the relationship of these bonds with entrustment, and the risks and benefits of these bonds for residents.

We also see two implications for practice based on these findings, both of which can be incorporated into faculty development programmes. First, supervisors need to be trained in when and how to apply different role modelling and mentoring skills across the different stages of PIF(33, 43, 44). Second, the development of a bond of trust between supervisor and resident needs specific attention during faculty development courses; that is, supervisors need to become aware of their own responsibility in establishing bonds of trust and how they can use these bonds to support residents' PIF.

Conclusions

This study is the first to explore PIF in GP training from the perspective of clinical supervisors. We identified three themes; the desired goal of GP training; supervisors' ways of working toward that goal; and prerequisites for achieving that goal. These themes mirror the three components of both the therapeutic alliance between doctors and patients, and of the educational alliance between teachers and learners in education. In contrast to the therapeutic alliance, which is experienced by the patient, and the educational alliance, which is experienced by the learners, in our study it was the *supervisor* who stated that a bond of trust was a prerequisite for supporting PIF. Since PIF is essential for the future career development of GP trainees, this implies a great responsibility for supervisors as well as those involved in coaching their educational skills.

References

1. 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.
2. 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.
3. Cruess RL, Cruess SR, Steinert Y. Amending Miller's pyramid to include professional identity formation. Academic Medicine. 2016;91(2):180-5.
4. 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.
5. 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.
6. Monrouxe LV. Identity, identification and medical education: why should we care? Medical education. 2010;44(1):40-9.
7. Monrouxe LV, Bullock A, Tseng H-M, Wells SE. Association of professional identity, gender, team understanding, anxiety and workplace learning alignment with burnout in junior doctors: a longitudinal cohort study. BMJ open. 2017;7(12):e017942.
8. Holden M, Buck E, Clark M, Szauter K, Trumble J, editors. Professional identity formation in medical education: the convergence of multiple domains. HEC forum; 2012: Springer.
9. Sternszus R, Boudreau JD, Cruess RL, Cruess SR, Macdonald ME, Steinert Y. Clinical Teachers' Perceptions of Their Role in Professional Identity Formation. Academic Medicine. 2020;95(10):1594-9.
10. Daniel M, Gordon M, Patricio M, Hider A, Pawlik C, Bhagdev R, et al. An update on developments in medical education in response to the COVID-19 pandemic: a BEME scoping review: BEME Guide No. 64. Medical teacher. 2021;43(3):253-71.
11. Cooke M, Irby DM, O'Brien BC. Educating physicians: a call for reform of medical school and residency: John Wiley & Sons; 2010.
12. Jarvis-Selinger S, Pratt DD, Regehr G. Competency is not enough: integrating identity formation into the medical education discourse. Academic Medicine. 2012;87(9):1185-90.
13. Cruess SR, Cruess RL, Steinert Y. Supporting the development of a professional identity: general principles. Medical teacher. 2019;41(6):641-9.
14. Pratt MG, Rockmann KW, Kaufmann JB. Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. Academy of management journal. 2006;49(2):235-62.
15. Sawatsky AP, Santivasi WL, Nordhues HC, Vaa BE, Ratelle JT, Beckman TJ, et al. Autonomy and professional identity formation in residency training: a qualitative study. Medical education. 2020;54(7):616-27.
16. Yakov G, Riskin A, Flugelman AA. Mechanisms involved in the formation of professional identity by medical students. Medical Teacher. 2020:1-22.
17. Wong A, Trollope-Kumar K. Reflections: an inquiry into medical students' professional identity formation. Medical Education. 2014;48(5):489-501.
18. Monrouxe LV. Negotiating professional identities: dominant and contesting narratives in medical students' longitudinal audio diaries. Current Narratives. 2009;1(1):41-59.
19. Helmich E, Bolhuis S, Dornan T, Laan R, Koopmans R. Entering medical practice for the very first time: emotional talk, meaning and identity development. Medical Education. 2012;46(11):1074-86.
20. Kline CC, Park SE, Godolphin WJ, Towle A. Professional identity formation: a role for patients as mentors. Academic Medicine. 2020;95(10):1578-86.

21. Kay D, Berry A, Coles NA. What experiences in medical school trigger professional identity development? Teaching and learning in medicine. 2019;31(1):17-25.
22. Monrouxe LV, Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: acting, representing, becoming. Medical education. 2011;45(6):585-602.
23. Madill A, Latchford G. Identity change and the human dissection experience over the first year of medical training. Social Science & Medicine. 2005;60(7):1637-47.
24. Ratanawongsa N, Teherani A, Hauer KE. Third-year medical students' experiences with dying patients during the internal medicine clerkship: a qualitative study of the informal curriculum. Academic Medicine. 2005;80(7):641-7.
25. Désilets V, Graillon A, Ouellet K, Xhignesse M, St-Onge C. Reflecting on professional identity in undergraduate medical education: implementation of a novel longitudinal course. Perspectives on Medical Education. 2021:1-5.
26. Hansen S, Mathieu S, Biery N, Dostal J. The emergence of family medicine identity among first-year residents: a qualitative study. Family medicine. 2019;51(5):412-9.
27. 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.
28. Barnhoorn PC NV, Numans ME, Steinert Y, Kramer AWM, van Mook WNKA. General Practice residents' perspectives on their professional identity formation: A qualitative study. under review. 2021.
29. Sandelowski M. Whatever happened to qualitative description? Research in nursing & health. 2000;23(4):334-40.
30. Sandelowski M. What's in a name? Qualitative description revisited. Research in nursing & health. 2010;33(1):77-84.
31. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International journal for quality in health care. 2007;19(6):349-57.
32. Fereday J, Muir-Cochrane E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. International journal of qualitative methods. 2006;5(1):80-92.
33. Lin J, Reddy RM. Teaching, mentorship, and coaching in surgical education. Thoracic surgery clinics. 2019;29(3):311-20.
34. Sagasser MH, Kramer AW, van Weel C, van der Vleuten CP. GP supervisors' experience in supporting self-regulated learning: a balancing act. Advances in Health Sciences Education. 2015;20(3):727-44.
35. Jackson D, Davison I, Adams R, Edordu A, Picton A. A systematic review of supervisory relationships in general practitioner training. Medical education. 2019;53(9):874-85.
36. Mann K, Gaufberg E. Role modeling and mentoring in the formation of professional identity. Teaching medical professionalism Supporting the development of a professional identity Cambridge: Cambridge University Press pp. 2016:84-96.
37. Sagasser MH, Fluit CR, Van Weel C, van der Vleuten CP, Kramer AW. How entrustment is informed by holistic judgments across time in a family medicine residency program: an ethnographic nonparticipant observational study. Academic Medicine. 2017;92(6):792-9.
38. Ten Cate O, Balmer DF, Caretta-Weyer H, Hatala R, Hennus MP, West DC. Entrustable professional activities and entrustment decision making: A development and research agenda for the next decade. Academic Medicine. 2021;96(7S):S96-S104.
39. Bonnie LHA, Visser MRM, Kramer AWM, van Dijk N. Insight in the development of the mutual trust relationship between trainers and trainees in a workplace-based postgraduate medical training programme: a focus group study among trainers and trainees of the Dutch general practice training programme. BMJ Open. 2020;10(4):e036593.
40. Bordin ES. The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy: Theory, research & practice. 1979;16(3):252.

41. Telio S, Ajjawi R, Regehr G. The “educational alliance” as a framework for reconceptualizing feedback in medical education. Academic Medicine. 2015;90(5):609-14.
42. Van der Zwet J, Hanssen V, Zwietering P, Muijtjens A, Van der Vleuten C, Metsemakers J, et al. Workplace learning in general practice: supervision, patient mix and independence emerge from the black box once again. Medical teacher. 2010;32(7):e294-e9.
43. Parsons AS, Kon RH, Plews-Ogan M, Gusic ME. You can have both: Coaching to promote clinical competency and professional identity formation. Perspectives on Medical Education. 2021;10(1):57-63.
44. Sawatsky AP, Huffman BM, Hafferty FW. Coaching versus competency to facilitate professional identity formation. Academic Medicine. 2020;95(10):1511-4.

Existentie gaat vooraf aan essentie.

Jean-Paul Sartre

Chapter 6

General discussion

6

Background

This thesis presents a series of studies aimed at unravelling Professional Identity Formation (PIF) in the context of General Practice (GP) residency.

The first objective of this dissertation was to identify unprofessional behaviour in both GP practice and GP training. Therefore, we started with research into patient complaints in general practice with a special focus on professionalism, followed by research on unprofessional behaviour of GP residents as perceived by their supervisors and faculty.

The second objective of this dissertation was to gain insight into Professional Identity Formation of GP residents. Therefore, we first explored PIF during GP training from the viewpoint of GP residents and thereafter from the viewpoint of GP supervisors.

With this dissertation we hope to; contribute to a more in-depth understanding of the nature of unprofessional behaviour in both GP practice and GP training; and narrow the gap in our understanding of the process of becoming a professional GP.

In this chapter we present the main findings - with an overview in Table 6.1 - of our studies and discuss them in the context of the literature. Subsequently, we reflect on the methodology used. We conclude with recommendations for both research and practice.

Aims	Main findings	Chap.
Identify unprofessional behaviour in both GP practice and GP training.	Although most unsolicited patient complaints relate to clinical problems, a substantial proportion (35%) concern professionalism issues. Unprofessional behaviour is described in a variety of ways. 'Not being taken seriously' is a common denominator.	2
	Supervisors and faculty share a conceptualisation in pinpointing and assessing unprofessional behaviour, which matches the descriptors and categories of the 4 I's model,	3

	to which two new groups: 'nervous exhaustion complaints' and 'nine-to-five mentality' need to be added. The processes of identification and remediation of unprofessional behaviour in residents are intertwined. Identification of behaviours related to lack of introspection or integrity are the most important to remediate.	
Gain insight into Professional Identity Formation of GP residents.	According to residents, identity formation occurs primarily in the workplace as they move from doing the work of to becoming a GP and negotiate perceived norms. Residents feel that a tapestry of interrelated influencing factors – most prominently clinical experiences, clinical supervisors, and self-assessments – which changes over time, is felt to exert its influence predominantly in the workplace.	4
	Supervisors have an image of the professional identity they are supporting and work toward that goal through role-modeling and mentoring. Supervisors believe that a bond of trust between supervisor and resident is a prerequisite to properly support residents' PIF.	5

Table 6.1 Aims and main findings of this dissertation

Main findings

Unprofessional behaviour in practice (**Study 1**)

With our first study, presented in **Chapter 2**, we aimed to gain insight into patients' expectations regarding the professionalism of GPs, by studying unsolicited complaints. More specifically, our aim was to investigate the exact nature of patient complaints in out-of-hours general practice (OOH GP) care, with a special focus on perceived lapses of professionalism among physicians. This resulted in two research questions: 'How can patient complaints in the GP setting be characterised?' and 'What elements of physicians' professionalism do are addressed in these complaints?'

Professionalism is often mentioned in patient complaints

Our retrospective observational study showed that most unsolicited patient complaints were related to medical expertise (45%), such as diagnoses being missed or unsuccessful clinical treatment. Nineteen percent were related to management problems, especially waiting times and access to care. Communication issues, such as not being called back, were only explicitly mentioned in 1% of the complaints. A substantial proportion (35%) of the complaints however, concerned issues around professionalism. Among the complaints concerning professionalism, the description of perceived unprofessional behaviour was worded in a variety of ways, including; not being taken seriously; being patronised; being unpleasantly spoken to; getting inappropriate comments; perceiving a lack of empathy; perceiving the physician as being rushed; physicians not introducing themselves; physicians not shaking hands; physicians appearing arrogant or disinterested; or displaying physical harshness or unwanted intimacy. The theme most frequently found within the professionalism category was 'not being taken seriously', mostly in regard to the health issue at hand, the urgency of the complaint, or the perception that one was seen as being overprotective.

Unprofessional behaviour in training (**Study 2**)

With our second study, reported in **Chapter 3**, we aimed to investigate which GP resident behaviours are considered unprofessional according to supervisors and faculty, and how these unprofessional behaviours were remediated. Our research questions for Study 2 were: 'Which behaviours of GP residents are considered unprofessional according to their supervisors and faculty and how is remediation applied?'

Conceptualisation matching the undergraduate 4 I's model

The results of this focus group study among GP supervisors and designated professionalism faculty members showed that supervisors and faculty shared a conceptualisation in pinpointing and assessing unprofessional behaviour, which matched the descriptors and categories of the recently developed 4 I's model(1, 2). This model was developed based on research in undergraduate medical education (UGME) aiming to overcome the 'failure to fail' problem. It does so by guiding educators in how to document unprofessional behaviour and

provides directions for effective remediation. The 4 I's model consists 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)(1, 2).

New groups of unprofessional behaviour in the PGME setting

Two new groups of behaviours; 'nervous exhaustion complaints' and 'nine-to-five mentality', needed to be added to the 4 I's model, both in the Introspection category. Behaviours in the categories 'Involvement' and 'Interaction' were assessed as mild and received informal, pedagogical feedback. Behaviours in the categories 'Introspection' and 'Integrity', were seen as very alarming and received strict remediation.

Tools and phases in detecting and remediation

The tools used by both GP clinical supervisors and designated professionalism faculty members to identify unprofessional behaviours seem very similar to those used by GPs in their diagnostic reasoning: that is, a combination of non-analytic and analytic reasoning(3). The diagnostic phase usually started with the supervisor getting a sense of alarm about residents' PIF, described as either a 'gut feeling', 'a loss of enthusiasm for teaching' or 'fuss surrounding the resident'. This sense of alarm often triggered the remediation phase. The diagnostic phase, however, appeared to be intertwined with the remediation phase: exploring the unprofessional behaviour in a conversation with the resident often already had a remediating effect, and vice versa: the way in which residents coped with the remediation phase gave new input for the diagnostic phase. Remediation varied from informal or 'pedagogical' feedback to formally planned meetings. In the latter the Compass(4) was more explicitly used, to exactly pinpoint and assess in which competency domain the resident was underperforming. When formally planned meetings were needed, often faculty members were also consulted to collaborate on a remediation plan.

PIF according to residents (**Study 3**)

With our third study, reported in **Chapter 4**, we aimed to explore the process of PIF during GP residency according to GP residents. Our research question for this study was: 'How do

residents perceive their PIF process during GP residency and what factors are perceived to be influential?'

Three themes

Using focus groups among GP residents and the conceptual framework of PIF developed by Cruess et al.(5) as a sensitising framework for both the interview guide and for conducting the deductive part of the analysis, revealed three major themes. These three themes together provided insight into the process of PIF among GP residents: 1. it all happens in the workplace, 2. from doing to becoming and 3. negotiating perceived norms.

It all happens in the workplace

First, we found that identity formation of GP residents occurs primarily in the workplace. In the GP training practices, multiple interrelated factors, especially clinical experiences, clinical supervisors, and residents' self-assessment were found to be at play in forming the professional identity.

From doing to becoming

Second, we found that during the years of training, residents' identity formation reflected their move from doing the work of a GP to becoming a GP. During this process, residents found themselves changing their focus from the biomedical and technical aspects of clinical experience to being able to view patients holistically, rather than as people with diseases. During this process of becoming, residents also changed from observing and imitating their supervisor and reflecting with the supervisor, to gradually finding their own way to practice GP medicine.

Negotiating perceived norms

Third, we found that the multiplicity of personal and professional roles residents have, and how they expected to balance personal roles with their role as a GP, appeared to be important aspects of their identity development. And although residents agreed on GP core values, they differed with their supervisors on how to operationalise those values. The perceived norms caused internal negotiations about how to balance professional roles with personal roles. However, residents perceived no room to discuss these challenges with their supervisors.

PIF according to supervisors (**Study 4**)

In the fourth study, presented in **Chapter 5**, we addressed the research question: 'How do supervisors perceive their role in the PIF of residents?'

Three themes

Using focus groups among GP supervisors and again using the conceptual framework of PIF developed by Cruess et al.(5) as a sensitizing framework for the interview guide, we revealed three major themes. These three themes provided insight into the role of the supervisor in the process of PIF among GP residents: 1. supervising with the end in mind, 2. role modelling and mentoring, and 3. developing bonds of trust.

Supervising with the end in mind

First, supervisors seemed to have an image in mind about what a GP should look like. Based on this image, which they saw as the desired goal of residency training, they supported residents' PIF and used observable 'signposts' to direct them toward that goal. The signposts supervisors used to evaluate residents' PIF were; patient safety; residents becoming a patient's primary physician; and a changing resident-supervisor relationship.

Role modelling and mentoring

Second, supervisors described how they worked toward that goal by supporting residents' PIF through role modelling and mentoring. When role modelling, supervisors relied on rather informal, often unplanned 'performance driven' transfer of knowledge and skills based on the resident observing the supervisor. When mentoring, supervisors were more 'development driven' and offered their support beyond the biomedical context of knowledge and skills, instead helping residents find their place within the profession.

Developing bonds of trust

Third, supervisors described the prerequisites for achieving that goal. To support residents' PIF, supervisors needed to be transparent and vulnerable, necessitating a bond of trust with the resident, often described as the need for a 'click'. When a bond of trust was felt,

supervisors felt they could support residents' PIF in a spontaneous fashion, trusting that they would achieve the most important learning goals by themselves while doing the work of a GP. However, in case of a poor or absent bond of trust, supervisors felt they could not navigate on serendipity but instead had to organise training 'by the book'.

Synthesis of the findings in the context of the literature

In this paragraph we display the relationship of this thesis to the literature and how the separate studies interconnect to form a clarifying line of research.

Unprofessional behaviour of GPs is a serious problem

Unfortuantely, unprofessional behaviour among GPs is a reality for some patients(6). We found that 35% of unsolicited patient complaints concerned professionalism lapses: this is in line with the existing literature(6). However, there are reasons to believe that the actual number of professionalism lapses may even be higher than our and other research shows. First, the scientific literature shows that not all adverse outcomes or all instances of patient dissatisfaction lead to complaints(7, 8).

Second, professionalism is a meta-competence or second-order competence and thus can also be expressed via the performance of other competences(9, 10). In expressing itself in the performance of other competences the CanMEDS role 'Professional' is fundamentally different from the other six roles(11). Thus, even when other competences are complained about, professionalism lapses can be the root cause. This could explain the relatively high percentage of combinations of competencies that were complained about in each complaint letter. We therefore conclude that unprofessional behaviour among GPs is a serious problem, potentially even bigger than this study reveals.

Supervisors describe more abstract unprofessional behaviour than patients

Our second study, in which we investigated unprofessional behaviour in GP training, yielded different descriptions of unprofessional behaviour from those found in Study 1. Where we found specific and concrete descriptions of unprofessional behaviours in Study 1, we found more abstract descriptions of unprofessional behaviours in Study 2. This resonates with

literature which found a difference between elements of professionalism emerging from patients complaints and those considered relevant by residents intensive care(12).

One reason for this difference in abstraction level might be that patients described unprofessional behaviour with which they were actually confronted themselves. Supervisors and faculty, however, were asked to reflect more generally on which behaviours of GP residents they considered unprofessional. This led to descriptions of behaviours that were displayed in a broader context, more at a distance, and not limited to a patient-physician situation.

A second reason might be that supervisors and faculty view the unprofessional behaviour of residents from a more formational point of view, which is supported by the findings of Studies 2 and 4. These studies show that supervisors first and foremost focus on supporting the identity formation of residents and only in secondary instance - and often reluctantly - change to a concrete focus on behaviour using direct observation, video observation and consultation hours together.

By discussing professionalism in too abstract a manner, it may be of limited practical operational significance for patients. This resonates with the danger of treating professionalism as a 'god term'(11, 13). God terms are terms that keep recurring in the rhetoric of a particular culture or subculture in a particular time, as the core values of that place and time: thus, terms expressed in a powerful, positive, but extremely vague way. A god term can often be recognised by the fact that you can't really be 'against' it. And precisely because god terms sound so positive and you can hardly protest against them, they carry the potential danger of drowning out conversation(11, 13). This is something that, certainly in the light of Study 1 – in which we sought to understand the exact nature of patient complaints - should be avoided at all costs.

Competing views on professionalism between supervisors and residents

Study 2 revealed two unprofessional behaviours which we think should be added to the 4 I's model, if used in a GP resident setting: 'nervous exhaustion complaints' and 'nine-to-five mentality'. For both clinical supervisors and faculty these behaviours illustrated a poor fit with the GP community. For them, these behaviours disclose long-held professional values being threatened in the new generation of GPs. It is tempting to endorse faculty and supervisors' simple explanation of 'poor fit' and 'values under threat'. However, especially in the light of

Study 3 and 4, these behaviours might also reflect competing views on professionalism between clinical supervisors and residents. In Studies 2 and 4, clinical supervisors voiced the opinion that apparently the GP community has implicit expectations of what it takes to be a GP and conclude that residents do not always notice these implicit expectations. This is contradicted in Study 3, where residents stated they do perceive these unspoken norms but didn't feel room to discuss them. So, other explanations than 'poor fit' and 'values under threat' are possible.

Unprofessional behaviour or self-protection?

The novel descriptor 'nervous exhaustion complaints' might also reflect residents' risk for burnout and stress(14, 15), just as the novel descriptor 'nine-to-five mentality' might reflect residents' self-protection reaction to that risk(16, 17). Residency is a phase in a physician's career where work-life interference can be experienced as especially demanding, which might induce a shift from other to self(18). This self-focus is interpreted as foreshadowing unprofessional behaviour(18). However, residents across all our focus groups agreed on the typical GP values about best possible care, like continuity of care, commitment and being available for patients, but differed with their supervisors about how to operationalise these values. The same picture of difference in operationalisation of values between generations of healthcare workers emerges in both the non-scientific (19-21) and scientific literature(16, 17, 22, 23). This is in line with the notion that the concept of professionalism is in constant evolution because it is time- and context-dependent(24, 25).

It might be, as Castellani et al. argue, that 'poor fit' and 'values under threat' are typical statements of the ruling class of medicine - individuals, groups and organisations that hold an elite status within organised medicine - which for ages made its imprint on the professionalism discourse(17). Younger physicians on the other hand believe that nostalgic professionalism over-emphasises work to the exclusion of other important values(17) and seem to ask for other interpretations of professionalism, e.g. lifestyle professionalism.

Generational gap

Our studies also show a picture of a clash between generations. At the one end stand supervisors, leaning toward interpreting professionalism as nostalgic professionalism, i.e. training residents with the goal to become practice owners taking responsibility for their

enlisted population of patients, which is seen as the only way to take responsibility for the future of general practice. At the other end stand residents, leaning toward interpreting professionalism as lifestyle professionalism, i.e. working in a shared practice, part-time, as a locum, with fewer patients, enabling them to live up to other values than hard work. Our studies also indicate that clinical supervisors – by imposing their nostalgic professionalism norms - behave as the ruling class of medicine. However, what residents wished for were supervisors who did not impose their norms but rather take a coaching role in this regard. Residents perceived supervisors' norms but had a desire to discuss them. They especially wanted to discuss the challenges generated by these norms, challenges about how to balance their professional roles with their personal roles. However, residents perceived little room to discuss these norms and challenges with their supervisors. Problems in safeguarding practice succession, young GPs leaving the profession and the difficulty in fulfilling OOH GP shifts might be a consequence of this lack of discussion between the generations of GPs(19-21). The failure to discuss competing views on professionalism means residents are denied subjectivity and will not help the profession move forward.

Are there limits to socialisation?

Imposing professional norms as described in the section above, however, is not without risk. It is at odds with what is seen as a very important goal of training; subjectification. The educational philosopher Biesta introduced subjectification as one of the three domains of education(26, 27). The other two are; qualification- acquiring knowledge, skills and expertise; and socialization - identity formation, becoming part of the professional community. Qualification and socialisation both already receive a lot of attention in Health Profession Education in general and in this dissertation in particular. Qualification, for example, is explicitly addressed in article 3 where residents come to speak about that 'it all happens in the workplace' and how they move from 'doing to becoming'. In Health Profession Education, PIF is seen as a dynamic process achieved through socialisation. And socialisation is the main lens through which PIF is seen in this dissertation. However, with too much focus on qualification and socialisation, the third domain of education – subjectification – might fall into disarray(28).

Subjectification

In subjectification the word subject resounds. First, subject is to be understood as opposed to object. Within GP training, this means that relationships between clinical supervisors & faculty and residents are prone to instrumental interactions, predefined and oriented toward a certain aim, with the resident as object instead of subject. The experience residents voice in Study 3 that the norms imposed on them can be interpreted as instrumental interactions. Although this way of encountering residents is not always something that has to be avoided, good education goes beyond instrumentalised relationships.

Subjectivity, on the other hand, is about one's freedom to define oneself through action(29). Although, GP training has a pre-defined goal, namely delivering GPs to society, imposing norms can easily be seen as denying the resident's subjectivity. Moreover, because responsibility comes with the freedom to define oneself, by denying a resident's subjectivity the responsibility for his choices and actions is also denied(29, 30).

Socialisation can bring about reproductions of the past

Socialisation is without a doubt valuable in education. However, education is not only about socialising into the profession. It is also (and, probably, fundamentally) about how unique individuals can be free to develop their own ways of being within the profession, whilst questioning the professional standards along the way(27). Too much focus on qualification and socialisation can easily lead to seeing education as a box-ticking exercise that produces professionals that fit the established orders of the profession. However, if the space for unique individuals to 'appear' does not exist, education will produce a reproduction of the past instead of providing room for the future. Diversity and inclusivity are not only relevant for the way they acknowledge differences: they also have great potential in progressing the profession by adapting the professional standards in flux with society. Debate is needed to understand to what extent the notion of negotiating one's identity(5, 31) overlaps with the notion of subjectification.

Other factors involved in the process of PIF

In Study 3 we found three factors in particular to be at play in residents' PIF. And although the other factors of the theoretical PIF framework developed by Cruess et al(5). were touched upon during the focus group discussions these three - clinical experiences, clinical supervisors,

and residents' self-assessment - appeared to be most important in the PIF of residents in our studies(5).

Since the publication of Cruess' perspective, other studies on PIF and influencing factors have appeared(32-34). To our knowledge however, none of these systematically explored the factors Cruess et al. proposed. Cruess et al. stated that not all these factors exert equal influence. They particularly emphasised the importance of clinical experiences and role models/mentors. These factors also emerge as very important in the PIF of residents in our studies. As discussed in our studies, this is in line with recent literature(35-40). Interestingly, our study 3 also indicated that in addition to supervisors and clinical experiences, residents' self-assessment is an important influence in PIF. We found that residents especially self-asses their clinical experiences; whether they ran out of time in the workplace; whether their patients were satisfied; whether their diagnoses and therapy decisions were right; whether they were managing to cope with uncertainty; and whether their experiences in the workplace were in line with those of their peers; can all be seen as self-assessments of their clinical experiences. In this study it appears that self-assessment is the intermediate factor between clinical experiences and socialisation. Self-assessment thus seems to take a place where Cruess et al. placed 'conscious reflection' and 'unconscious acquisition' in their model(5). Where Cruess et al. propose self-assessment as a separate factor, separate from conscious reflection and unconscious acquisition, our data suggest that self-assessment, conscious reflection, and unconscious acquisition might be entangled when they are related to the factor clinical experiences.

Thoughts on methodology

The research methods used in the studies of this dissertation were all qualitative in nature. Because in qualitative research, the researcher is the main instrument in both data collection and data analysis, the researcher is also a possible source of bias. Therefore, qualitative research requires even more reflexivity than is required in quantitative research. Reflexivity is about how the researchers relate to the fact that most findings in qualitative research are not 'found' but rather are 'produced'. Describing it this way, reflects our vision that reality is constructed by and between people. This aligns with a constructivist paradigm(41, 42).

Because the role of the researchers themselves undoubtedly influences the research process, we provided information about the researchers in the different studies. The following additional information about the main researcher and his motives to start this PhD trajectory, however, may be valuable in the light of further reflexivity. The main researcher is a GP, sexologist, and medical teacher in both undergraduate and postgraduate medical education. This diverse work experience led him to belief that much can be improved in healthcare. Especially in relation to the professionalism of (future) healthcare workers, he believes there is much to be gained. To this end, he accepted the position of chairman of both the LUMC and the national professionalism committee. In 2021 the book 'Professionalism in healthcare' was published under his editorship. Regularly he shares his vision on how healthcare can be improved in various media. Every fortnight from 2016 to 2020 he shared his view on current affairs in healthcare as 'friend of the show' on radio 1, Netherlands's largest national news radio station. Summarised, the main researcher has a mission. However, he is fully aware that his inclination to activism can compromise a scientific approach and influence the research process. To overcome prematurely drawn conclusions, limited views and potential sources of bias, the main researcher therefore closely collaborated with a diverse and interdisciplinary group of experienced (educational) researchers and medical teachers with more distance to either general practice and/or medical education. Furthermore, the main researcher kept and discussed audit trails in order to consider his own influences and contributions to the research process. These were discussed during both the weekly meetings between the main researcher and the co-promotor as well as the monthly meetings with the entire research team.

A further strength of this dissertation is its relevance for practice via medical education. Physicians' professionalism is a core factor in providing high-quality patient care(6, 43). Unprofessional behaviour by physicians on the other hand, compromises patient-physician relationships, patient safety and quality of care, and can harm patients' trust in the medical profession(44-49). Research has revealed a clear association between the unprofessional behaviour of physicians and unprofessional behaviour during undergraduate and postgraduate training(50-54). And therefore, supporting the development of a strong professional identity is a primary objective in specialist training programs(5, 55-58). This dissertation can contribute to that important objective.

Another strength of the studies in this dissertation is that they provide empirical evidence for what earlier has been theorised on unprofessional behaviour and PIF. Study 2 confirmed the continued value and validity of the Four I's model in PGME(1, 2). Studies 3 and 4 confirmed the continued value and validity of the conceptual framework of PIF developed by Cruess et al(5).

A last strength of this dissertation is the rigour with which the different studies were performed. The studies in this dissertation build on each other as they move from unprofessional behaviour to PIF and from practice to medical education. Further, in each successive studies we used a wide variety of research methods: content analysis, in-depth interviews and focus group interviews. Moreover, we drew input from all stakeholders relevant to professionalism in general practice: patients, residents, clinical supervisors, and faculty. These choices generated successive layers of data reflecting the perspectives of people who actually experience unprofessional behaviour and PIF. We also used different theoretical lenses in this dissertation: the CanMEDS model(59), the 4 I's model for describing unprofessional behaviours(1, 2), the multi-level professionalism framework for remediation(58) and the conceptual framework of PIF developed by Cruess et al.(5) as a sensitising framework for designing the interview guide as well as for conducting the deductive part of the analysis. Looking at the problem at hand through these different theoretical lenses added further rigour to our studies, whilst the exploratory approach left open the possibility of finding complementary themes.

The four empirical studies we present in this dissertation, however, also have limitations. A first limitation is that although many stakeholders are directly interviewed about unprofessional behaviour and PIF, the most important stakeholder in health care - the patient - is only questioned indirectly via unsolicited patient complaints. As a consequence, the patient's view on (un)professional behaviour and PIF is not addressed in depth in this dissertation. We will touch upon this point in the recommendations for both research and practice.

A second limitation – already discussed above – is the various roles of the main researcher. Being interviewed by a (well-known) colleague could have negatively affected data collection:

the participants might have provided 'socially desirable' answers. However, the PhD-candidate kept a research journal and audit trails in which he reflected on his role in each interview and discussed in the research group, which added to the rigour of the study. Being interviewed by an intrinsically interested and trustworthy colleague could equally have a positive influence. The participants seemed to experience a confidential atmosphere with an interviewer who recognised their daily challenges and seemed to provide rich 'inside information'.

A third limitation is that - due to the qualitative nature of our studies - caution should be exercised to generalise our findings. Exploration - rather than generalisation of the findings - is the goal of qualitative studies. And having explored patients' views (indirectly) and interviewed a large and diverse group of residents, supervisors, and faculty from eight different GP training institutes made it possible to discern a wide range of perceptions on (un)professional behaviour and PIF. Hence, this dissertation provides a rich - although contextualised - understanding of unprofessional behaviours, remediation and PIF in a PGME GP setting. Therefore, we think our study has implications for practice and further research in PGME, which we will discuss next.

Recommendations for research

We strongly encourage further research on the findings of the different studies in this dissertation.

Unprofessional behaviour in both practice and training

To gain a better insight into patients' experiences regarding professionalism, future research should focus on a deeper analysis of complaints concerning the container concept professionalism. For this, in-depth interviews with patients are needed to further investigate the subtleties of how lapses in professionalism are perceived(60).

Further studies might also delve into what categories of professionalism GPs and GP residents perceive as important and compare these categories with the descriptions of unprofessional

behaviours patients describe. Research done by van Mook et al.(12) can serve as an example for such research.

Following our second study, further research is also needed on the two novel descriptors: 'nervous exhaustion complaints' and 'nine-to-five mentality'. We especially welcome the viewpoint of the residents herein. Some of this work has already been carried out in Studies 3 and 4, where we investigated what it takes to become a GP and what it takes to 'make' a GP, respectively. However, the way in which the current generation of physicians makes different behavioural choices compared to their older colleagues when certain values are at stake still needs to be explored further: in particular, the challenges experienced in the area of work-life interference and how these challenges affect the vision on professionalism need further exploration. The growing discontent between generations of GPs, the problems in safeguarding practice succession, young GPs leaving the profession and the difficulty in fulfilling OOH GP shifts are three of the most significant challenges which make this research all the more urgent(19-21).

Further research also is needed to identify the best way to remediate unprofessional behaviours of residents. This research is especially needed for those cases in which introspection seems to be hampered or even absent.

PIF of GP residents

The results of the third and fourth study begin to make explicit what PIF in GP residency comprises. However, to allow for a more purposeful approach to PIF in GP residency, further exploratory studies are needed to capture the subtleties of PIF in GP residency. Themes which warrant further exploration are: 1. perceived norms and how they can be negotiated 2. the use of role modelling and mentoring and 3. the role of bonds of trust. We hypothesised above how these three themes might be interrelated, but further research is needed to explore this. We suggest a narrative approach for this research. As the above-mentioned themes are about multifaceted experiences, they need to be understood in the context of the narratives of residents and supervisors. Through these narratives we hope that interpretations of the experienced reality can be unveiled.

Second, in Study 3 we found that three interrelated factors; 1. clinical experiences; 2. clinical supervisors; and 3. residents' self-assessment, are at play in forming a professional identity. As described above, the other factors of the theoretical PIF framework developed by Cruess et al.(5) were touched upon during focus group discussions, but these three appeared to be most important in the PIF of residents in our studies. However, we encourage further research to point out the precise relevance of the other factors Cruess et al. propose(5) to residents' PIF.

Moreover, we would strongly recommend studies focused on PIF in other residency contexts as well as studies that explore other stakeholders' perspectives, including educators outside the clinical workplace and patients.

Recommendations for practice

The findings in this dissertation have implications for stakeholders involved in healthcare practice: patients and physicians and for stakeholders involved in training practice, as well as residents, faculty, and clinical supervisors, and are discussed consecutively below.

Patients

Our first study might provide patients with language to describe expectations and discontent about the care provided, especially when confronted with the unprofessional behaviour of healthcare workers. Regrettably, not all adverse outcomes or instances of patient dissatisfaction are fed back to physicians(7, 8). However, because one can only improve when aware of shortcomings, healthcare workers need patients' feedback. Therefore, we encourage patients to share their thoughts on how their healthcare can be improved. Moreover, patient's thoughts on the professionalism of healthcare workers must also be actively researched as advocated above.

Physicians

Our first study shows that patients can provide unique and important insights into patients' expectations and confirmed previous findings that unmet expectations were drivers for many complaints(61-69). An important way to align expectations is to actively address expectations

during consultations. Therefore, we urge physicians to communicate clearly about examination, treatment, potential complications and prognosis and actively address patient expectations during consultations(61).

The fact that patient complaints can serve as a valuable source of information to stimulate reflection on how to improve health care quality fits perfectly in what currently is called "a lifelong commitment to excellence"(70, 71). We call for physicians to further use patient complaints as input for training purposes. Learning from the lapses they reveal might take a new turn and touch upon deeper layers when studying them through the lens of PIF. Because a considerable proportion of patient complaints relate to professionalism issues, we specifically recommend Continuing Medical Education training concerning professionalism and the devastating consequences that can be caused by lapses in professionalism.

Residents

The above-mentioned recommendations concerning training apply without restriction to residents. For residents however, this dissertation especially provides recommendations concerning PIF. We strongly recommend residents to clarify their own PIF thus far and actively plan their further PIF. We recommend residents to take an active stance in asking to make the often-implicit norms of clinical supervisors explicit and recommend they discuss these norms. Furthermore, we recommend that residents take their role in actively shaping a bond of trust between with their clinical supervisors aiming to facilitate their own PIF.

Faculty

Our four studies urge explicit training regarding professionalism. Whereas our first studies did so mainly with regard to professional and unprofessional behaviour in practice, the other three studies show the need for a focus on unprofessional behaviour and PIF in the curriculum. Curriculum revision is an excellent opportunity to integrate the relatively new concept of PIF into the curriculum.

We recommend faculty actively use the 4 I's model, which was primarily developed based on research in UGME aiming to overcome the 'failure to fail' problem. It does so by guiding educators in how to document unprofessional behaviour, and in doing so, provides directions

for effective remediation. Based on the results of our Study 2, we have reason to believe that the same applies to PGME. But we recommend faculty to not only use this model when confronted with unprofessional behaviour of residents that clinical supervisors were unable to remediate. It should also be used to train clinical supervisors in the use of the 4 I's model, aiming to facilitate accurate description of unprofessional behaviour of residents and in doing so facilitate timely identification of the issue and thus reduce the ' failure to fail' problem(1, 72).

Studies 3 and 4 demonstrate the importance of clinical supervisors in supporting resident's PIF. Methods for translating the knowledge gathered into ways of actively supporting residents' PIF are needed. Since supporting PIF seems to demand other skills from supervisors in addition to just teaching knowledge and skills, supervisors need to be trained in when and how to apply these different skills across the different stages of PIF(73-75). Furthermore, supervisors must be taught about establishing bonds of trust and how to support PIF, even if the bond between supervisor and resident is considered suboptimal. Supervisors must also be taught (or stimulated) to not only discuss their norms with their residents but also discuss the challenges generated by these norms. In doing so, supervisors have to be stimulated to fulfil their role as coaches through respecting residents' subjectivity.

The finding in our third study, that residents' professional identity is more likely to be influenced by doing the work than by being taught, might (re)open the debate on time distribution between days in practice and the day-release program, or on the content of the day-release program, when revising the curriculum.

Clinical supervisors

We also recommend clinical supervisors to actively use the 4 I's model, again to facilitate timely identification and thus reduce the 'failure to fail' problem(1, 72). As our study (and earlier studies) have shown, unprofessional behaviour is indeed often difficult to pinpoint(1, 2, 76). We hope and believe that the descriptors of the 4 I's model can provide clinical supervisors with a language to adequately describe unprofessional behaviours among residents which can facilitate timely identification of issues and thus reduce the problem of 'failure to fail'(1, 72).

Study 2 suggests there is scope for clinical supervisors to develop their remedial skills, especially when confronted with residents whose introspection is hampered, or for whom the usual PIF approach is insufficient. Here again we would like to draw attention to the comprehensive multi-level professionalism framework, which we described earlier(77). This framework which is well suited to the training practice can serve to guide the remediation of unprofessional behaviour by encouraging reflection on all of the important levels that influence professionalism(77). Together with the 4 I's model this additional framework can help to distinguish between residents having a problem with introspection, or supervisors themselves being insufficiently aware of their own limitations.

The results of two last studies in particular should make clinical supervisors realise the importance of their role in the PIF of residents. Supervisors are to a large extent responsible for building a safe supervisory relationship. And again, imposing norms is at odds with this. By contrast, supervisors must learn about establishing bonds of trust to support PIF and need to discuss their norms as and the challenges generated by these norms, with their residents.

Study 3 also recommends a reciprocal supervisory relationship which evolves in a similar manner to a resident's PIF. Supervisors need to be trained in using different supervisor competencies across the different stages of the resident's PIF (73-75). The residents we spoke with in Study 3 painted a picture which leaves room for improvement, especially in the last period of residents' training. In this period supervisors should devote themselves to their role as a coach – thus respecting residents' subjectivity - and give residents room to negotiate perceived norms around providing care, as advocated earlier(74, 75).

Conclusions

Unfortunately, unprofessional behaviour of physicians is an everyday reality. Aimed to gain insight into patients' expectations regarding the professionalism of GPs, we first studied unsolicited patient complaints. It appeared that a substantial proportion of unsolicited complaints concern professionalism issues. This dissertation provides insight into how patients experience unprofessional behaviour of physicians.

Further, it provides educators with appropriate language to describe the unprofessional behaviour of residents, which matches that of the 4 I's model. This language can contribute to the early identification of professionalism issues and the remediation of lapses in professionalism.

Because "kill it before it grows" – as the saying goes – implies more than early detection and remediation but also a focus on the formation of a professional identity, this dissertation also provides insights into the PIF of GP residents from the perspectives of both supervisors and residents. According to residents, identity formation occurs primarily in the workplace as they move from doing the work of to becoming a GP and negotiate perceived norms. Residents feel that a tapestry of interrelated influencing factors – most prominently clinical experiences, clinical supervisors, and self-assessments – which changes over time, is felt to exert its influence predominantly in the workplace. Their supervisors have an image of the professional identity they are supporting and work toward that goal through role-modeling and mentoring. Supervisors believe that a bond of trust between supervisor and resident is a prerequisite to properly support residents' PIF.

To safeguard the future of General Practice as a profession a dialogue must be initiated between the generations of GPs about how professionalism can be practiced given the challenges in balancing professional and personal roles.

References

1. 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.
2. 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.
3. Stolper E, Van de Wiel M, Van Royen P, Van Bokhoven M, Van der Weijden T, Dinant GJ. Gut feelings as a third track in general practitioners' diagnostic reasoning. 2011;26(2):197-203.
4. Tromp F, Vernooij-Dassen M, Grol R, Kramer A, Bottema B. Assessment of CanMEDS roles in postgraduate training: the validation of the Compass. Patient education and counseling. 2012;89(1):199-204.
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, 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.
7. Cunningham W, Wilson H. Complaints, shame and defensive medicine. BMJ Qual Saf. 2011;20(5):449-52.
8. Bismark MM, Brennan TA, Paterson RJ, Davis PB, Studdert DM. Relationship between complaints and quality of care in New Zealand: a descriptive analysis of complainants and non-complainants following adverse events. Qual Saf Health Care. 2006;15(1):17-22.
9. Harden JC, MH Davis, M. Friedman, RM. AMEE Guide No. 14: Outcome-based education: Part 5-From competency to meta-competency: a model for the specification of learning outcomes. Medical teacher. 1999;21(6):546-52.
10. Verkerk MA, De Bree M, Mourits MJ. Reflective professionalism: interpreting CanMEDS'"professionalism". Journal of medical ethics. 2007;33(11):663-6.
11. Barnhoorn PC. Wat is professioneel? Professionaliteit in de zorg: Springer; 2021. p. 1-8.
12. 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.
13. Weaver RM. The Ethics of Rhetoric, Chicago: H. Regnery Co. 1953.
14. Zhou AY, Panagioti M, Esmail A, Agius R, Van Tongeren M, Bower P. Factors associated with burnout and stress in trainee physicians: a systematic review and meta-analysis. JAMA network open. 2020;3(8):e2013761-e.
15. Bustraan J, Dijkhuizen K, Velthuis S, van der Post R, Driessen E, van Lith JM, et al. Why do trainees leave hospital-based specialty training? A nationwide survey study investigating factors involved in attrition and subsequent career choices in the Netherlands. BMJ open. 2019;9(6):e028631.
16. Blanchard MH. Work… life… balance? Obstetrics & Gynecology. 2012;119(1):177-9.
17. Castellani B, Hafferty FW. The complexities of medical professionalism. Professionalism in medicine: Springer; 2006. p. 3-23.
18. Thaxton RE, Jones WS, Hafferty FW, April CW, April MD. Self vs. other focus: predicting professionalism remediation of emergency medicine residents. Western Journal of Emergency Medicine. 2018;19(1):35.
19. Saris K. 24 uur per dag dokter? Nee, bedankt. Waarom jonge artsen stoppen met hun opleiding. de Groene Amsterdammer. 22 februari 2022
20. Bos I. Helft jonge artsen denkt weleens over stoppen. NRC. 2020.
21. Dekker M. Het is tijd voor een gezonde werkcultuur. Medisch Contact. 2019.

22. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. Journal of internal medicine. 2018;283(6):516-29.
23. Goodman A. Work–life balance. Physicians' pathways to non-traditional careers and leadership opportunities: Springer; 2012. p. 25-34.
24. van Mook WN, de Grave WS, Wass V, O'Sullivan H, Zwaveling JH, Schuwirth LW, et al. Professionalism: Evolution of the concept. European Journal of Internal Medicine. 2009;20(4):e81-e4.
25. Al-Rumayyan A, Van Mook W, Magzoub M, Al-Eraky M, Ferwana M, Khan M, et al. Medical professionalism frameworks across non-Western cultures: a narrative overview. Medical Teacher. 2017;39(sup1):S8-S14.
26. Biesta G. Risking ourselves in education: qualification, socialization, and subjectification revisited. Educational Theory. 2020;70(1):89-104.
27. Biesta GJ, van Braak M. Beyond the medical model: thinking differently about medical education and medical education research. Teaching and Learning in Medicine. 2020;32(4):449-56.
28. Biesta GJ. The Beautiful Risk of Education. New York: Routledge; 2014.
29. Sartre J-P. L'existentialisme est un humanisme. Nagel Paris; 1946.
30. Sartre J-P. L'être et le néant: Gallimard Paris; 1943.
31. Frost HD, Regehr G. "I am a doctor": negotiating the discourses of standardization and diversity in professional identity construction. Academic Medicine. 2013;88(10):1570-7.
32. Chew QH, Steinert Y, Sim K. Factors associated with professional identity formation within psychiatry residency training: A longitudinal study. Perspectives on medical education. 2021;10(5):279-85.
33. O'Doherty D, Culhane A, O'Doherty J, Harney S, Glynn L, McKeague* H, et al. Medical students and clinical placements-a qualitative study of the continuum of professional identity formation. Education for Primary Care. 2021;32(4):202-10.
34. Gkiousias V. Scalpel Please! A Scoping Review Dissecting the Factors and Influences on Professional Identity Development of Trainees Within Surgical Programs. Cureus. 2021;13(12).
35. Yardley S, Teunissen PW, Dornan T. Experiential learning: AMEE guide No. 63. Medical teacher. 2012;34(2):e102-e15.
36. Teunissen P, Scheele F, Scherpbier A, Van Der Vleuten C, Boor K, Van Luijk S, et al. How residents learn: qualitative evidence for the pivotal role of clinical activities. Medical education. 2007;41(8):763-70.
37. de Bever S, van Rhijn SC, van Dijk N, Kramer A, Visser MR. Professionals' perspectives on factors affecting GP trainees' patient mix: results from an interview and focus group study among professionals working in Dutch general practice. BMJ open. 2019;9(12):e032182.
38. Jackson D, Davison I, Adams R, Edordu A, Picton A. A systematic review of supervisory relationships in general practitioner training. Medical education. 2019;53(9):874-85.
39. 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.
40. Bonnie LHA, Visser MRM, Kramer AWM, van Dijk N. Insight in the development of the mutual trust relationship between trainers and trainees in a workplace-based postgraduate medical training programme: a focus group study among trainers and trainees of the Dutch general practice training programme. BMJ Open. 2020;10(4):e036593.
41. Bergman E, de Feijter J, Frambach J, Godefrooij M, Slootweg I, Stalmeijer R, et al. AM last page: A guide to research paradigms relevant to medical education. Academic Medicine. 2012;87(4):545.
42. Stalmeijer RE, McNaughton N, Van Mook WN. Using focus groups in medical education research: AMEE Guide No. 91. Medical teacher. 2014;36(11):923-39.
43. 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.
44. Reader TW, Gillespie A, Roberts J. Patient complaints in healthcare systems: a systematic review and coding taxonomy. BMJ quality & safety. 2014;23(8):678-89.

45. Schnitzer S, Kuhlmey A, Adolph H, Holzhausen J, Schenk L. Complaints as indicators of health care shortcomings: which groups of patients are affected? International Journal for Quality in Health Care. 2012;24(5):476-82.
46. 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. JAMA internal medicine. 2018;178(10):1317-31.
47. 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.
48. Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. Jama. 2002;287(22):2951-7.
49. Cruess R, Cruess S. Updating the Hippocratic Oath to include medicine's social contract. Medical education. 2014;48(1):95-100.
50. 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 : journal of the Association of American Medical Colleges. 2004;79(3):244-9.
51. 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.
52. 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 : journal of the Association of American Medical Colleges. 2005;80(10 Suppl):S17-20.
53. 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.
54. 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 : journal of the Association of American Medical Colleges. 2020;95(6):888-95.
55. 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.
56. 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.
57. Cruess RL, Cruess SR, Steinert Y. Amending Miller's pyramid to include professional identity formation. Academic Medicine. 2016;91(2):180-5.
58. 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.
59. CanMEDS: Better standards, better physicians, better care. http://wwwroyalcollegeca/rcsite/canmeds/canmeds-framework-e. Accessed September 22th 2020.
60. Verkerk MA, de Bree MJ, Mourits MJ. Reflective professionalism: interpreting CanMEDS' "professionalism". J Med Ethics. 2007;33(11):663-6.
61. 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.
62. 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.
63. Harrison R, Walton M, Healy J, Smith-Merry J, Hobbs C. Patient complaints about hospital services: applying a complaint taxonomy to analyse and respond to complaints. Int J Qual Health Care. 2016;28(2):240-5.
64. 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.

65. Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. Prevalence and sources of patients' unmet expectations for care. Annals of internal medicine. 1996;125(9):730-7.
66. 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.
67. Montini T, Noble AA, Stelfox HT. Content analysis of patient complaints. International Journal for Quality in Health Care. 2008;20(6):412-20.
68. 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.
69. Owen C. Formal complaints against general practitioners: a study of 1000 cases. British Journal of General Practice. 1991;41(344):113-5.
70. Royal College of Physicians and Surgeons in Canada. The CanMEDS. https://wwwroyalcollegeca/rcsite/canmeds/about-canmeds-e. Accessed August 30th 2021.
71. Barnhoorn P. How healthy is 'striving for excellence'? Nederlands Tijdschrift Voor Geneeskunde. 2018;162.
72. Ziring D, Frankel RM, Danoff D, Isaacson JH, Lochnan HJAM. Silent witnesses: faculty reluctance to report medical students' professionalism lapses. 2018;93(11):1700-6.
73. Lin J, Reddy RM. Teaching, mentorship, and coaching in surgical education. Thoracic surgery clinics. 2019;29(3):311-20.
74. Parsons AS, Kon RH, Plews-Ogan M, Gusic ME. You can have both: Coaching to promote clinical competency and professional identity formation. Perspectives on Medical Education. 2021;10(1):57-63.
75. Sawatsky AP, Huffman BM, Hafferty FW. Coaching versus competency to facilitate professional identity formation. Academic Medicine. 2020;95(10):1511-4.
76. 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.
77. 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.

‘Het is gezien’, mompelde hij,

‘het is niet onopgemerkt gebleven.’

Gerard Kornelis van het Reve

Chapter 7

Summary

This thesis presented a series of studies aimed at unravelling Professional Identity Formation (PIF) in the context of General Practice (GP) residency.

The *first* objective of this dissertation was to identify unprofessional behaviour in both GP practice and GP training. Therefore, we started with research into patient complaints in general practice with a special focus on professionalism, followed by research on unprofessional behaviour of GP residents as perceived by their supervisors and faculty.

The *second* objective of this dissertation was to gain insight into Professional Identity Formation (PIF) of GP residents. Therefore, we first explored PIF during GP training from the viewpoint of GP residents and thereafter from the viewpoint of GP supervisors.

In **chapter 1**, we introduced our readers to the research field of PIF and its precursors. PIF is a relatively new framework in which physicians' professionalism can be discussed. 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).
We outlined the two main lines of thought out this dissertation:
1. from unprofessional behaviour to PIF and
2. from GP practice to GP training.
We started our study into PIF in the context of GP residency by studying the public's expectations of GPs by means of a study on GPs' unprofessional behaviours as vented in patient complaints. 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, which was the focus of the second study. Although a behaviour-based perspective on professionalism focussing on (un)professional behaviour and remediation remains indispensable, in last two studies we broadened our focus shifted to PIF in GP residency. In study 3 we studied PIF from the viewpoint of residents. In study 4 we studied PIF from the viewpoint of their supervisors.

With our first study, presented in **Chapter 2**, we aimed to gain insight into patients' expectations regarding the professionalism of GPs, by studying unsolicited complaints. More specifically, our aim was to investigate the exact nature of patient complaints in out-of-hours general practice (OOH GP) care, with a special focus on perceived lapses of professionalism among physicians. This resulted in two research questions: 'How can patient complaints in the GP setting be characterised?' and 'What elements of physicians' professionalism do are addressed in these complaints?'

Our retrospective observational study showed that most unsolicited patient complaints were related to medical expertise (45%), such as diagnoses being missed or unsuccessful clinical treatment. Nineteen percent were related to management problems, especially waiting times and access to care. Communication issues, such as not being called back, were only explicitly mentioned in 1% of the complaints. A substantial proportion (35%) of the complaints however, concerned issues around professionalism. Among the complaints concerning professionalism, the description of perceived unprofessional behaviour was worded in a variety of ways, including; not being taken seriously; being patronised; being unpleasantly spoken to; getting inappropriate comments; perceiving a lack of empathy; perceiving the physician as being rushed; physicians not introducing themselves; physicians not shaking hands; physicians appearing arrogant or disinterested; or displaying physical harshness or unwanted intimacy. The theme most frequently found within the professionalism category was "not being taken seriously", mostly in regard to the health issue at hand, the urgency of the complaint, or the perception that one was seen as being overprotective.

With our second study, reported in **Chapter 3,** we aimed to investigate which GP resident behaviours are considered unprofessional according to supervisors and faculty, and how these unprofessional behaviours were remediated. Our research questions for Study 2 were: 'Which behaviours of GP residents are considered unprofessional according to their supervisors and faculty and how is remediation applied?'

The results of this focus group study among GP supervisors and designated professionalism faculty members showed that supervisors and faculty shared a conceptualisation in pinpointing and assessing unprofessional behaviour, which matched the descriptors and

categories of the recently developed 4 I's model. This model was developed based on research in undergraduate medical education (UGME) aiming to overcome the 'failure to fail' problem. It does so by guiding educators in how to document unprofessional behaviour and provides directions for effective remediation. The 4 I's model consists 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).

Two new groups of behaviours; 'nervous exhaustion complaints' and 'nine-to-five mentality', needed to be added to the 4 I's model, both in the Introspection category. Behaviours in the categories 'Involvement' and 'Interaction' were assessed as mild and received informal, pedagogical feedback. Behaviours in the categories 'Introspection' and 'Integrity', were seen as very alarming and received strict remediation.

The tools used by both GP clinical supervisors and designated professionalism faculty members to identify unprofessional behaviours seem very similar to those used by GPs in their diagnostic reasoning: that is, a combination of non-analytic and analytic reasoning. The diagnostic phase usually started with the supervisor getting a sense of alarm about residents' PIF, described as either a 'gut feeling', 'a loss of enthusiasm for teaching' or 'fuss surrounding the resident'. This sense of alarm often triggered the remediation phase. The diagnostic phase, however, appeared to be intertwined with the remediation phase: exploring the unprofessional behaviour in a conversation with the resident often already had a remediating effect, and *vice versa*: the way in which residents coped with the remediation phase gave new input for the diagnostic phase. Remediation varied from informal or 'pedagogical' feedback to formally planned meetings. In the latter the Compass was more explicitly used, to exactly pinpoint and assess in which competency domain the resident was underperforming. When formally planned meetings were needed, often faculty members were also consulted to collaborate on a remediation plan.

With our third study, reported in **Chapter 4,** we aimed to explore the process of PIF during GP residency according to GP residents. Our research question for this study was: 'How do

residents perceive their PIF process during GP residency and what factors are perceived to be influential?'

Using focus groups among GP residents and the conceptual framework of PIF developed by Cruess et al. as a sensitising framework for both the interview guide and for conducting the deductive part of the analysis, revealed three major themes. These three themes together provided insight into the process of PIF among GP residents: 1. it all happens in the workplace, 2. from doing to becoming and 3. negotiating perceived norms.

First, we found that identity formation of GP residents occurs primarily in the workplace. In the GP training practices, multiple interrelated factors, especially clinical experiences, clinical supervisors, and residents' self-assessment were found to be at play in forming the professional identity.

Second, we found that during the years of training, residents' identity formation reflected their move from *doing* the work of a GP to *becoming* a GP. During this process, residents found themselves changing their focus from the biomedical and technical aspects of clinical experience to being able to view patients holistically, rather than as people with diseases. During this process of becoming, residents also changed from observing and imitating their supervisor and reflecting with the supervisor, to gradually finding their own way to practice GP medicine.

Third, we found that the multiplicity of personal and professional roles residents have, and how they expected to balance personal roles with their role as a GP, appeared to be important aspects of their identity development. And although residents agreed on GP core values, they differed with their supervisors on how to operationalise those values. The perceived norms caused internal negotiations about how to balance professional roles with personal roles. However, residents perceived no room to discuss these challenges with their supervisors.

In the fourth study, presented in **Chapter 5,** we addressed the research question: 'How do supervisors perceive their role in the PIF of residents?'

Using focus groups among GP supervisors and again using the conceptual framework of PIF developed by Cruess et al. as a sensitizing framework for the interview guide, we revealed three major themes. These three themes provided insight into the role of the supervisor in the process of PIF among GP residents: 1. supervising with the end in mind, 2. role modelling and mentoring, and 3. developing bonds of trust. First, supervisors seemed to have an image in mind about what a GP should look like. Based on this image, which they saw as the desired goal of residency training, they supported residents' PIF and used observable 'signposts' to direct them toward that goal. The signposts supervisors used to evaluate residents' PIF were; patient safety; residents becoming a patient's primary physician; and a changing resident-supervisor relationship.

Second, supervisors described how they worked toward that goal by supporting residents' PIF through role modelling and mentoring. When role modelling, supervisors relied on rather informal, often unplanned 'performance driven' transfer of knowledge and skills based on the resident observing the supervisor. When mentoring, supervisors were more 'development driven' and offered their support beyond the biomedical context of knowledge and skills, instead helping residents find their place within the profession.

Third, supervisors described the prerequisites for achieving that goal. To support residents' PIF, supervisors needed to be transparent and vulnerable, necessitating a bond of trust with the resident, often described as the need for a 'click'. When a bond of trust was felt, supervisors felt they could support residents' PIF in a spontaneous fashion, trusting that they would achieve the most important learning goals by themselves while doing the work of a GP. However, in case of a poor or absent bond of trust, supervisors felt they could not navigate on serendipity but instead had to organise training 'by the book'.

In **chapter 6**, we described the main findings, discussed them in the context of the literature and presented recommendations for both research and practice. Based on the studies described in this thesis, we concluded that unprofessional behaviour of physicians is an everyday reality. We provided insight into how patients experience the unprofessional behaviour of physicians. Further, we provided educators with appropriate language to describe the unprofessional behaviour of residents, which can contribute to the early

identification of issues and the remediation of lapses in professionalism. Because also a focus on the formation of a professional identity is needed, this dissertation also provided insights into the PIF of GP residents from the perspectives of both supervisors and residents. To safeguard the future of General Practice as a profession we recommended a dialogue to be initiated between the generations of GPs about how professionalism can be practiced given the challenges in balancing professional and personal roles.

Samenvatting

In dit proefschrift wordt een aantal studies beschreven, gericht op het ontrafelen van professionele identiteitsvorming (in het Engels: Professional Identity Formation (PIF)) in de context van huisartsenopleiding.

De eerste doelstelling van dit proefschrift was het identificeren van onprofessioneel gedrag in zowel de huisartsenpraktijk als de huisartsopleiding. Daarom begonnen we met onderzoek naar klachten van patiënten in de huisartspraktijk met een speciale focus op professionaliteit, gevolgd door onderzoek naar onprofessioneel gedrag van AIOS huisartsgeneeskunde zoals gepercipieerd door hun praktijkbegeleiders en docenten op de faculteit.

De tweede doelstelling van dit proefschrift was om inzicht te krijgen in de PIF van AIOS huisartsgeneeskunde. Daarom onderzochten we eerst de PIF tijdens de huisartsopleiding vanuit het gezichtspunt van AIOS huisartsgeneeskunde en daarna vanuit het gezichtspunt van praktijkbegeleiders.

In **hoofdstuk 1** introduceerden we onze lezers in het onderzoeksveld van PIF. PIF is een relatief nieuw begrip waarbinnen de professionaliteit van artsen kan worden bezien. Waar we vroeger professionaliteit bespraken in termen van deugden (de goede arts als persoon met karakter) of gedrag (de goede arts als persoon die bekwaamheid toont), richt onderzoek van medisch onderwijs zich nu meer op identiteit en de vorming daarvan (de goede arts als persoon die in zijn of haar identiteit een reeks waarden integreert die overeenkomen met die van de artsengemeenschap met als resultaat te denken, te handelen, en zich te voelen als een arts).
We schetsten in dit eerste hoofdstuk de twee hoofdlijnen van het proefschrift:
1. van onprofessioneel gedrag naar PIF en
2. van huisartsenpraktijk naar huisartsopleiding.
We begonnen ons onderzoek naar PIF in de context van de huisartsopleiding met een studie van de verwachtingen van het publiek ten aanzien van huisartsen door middel van een onderzoek naar onprofessioneel gedrag van huisartsen zoals geventileerd in klachten van

patiënten. Het bestuderen van klachten van patiënten en in het bijzonder wat dat onprofessionele gedrag voor patiënten betekent, doet de vraag rijzen hoe onprofessioneel gedrag en de remediëring ervan, worden aangepakt in de huisartsenopleiding. Dit is dan ook het onderwerp van de tweede studie. Hoewel een op gedrag gebaseerd perspectief op professionaliteit met aandacht voor (on)professioneel gedrag en remediëring onontbeerlijk blijft, hebben we in de laatste twee studies onze focus verlegd naar PIF in de huisartsopleiding. In studie 3 bestudeerden we PIF vanuit het gezichtspunt van AIOS huisartsgeneeskunde. In studie 4 bestudeerden we PIF vanuit het standpunt van hun praktijkbegeleiders.

Met onze eerste studie, gepresenteerd in **hoofdstuk 2**, wilden we inzicht krijgen in de verwachtingen van patiënten over de professionaliteit van huisartsen, door ongevraagde klachten te bestuderen. Meer specifiek wilden we de precieze aard van klachten van patiënten in de ambulante huisartsenzorg onderzoeken, met een speciale focus op gepercipieerde misstappen in de professionaliteit van huisartsen. Dit resulteerde in twee onderzoeksvragen: "Hoe kunnen klachten van patiënten in de huisartssetting worden gekarakteriseerd?" en "Welke elementen van de professionaliteit van artsen komen in deze klachten aan de orde?

Uit onze retrospectieve observationele studie bleek dat de meeste ongevraagde klachten van patiënten betrekking hadden op medische deskundigheid (45%), zoals het missen van diagnoses of een niet-succesvolle klinische behandeling. Negentien procent had te maken met managementproblemen, met name wachttijden en toegang tot zorg. Communicatieproblemen, zoals niet worden teruggebeld, werden slechts in 1% van de klachten expliciet genoemd. Een aanzienlijk deel (35%) van de klachten betrof echter kwesties rond professionaliteit. Onprofessioneel gedrag werd op verschillende manieren verwoord, zoals; niet serieus genomen worden; betutteld worden; onaangenaam te woord gestaan worden; ongepaste opmerkingen krijgen; een ervaren gebrek aan empathie; de arts als gehaast ervaren; artsen die zich niet voorstellen; artsen die geen handen schudden; artsen die arrogant of ongeïnteresseerd overkomen; of fysieke ruwheid of ongewenste intimiteit vertonen. Het thema dat het meest werd aangetroffen binnen de categorie professionaliteit was "niet serieus genomen worden".

Met onze tweede studie, waarvan verslag wordt gedaan in **hoofdstuk 3**, wilden we nagaan welke gedragingen van AIOS huisartsgeneeskunde als onprofessioneel worden beschouwd door praktijkbegeleiders en docenten, en hoe deze onprofessionele gedragingen konden worden geremedieerd. Onze onderzoeksvragen voor Studie 2 waren: “Welke gedragingen van AIOS huisartsgeneeskunde worden door hun praktijkbegeleiders en docenten als onprofessioneel beschouwd en hoe wordt dit gedrag geremedieerd?”

De resultaten van deze focusgroepstudie bij praktijkbegeleiders en aandachtsfunctionarissen professionaliteit toonden aan dat praktijkbegeleiders en docenten een conceptualisering deelden in het aanduiden en beoordelen van onprofessioneel gedrag, die overeenkwam met de descriptoren en categorieën van het recent ontwikkelde 4 I's-model. Dit model werd ontwikkeld op basis van onderzoek in de medische basisopleiding met als doel het probleem van "niet kunnen laten zakken" het hoofd te bieden. Het doet dit door opleiders te begeleiden bij het documenteren van onprofessioneel gedrag en geeft aanwijzingen voor effectieve remediëring. Het 4 I's model bestaat uit descriptoren voor onprofessioneel gedrag, ingedeeld in vier verschillende categorieën: gebrek aan betrokkenheid (niet geëngageerd zijn); gebrek aan integriteit (oneerlijk gedrag); gebrek aan interactie (respectloos gedrag); en gebrek aan introspectie (gebrekkig zelfbewustzijn).

Twee nieuwe groepen van gedragingen; 'nerveuze uitputtingsklachten' en 'negen-tot-vijf mentaliteit', dienden toegevoegd te worden aan het 4 I's model, beide in de categorie Introspectie. Gedragingen in de categorieën 'Betrokkenheid' en 'Interactie' werden als mild beoordeeld en kregen informele, pedagogische feedback. Gedragingen in de categorieën 'Introspectie' en 'Integriteit', werden als zeer alarmerend ervaren en kregen veel striktere remediëring.

De instrumenten die zowel door de klinische praktijkbegeleiders als door de en aandachtsfunctionarissen professionaliteit werden gebruikt om onprofessionele gedragingen op te sporen, lijken sterk op de instrumenten die huisartsen gebruiken bij hun diagnostisch redeneren: dat wil zeggen een combinatie van niet-analytisch en analytisch redeneren. De diagnostische fase begon gewoonlijk met een gevoel van ongerustheid bij de

praktijkbegeleider over de PIF van de AIOS, beschreven als een 'onderbuikgevoel', 'verlies van enthousiasme voor het lesgeven' of 'gedoe rond de AIOS'. Dit gevoel van alarm zette vaak de remediërende fase in gang. De diagnostische fase bleek echter verweven met de remediërende fase: het verkennen van het onprofessionele gedrag in een gesprek met de AIOS had vaak al een remediërend effect, en vice versa: de manier waarop AIOS met de remediërende fase omgingen, gaf nieuwe input voor de diagnostische fase. Remediëring varieerde van informele of 'pedagogische' feedback tot formeel geplande bijeenkomsten. In het laatste geval werd de ComBeL explicieter gebruikt, om precies aan te geven en te beoordelen op welk competentiedomein de AIOS ondermaats presteerde. Wanneer formeel geplande bijeenkomsten nodig waren, werden vaak ook docenten geraadpleegd om samen te werken aan een remediëringsplan.

Met onze derde studie, waarover in **hoofdstuk 4** wordt gerapporteerd, wilden we het proces van PIF tijdens de huisartsopleiding volgens de AIOS huisartsgeneeskunde onderzoeken. Onze onderzoeksvraag voor deze studie was: "Hoe percipiëren AIOS huisartsgeneeskunde hun PIF proces tijdens de huisartsopleiding en welke factoren worden als invloedrijk ervaren?

We maakten voor deze studie gebruik van focusgroepen onder AIOS huisartsgeneeskunde. Het conceptuele kader van PIF ontwikkeld door Cruess et al. gebruikten we als sensitizing framework voor zowel de interviewguide als voor het uitvoeren van het deductieve deel van de analyse. Drie thema's kwamen aan het licht. Deze drie thema's samen gaven inzicht in het proces van PIF bij AIOS huisartsgeneeskunde: 1. het gebeurt allemaal op de werkplek, 2. van doen naar worden en 3. onderhandelen over ervaren normen.

Ten eerste vonden we dat identiteitsvorming van huisartsenassistenten vooral op de werkplek plaatsvindt. In de huisartsopleidingspraktijken bleken meerdere onderling samenhangende factoren, met name klinische ervaringen, praktijkbegeleiders en de zelfbeoordeling van AIOS huisartsgeneeskunde, een rol te spelen bij de vorming van de professionele identiteit.

Ten tweede vonden we dat tijdens de opleidingsjaren de identiteitsvorming van AIOS huisartsgeneeskunde de overgang weerspiegelde van het doen van het werk van een huisarts

naar het worden van een huisarts. Tijdens dit proces veranderden AIOS huisartsgeneeskunde hun focus van de biomedische en technische aspecten van de klinische ervaring naar het in staat zijn om patiënten holistisch te zien, in plaats van als mensen met ziekten. Tijdens dit wordingsproces maken AIOS een verandering door van het observeren en imiteren van hun praktijkbegeleider en het reflecteren met de praktijkbegeleider, naar het geleidelijk vinden van hun eigen manier om huisartsgeneeskunde te beoefenen.

Ten derde vonden we dat de veelheid aan persoonlijke en professionele rollen die AIOS huisartsgeneeskunde hebben, en hoe ze verwachtten hun persoonlijke rollen in evenwicht te brengen met hun rol als huisarts, belangrijke aspecten van hun identiteitsontwikkeling bleken te zijn. En hoewel de AIOS het eens waren over de kernwaarden van de huisartsgeneeskunde, verschilden ze van mening met hun praktijkbegeleiders over de manier waarop ze deze waarden in de praktijk konden brengen. De waargenomen normen leidden tot interne strijd over hoe professionele rollen en persoonlijke rollen in evenwicht te brengen. De AIOS zagen echter geen ruimte om deze strijd met hun praktijkbegeleiders te bespreken.

In de vierde studie, die in **hoofdstuk 5** wordt gepresenteerd, hebben we ons gebogen over de onderzoeksvraag: "Hoe percipiëren praktijkbegeleiders hun rol in de PIF van AIOS huisartsgeneeskunde?

Met behulp van focusgroepen onder huisartsbegeleiders en opnieuw gebruikmakend van het conceptuele raamwerk van PIF ontwikkeld door Cruess et al. als sensitizing framework voor de interviewguide, brachten we drie belangrijke thema's aan het licht. Deze drie thema's gaven inzicht in de rol van de praktijkbegeleider in het proces van PIF bij AIOS huisartsgeneeskunde: 1. superviseren met het doel voor ogen, 2. rolmodellering en mentoring, en 3. het ontwikkelen van vertrouwensbanden.

Ten eerste leken de praktijkbegeleiders een beeld voor ogen te hebben van hoe een huisarts eruit zou moeten zien. Op basis van dit beeld, dat ze zagen als het gewenste doel van de opleiding, ondersteunden ze de PIF van de AIOS en gebruikten ze observeerbare 'wegwijzers' om hen in de richting van dat doel te sturen. De wegwijzers die de praktijkbegeleiders gebruikten om de PIF van AIOS te evalueren waren: patiëntveiligheid; AIOS die de eerst

verantwoordelijke arts van de patiënt worden; en een veranderende relatie tussen AIOS en praktijkbegeleider.

Ten tweede beschreven de praktijkbegeleiders hoe ze naar dat doel toe werkten door de PIF van AIOS te ondersteunen door rolmodellering en mentorschap. Bij rolmodellen vertrouwden de praktijkbegeleiders op een eerder informele, vaak ongeplande 'prestatiegedreven' overdracht van kennis en vaardigheden, gebaseerd op de observatie van de praktijkbegeleider door de AIOS. Bij mentoring waren de praktijkbegeleiders meer 'ontwikkelingsgericht' en boden ze hun steun aan buiten de biomedische context van kennis en vaardigheden, om zo de AIOS te helpen hun plaats in het beroep te vinden.

Ten derde beschreven de praktijkbegeleiders de voorwaarden om dat doel te bereiken. Om de PIF van AIOS te ondersteunen, moesten begeleiders zich transparant en kwetsbaar opstellen, wat een vertrouwensband met de AIOS noodzakelijk maakte, vaak omschreven als de behoefte aan een 'klik'. Wanneer een vertrouwensband werd gevoeld, hadden praktijkbegeleiders het gevoel dat ze de PIF van AIOS op een spontane manier konden ondersteunen, in het vertrouwen dat ze de belangrijkste leerdoelen zelf zouden bereiken terwijl ze het werk van een huisarts deden. In het geval van een slechte of afwezige vertrouwensband, voelden de praktijkbegeleiders echter dat ze niet op serendipiteit konden varen, maar in plaats daarvan de opleiding 'volgens het boekje' moesten organiseren.

In **hoofdstuk 6** hebben we de belangrijkste bevindingen beschreven, bespraken we die in de context van de literatuur en deden we aanbevelingen voor zowel onderzoek als praktijk. Op basis van de in dit proefschrift beschreven studies concludeerden we dat onprofessioneel gedrag van artsen een alledaagse realiteit is. We hebben inzicht gegeven in hoe patiënten het onprofessionele gedrag van artsen ervaren. Verder hebben we opleiders voorzien van bruikbare taal om het onprofessionele gedrag van AIOS te beschrijven. Dit kan bijdragen aan het vroegtijdig signaleren van problemen en het remediëren van onprofessioneel gedrag.
Omdat – naast aandacht voor professionaliteit - ook aandacht nodig is voor de vorming van een professionele identiteit, verschaft dit proefschrift ook inzicht in de PIF van AIOS huisartsgeneeskunde, zowel vanuit het perspectief van de praktijkbegeleiders als vanuit de AIOS. Ten einde de toekomst van de huisartsgeneeskunde veilig te stellen, moedigen wij het

gesprek aan tussen de generaties huisartsen over de invulling van het begrip professionaliteit en over de te vinden balans tussen professionele en persoonlijke rollen.

Dankwoord

Mijn herinnering werkt met verschillende vormen van epische concentratie. Onbedoeld maak ik soms van meerdere verhalen één verhaal of laat ik mensen dingen zeggen, die eigenlijk een andere bron hebben. Bovendien onthoud ik met name positieve voorvallen. In de woorden van de grote filosoof Keith Richards: “Never let the truth get in the way of a good story.”

In *mijn* herinnering is het zo gegaan. Twee jaar achtereen schreef ik een onderzoeksvoorstel dat niet in de prijzen viel. Toen ik me probeerde te verzoenen met mijn rol als miskend genie, besloot *Mattijs Numans* het PHEG spaarvarken stuk te slaan. Voor de kansen die je me op die manier hebt gegeven, ben ik je erg dankbaar. In een van de eerste besprekingen zei je: “goed onderzoek heeft 3 mogelijke antwoorden: ja, nee, of een getal” en “je meet niets, je weet niets, je ouwehoert maar wat”. Mijn antwoord dat er niets tegen geoudehoer is, zolang er maar Gods zegen op rust, heeft je hopelijk overtuigd(1).

Misschien was het overigens allemaal al eerder begonnen. Met *Jan Bolk*, die de commissie Professioneel Gedrag voorzat en mij van mijn koudwatervrees afhielp zodat ik mijn eerste wetenschappelijke artikel kon schrijven: ‘Causes and characteristics of medical student referrals to a professional behaviour board.’

Aan dat artikel schreef ook *Walther van Mook* mee, die ik had leren kennen in de NVMO werkgroep Professioneel Gedrag. Walther, sinds 2013 neem je me al op sleeptouw en nu 10 jaar later ligt er dan een proefschrift. Walther, dank voor je vertrouwen, geduld en coaching.

In 2016 werd ik onder gebracht in de stal van *Anneke Kramer*. Ik ben je dankbaar Anneke dat ik een stukje van je leeropdracht 'onderzoek naar opleiden' voor mijn rekening heb mogen nemen. Aanvankelijk was dat aan de hand van *Geurt Essers* als copromotor. Met jou heb ik een stevige basis gelegd voor dit proefschrift. Dank daarvoor. Na jouw vertrek, bracht je me onder de hoede van *Vera Nierkens*. Vera, jouw “terug naar de data” heeft zich vastgezet in mijn hoofd en ik ben je gedegen manier van werken erg gaan waarderen.

In woord en gedachte, in doen en laten ben ik een Gestructureerde Uitsteller. Bovenaan mijn lijstjes stond jaren lang het onderzoek. Werken aan de eveneens waardevolle zaken die vanaf nummer 2 genoemd staan, werd een manier om zonder al te veel schuldgevoel, niet (altijd) aan nummer 1 te hoeven werken. De eerste 4 jaar van mijn promotieonderzoek heb ik zo met volle overgave gewerkt aan radiobijdragen en brieven, opiniestukken en columns voor de krant. Tot *Peter van Dijken* mij vroeg voor de redactie van het boek 'Professionaliteit in de zorg'. Vanaf de dag dat dat boek bovenaan mijn lijstje stond, ben ik nog serieuzer gaan werken aan mijn proefschrift. Dit ondanks jouw niet aflatende ontmoedigingsbeleid: "Pieter, je leeft maar 1 keer, die promotie kost minimaal vier jaar die je nooit meer terug krijgt". Gelukkig staat er vandaag ook een 'echte paranimf' naast me: *Sander Dekker*. Dank Sander voor alle opbouwende gesprekken, de koffie en de whisky, die je tot in Hurdal (Noorwegen) kwam brengen.

Studie maken van de vorming van huisartsen heeft me vanzelfsprekend doen nadenken over mijn eigen (professionele) identiteit en de vorming daarvan. Met name de gesprekken met de *opleiders* en *AIOS* hebben mijn toewijding aan het mooie beroep van huisarts opnieuw bevestigd. Na ieder (focus groep) interview vervolgende ik fluitend mijn pad.

Ook de gesprekken met mijn huisarts collegae over mijn onderzoek heb ik zeer gewaardeerd. *Henk Thiadens*, *Annet Roelen* en *Ton van Haastert* , veel van wat in dit proefschrift staat over het worden van een huisarts, hebben jullie bij mij in gang gezet.
En ook de *collegae van de PHEG* wil ik hier bedanken. Ik de afgelopen onderzoeksjaren was ik minder inzetbaar als docent. Bovendien heb ik vele van jullie met mijn eindeloze geklets vaak van het werk gehouden. Ik ben weer terug, volledig inzetbaar. *Arlette de Voogd*, *Iris Meljes* en *Marleen Ottenhoff-de Jonge* wil ik nog in het bijzonder noemen. Dank dat jullie met me mee hebben gedacht en me in mijn waan en waarde hebben gelaten.

Het is te doen gebruikelijk om af te sluiten met een verzoenend woord richting het thuisfront en daar dan aan toe te voegen dat het na de promotie allemaal anders wordt. Maar ik denk niet dat het anders wordt. Ik blijf gewoon hard werken, al neem ik soms misschien een vrijdagmiddag vrij. *Anne Marie*, *Floris*, *Simon* en *Mees*, bij voorbaat dank voor jullie begrip in dezen.

Referentie

1. Gerard Reve. Op weg naar het einde (1963), pag. 53

Over de auteur

Pieter C. Barnhoorn werd geboren in Haulerwijk (Friesland) op 18 januari 1977. Een dinsdag, bewolkt, maar droog, temperaturen net boven nul. Al snel verhuisde hij naar Kapelle en enkele jaren later naar Strijen. In 1996 behaalde hij zijn VWO diploma aan het Christelijk Lyceum te Dordrecht en verhuisde hij naar Leiden om geneeskunde te gaan studeren. In 1998 behaalde hij zowel de propedeuse geneeskunde als de propedeuse psychologie. In 2003 zwoer hij de geneeskunst zo goed als hij kan uit te oefenen ten dienste van zijn medemensen. Hierna werkte hij enkele jaren als arts-assistent op afdelingen gynaecologie en urologie. In 2006 begon hij aan de opleidingen seksuologie en huisartsgeneeskunde, die hij in respectievelijk 2008 en 2009 afrondde. In datzelfde jaar begon zijn loopbaan in het medisch onderwijs. Sindsdien bestaat zijn werkweek uit patiëntenzorg, onderwijs en onderzoek.

Sinds 2011 is hij lid van de commissie professioneel gedrag van het LUMC en sinds 2012 is hij lid van de landelijke NVMO werkgroep professioneel gedrag. Deze landelijke werkgroep – thans werkgroep professionaliteit geheten – zit hij sinds 2018 voor. Sinds 2019 zit hij ook eerdergenoemde LUMC commissie – thans commissie professionaliteit geheten – voor.

Door het werk in deze commissie en werkgroep, zijn onderwijswerk en het werk in de praktijk begon Pieter zich steeds meer wetenschappelijk te verdiepen in het thema professioneel gedrag. In de jaren daarna verbreedde deze interesse zich via professionaliteit en professionele identiteitsvorming naar de vraag ‘wat is goede zorg?’.

Op deze vraag heeft hij de gelopen jaren – voorlopige – antwoorden gegeven in vele lezingen, opinieartikelen in alle landelijke kwaliteitskranten en in een tweewekelijkse vraaggesprek op radio 1. Voorlopig hoogtepunt in zijn loopbaan is het boek ‘Professionaliteit in de zorg’ dat hij redigeerde samen met Peter van Dijken en Janneke Geurts.

Pieter is gelukkig getrouwd met Anne Marie. Zij hebben 3 zoons: Floris, Simon en Mees.

foto auteur: Rogier Chang

About the author

Pieter C. Barnhoorn was born in Haulerwijk (Friesland) on January 18 1977. A Tuesday, cloudy but dry, temperatures just above zero. Soon, he moved to Kapelle and a few years later to Strijen. In 1996 he completed VWO at the Christelijk Lyceum in Dordrecht and moved to Leiden to study medicine. In 1998 he obtained his propaedeutic degree in medicine and psychology. In 2003 he swore to practice medicine to the best of his ability for the benefit of his fellow men.

After this he worked for several years as an assistant physician in gynecology and urology departments. In 2006 he began training in sexology and general medicine, which he completed in 2008 and 2009 respectively. In the same year, he joined the medical education department. Since then, his workweek has consisted of patient care, teaching and research.

In 2011 he joined the LUMC Professional Behaviour Committee. In 2012, a membership of the national NVMO working group on professional behavior was added. Since 2018 he chairs this working group, now called the working group on professionalism. Since 2019, he also chairs the aforementioned LUMC committee, now called the professionalism committee.

Through the work in this committee and working group, Pieter began to delve more and more scientifically into the topic of professional behaviour. In the following years this interest broadened via professionalism and professional identity formation to the question ‘what is good care?’.

To this question he has in the past years given - provisional - answers in, among others, all national quality newspapers and a two-weekly interview on Radio 1. Highlight of his career is the publication of the book ‘Professionalism in Healthcare’ which he edited in collaboration with the aforementioned Peter van Dijken and Janneke Geurts.

Pieter is happily married to Anne Marie. They have 3 sons: Floris, Simon and Mees.

List of publications

Chapters in this thesis

Barnhoorn, P. C., Essers, G. T. J. M., Nierkens, V., Numans, M. E., van Mook, W. N. K. A., & Kramer, A. W. M. (2021). Patient complaints in general practice seen through the lens of professionalism: a retrospective observational study. BJGP open, 5(3).

Barnhoorn, P. C., Nierkens, V., Mak-van der Vossen, M. C., Numans, M. E., van Mook, W. N. K. A., & Kramer, A. W. M. (2021). Unprofessional behaviour of GP residents and its remediation: a qualitative study among supervisors and faculty. BMC Family Practice, 22(1), 1-11.

Barnhoorn, P. C., Nierkens, V., Numans, M. E., Steinert , Y., van Mook, W. N. K. A., & Kramer, A. W. M. (2022). General Practice residents' perspectives on their professional identity formation: A qualitative study. BMJ open, *12*(7), e059691.

Barnhoorn, P. C., Nierkens, V., Numans, M. E., Steinert, Y., & van Mook, W. N. K. A. (2022). "What kind of doctor do you want to become?": Clinical supervisors' perceptions of their roles in the professional identity formation of General Practice residents. Medical Teacher, 1-7.

Other publications

Barnhoorn, P. C., Eekhof, J. H. & Neven, K. (2005). Dysmenorroe. Huisarts en wetenschap, 48(1), 1006-1009.

Barnhoorn, P. C. & Youngson, C. C. (2014). Defining professionalism: Simplex sigillum veri!. Medical teacher, 36(6), 545-545.

Barnhoorn, P.C. & Poortvliet, R. (2014). Dipsticks en urineweginfecties bij vrouwen. Huisarts en wetenschap, 57(8), 433-433.

Barnhoorn, P. C. & Youngson, C. (2014). Refining a definition of medical professionalism. Academic Medicine, 89(12), 1579.

Barnhoorn, P. C. (2015). Professionalism score and academic performance: with objective measures of professionalism, do we measure what we want to measure? Journal of Osteopathic Medicine, 115(3), 126-126.

Barnhoorn, P. C. & van Mook, W. N. (2015). Professionalism or professional behaviour: no reason to choose between the two. Medical Education, 49(7), 740-740.

Barnhoorn, P. C. (2015). Resident remediation: start from scratch. American Journal of Clinical Pathology, 144(3), 525-526.

Barnhoorn, P. C. (2015). Kromstand van de penis in erectie. Huisarts en wetenschap, 58(11), 615-615.

Barnhoorn, P. C. (2016). Professional identity formation: onions rather than pyramids. Academic Medicine, 91(3), 291.

Barnhoorn, P. C. (2016). Professional behavior: to define is to limit. Academic Medicine, 91(9), 1192-1193.

Barnhoorn, P. C. (2016). The humble physician. Nederlands Tijdschrift Voor Geneeskunde, 160, D609-D609.

Barnhoorn, P. C., Bolk, J. H., Ottenhoff-de Jonge, M. W., van Mook, W. N., & de Beaufort, A. J. (2017). Causes and characteristics of medical student referrals to a professional behaviour board. International Journal of Medical Education, 8, 19.

Barnhoorn, P. C. (2017). A good habit, well-practised, flowers into a virtue. Medical education, 51(9), 975.

van Venrooij, L. T., & Barnhoorn, P. C. (2017). The cost of caring. Medical Teacher, 39(6), 671-671.

van Venrooij, L. T., Barnhoorn, P. C., Giltay, E. J., & van Noorden, M. S. (2017). Burnout, depression and anxiety in preclinical medical students: a cross-sectional survey. International journal of adolescent medicine and health, 29(3).

van Venrooij, L. T., & Barnhoorn, P. C. (2017). Hospital clowning: a paediatrician's view. European journal of pediatrics, 176(2), 191-197.

van Venrooij, L. T., & Barnhoorn, P. C. (2017). Coulrophobia: how irrational is fear of clowns?. European journal of pediatrics, 176(5), 677-677.

Barnhoorn, P. C., Gianotten, W. L., & van Driel, M. F. (2018). Sleep-related painful erections following sexual intercourse. Archives of Sexual Behavior, 47(3), 815-817.

Barnhoorn, P. C. (2018). How healthy is 'striving for excellence'?. Nederlands Tijdschrift Voor Geneeskunde, 162.

Barnhoorn, P. C., Houtlosser, M., Ottenhoff-de Jonge, M. W., Essers, G. T., Numans, M. E., & Kramer, A. W. (2019). A practical framework for remediating unprofessional behavior and for developing professionalism competencies and a professional identity. Medical teacher, 41(3), 303-308.

Barnhoorn, P. C. (2019). Health is more than just a number. Nederlands Tijdschrift Voor Geneeskunde, 163.

Barnhoorn, P. C., Bruggink, S., & Eekhof, J. (2019). Pijnlijke nachtelijke erecties. Huisarts en wetenschap, 62(10), 58-59.

Barnhoorn, P. C. (2020). Shared decision making seen through the lens of professional identity formation. Patient Education and Counseling, 103(7), 1446-1447.

Barnhoorn, P. C. (2020). Touch in the time of corona. Nederlands tijdschrift voor geneeskunde, 164, D4994.

Barnhoorn, P. C., Zuurveen, H. R., Prins, I. C., van Ek, G. F., den Oudsten, B. L., den Ouden, M. E., Putter H., Numans, M.E. & Elzevier, H. W. (2020). Unravelling sexual care in chronically ill patients: the perspective of GP practice nurses; Health Service Research. Family Practice, 37(6), 766-771.

Barnhoorn, P. C., Bruinsma, A. C. A., Bouma, M., Damen, Z., De Swart, S. M., & Koetsier, M. J. E., Kurver M.J., Van der Sande R., Van der Wijden C.L., van Groeningen C.O.M. (2021).NHG-Standaard Anticonceptie (M02).

Pronk, S. A., Gorter, S. L., van Luijk, S. J., Barnhoorn, P. C., Binkhorst, B., & van Mook, W. N. (2021). Perception of social media behaviour among medical students, residents and medical specialists. Perspectives on medical education, 10(4), 215-221.

Barnhoorn, P. C., Kurver, M. J., & van der Wijden, C. L. (2021). Contraception: article for education and training. Nederlands Tijdschrift Voor Geneeskunde, 165.

Barnhoorn, P., Zuurveen, H., Prins, I., Oudsten, B. D., Numans, M., & Elzevier, H. (2021). Zorg voor seksuele gezondheid bij chronische zieken. Huisarts en wetenschap, 64(4), 25-30.

Barnhoorn, P.C & Veen, M. (2021). 'Wie is daar?' Over professionele identiteitsvorming van de aios. Huisarts en wetenschap, 64(7), 55-57.

Barnhoorn, P. C., Prins, I. C., Zuurveen, H. R., Oudsten, B. L. D., den Ouden, M. E., Numans, M. E., Elzevier, H. W. & van Ek, G. F. (2022). Let's talk about sex: exploring factors influencing the discussion of sexual health among chronically Ill patients in general practice. BMC Primary Care, 23(1), 1-9.

van Venrooij, L. T., Barnhoorn, P. C., Barnhoorn-Bos, A. M., Vermeiren, R. R., & Crone, M. R. (2022). General practitioners' everyday clinical decision-making on psychosocial problems of children and youth in the Netherlands. Plos one, 17(12), e0278314.

Book chapters

Barnhoorn, P. C. (2019). Heamangioma senilis. Kleine kwalen in de huisartsenpraktijk. Achtste druk. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2019). Dysmenorroe. Kleine kwalen in de huisartsenpraktijk. Achtste druk. Bohn Stafleu van Loghum, Houten.

den Boeft, M., Barnhoorn, P. C. (2019). Premenstrueel syndroom. Kleine kwalen in de huisartsenpraktijk. Achtste druk. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2019). Ziekte van Peyronie. Kleine kwalen in de huisartsenpraktijk. Achtste druk. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2019). Pijnlijke nachtelijke erecties. Kleine kwalen in de huisartsenpraktijk. Achtste druk. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2021). Erectiele disfunctie. In Diagnostiek van alledaagse klachten. Vijfde druk. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2021). Wat is professioneel?. In Professionaliteit in de zorg. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2021). Is er een dokter in de zaal? Over de reilwijdte van de artseneed. In Professionaliteit in de zorg. Bohn Stafleu van Loghum, Houten.

Barnhoorn, P. C. (2021). Heamangioma senilis. Kleine kwalen en alledaagse klachten bij ouderen. Eerste druk. Bohn Stafleu van Loghum, Houten.

Book

van Dijken, P. J., Barnhoorn, P. C. & Geurts, J. M. C. (2021). Professionaliteit in de zorg. Eerste druk. Bohn Stafleu van Loghum, Houten