RESEARCH Open Access



# Coordinated empathy in attending general practitioners: an interpretive phenomenological approach to constructing a conceptual model of empathy

Eishin Muramatsu<sup>1</sup>, Noriyuki Takahashi<sup>2\*</sup>, Muneyoshi Aomatsu<sup>3</sup>, Mina Suematsu<sup>2</sup> and Kei Miyazaki<sup>2,4</sup>

# **Abstract**

**Background** Empathy in general practice is important because it contributes to patient satisfaction and clinical outcomes. However, few studies have examined the perceptions of empathy of attending physicians, who are skilled medical practitioners. From the perspective of interpretive phenomenology, we conducted the present study to conceptualize perceptions of empathy in attending general practitioners, and to identify experiences that influenced these perceptions.

**Methods** We conducted four semi-structured interviews with three board-certified attending general practitioners. The transcripts were analyzed using the Steps for Coding and Theorization procedure. The four components of empathy (moral, emotional, cognitive, and behavioral) were used as the theoretical framework for the analysis.

**Results** We found that the participants exhibited the moral component of empathy, such that they felt they were on a mission to understand and support their patients. Furthermore, they mainly used cognitive empathy to understand the feelings and thoughts of their patients. The participants also used behavioral empathy to convey a sense of understanding to their patients, with the intent of building trust and creating an atmosphere in which the patients felt relaxed and able to speak freely. In contrast, emotional empathy was less frequent because the participants observed emotional boundaries related to professionalism.

**Conclusions** This study revealed new details about how attending general practitioners coordinate the four components of empathy and how they balance humanistic care with their objective standpoint as physicians. These findings are important in that they provide a model for physicians in terms of providing empathetic care while maintaining professional boundaries.

**Keywords** General practice, Physician, Empathy, Emotion, Professionalism



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

<sup>\*</sup>Correspondence: Noriyuki Takahashi takahashi.noriyuki.d9@f.mail.nagoya-u.ac.jp <sup>1</sup>Nagoya University School of Medicine, 65 Tsurumai-cho, Showa-ku, Nagoya 466-8550, Japan

<sup>&</sup>lt;sup>2</sup>Department of Education for Community-Oriented Medicine, Nagoya University Graduate School of Medicine, 65 Tsurumai-cho, Showa-ku, Nagoya, Aichi 466-8550, Japan

<sup>&</sup>lt;sup>3</sup>Department of Medical Education, Saku Central Hospital, Saku, Japan <sup>4</sup>Department of General Medicine & General Internal Medicine, Graduate School of Medical Sciences, Nagoya City University, Nagoya, Japan

Muramatsu et al. BMC Primary Care (2025) 26:130 Page 2 of 12

# **Background**

Although there are various definitions, Mercer and Reynolds [1] described clinical empathy as "an ability to; (a) understand the patient's situation, perspective, and feelings; (b) to communicate that understanding and check its accuracy; and (c) to act on that understanding with the patient in a helpful (therapeutic) way." Empathy in physicians is a fundamental component of the therapeutic relationship between doctors and patients [2]. In addition, empathy has been implicated in various health outcomes such as patient satisfaction, treatment adherence, anxiety, diagnosis accuracy, clinical outcomes, and agency [3, 4]. Indeed, empathy plays an important role in enhancing the quality of patient care. However, too much empathy in physicians can lead to compassion fatigue, which is defined as "the physical and mental exhaustion and emotional withdrawal experienced by individuals who care for sick or traumatized people over an extended period of time." [5] Moreover, when physicians become excessively empathetic toward their patients, it can lead to emotional distress that prevents them from providing appropriate and efficient treatment [6, 7]. The belief that excessive emotional resonance is undesirable for physicians can lead to "detached concern," in which physicians suppress their own personal feelings while treating patients, motivated by a sense of duty or commitment [8]. According to Halpern, [9] emotions affect how a person perceives the world, regardless of the intensity of experienced emotions, and "detachment," or avoidance of emotions, does not address the biases and errors caused by such emotional dispositions. Halpern [8] argued that it is important for physicians to engage both affective and cognitive empathy. Thus, in Halpern's view, effective empathy can be achieved through empathic curiosity (i.e., genuine, emotionally engaged interest in the patient's and physician's own perceptions) and emotional reasoning, which combines cognitive imagination of the patient's situation and the physician's own emotional resonance [8, 9]. In summary, empathy has both beneficial and adverse aspects, and a model of the appropriate balance may have useful implications.

Previous studies have revealed declining levels of empathy in medical students and residents as they progress through medical school or training [10, 11]. A systematic review of studies that qualitatively explored factors contributing to declining empathy among medical students reported the involvement of several factors, including the complexity of a patient's disease, patient social background and values, hidden curriculum such as stressful organizational culture, and the prior experiences of the medical students [12]. However, several studies suggest that empathy does not necessarily decline throughout an individual's experience with medical education and practice. A qualitative study on surgical residents in

the United Kingdom reported that empathy for patients changed according to new experiences in clinical practice and in personal life. This study also reported that clinical experience decreased the depth of emotional reactions, although this emotional desensitization did not necessarily result in a decline in empathy [13]. Another study on perceptions of empathy in medical students and residents found that empathy did not simply decline quantitatively, but rather the use of the four components of empathy changed over time [14]. The four components of empathy are: (1) the moral component, which reflects the altruistic motivation to show empathy; (2) the emotional component, which corresponds with the ability to subjectively experience and share the psychological states and feelings of others; (3) the cognitive component, which reflects the ability to understand the feelings and perspectives of others from an objective standpoint; and (4) the behavioral component, which refers to the communication of understanding and concern to others [15]. These components represent the complex, multifaceted, and dynamic aspects of empathy [16]. Aomatsu et al. [14] reported that medical students empathized primarily using the emotional component. In contrast, residents used the cognitive component more frequently because of a decreased sensitivity to patient emotions. The researchers did not simply conclude that medical education and practice diminish empathy, but examined the impact of these experiences on medical student and physician perceptions of their own empathy. Similar qualitative explorations of the experiences that influence empathy can contribute to our understanding of how perceptions of empathy change as physicians become more proficient, in comparison with medical students and residents.

Clinical empathy is emphasized in general practice because it plays a central role in patient-centered medicine [3]. Accordingly, perceptions of empathy among general practitioners are of interest to researchers. One study examined general practitioners' perceptions of their empathic behaviors, and the prerequisites (e.g., physical and mental fitness, and feeling no time pressure) and barriers (e.g., aggression from patients and strict medical guidelines) to empathy [17]. Another study showed that residents in general practice training struggled to balance their empathic attitudes with their professional growth and coping strategies for their own emotions [18]. Although attending general practitioners are considered to have overcome such barriers and conflicts in empathy through their clinical experiences, few studies have explored such experiences using the four components of empathy. To address this in the present study, we focused on attending general practitioners as skilled practitioners of empathy. We examined perceptions of empathy using the four components of empathy, and sought to identify the experiences that influenced participant perceptions.

Muramatsu et al. BMC Primary Care (2025) 26:130 Page 3 of 12

#### Methods

### Interpretive phenomenology

In this study, we used an interpretive phenomenology research approach. Interpretive phenomenology aims to understand the deeper layers of human experience and the lifeworld that influences individual experience and reality [19]. We considered this approach to be appropriate for this study because the study purpose was to identify the perceptions of empathy among attending general practitioners and their personal background experiences that influenced their empathy. In phenomenological research, the meaning of a phenomenon is often examined comprehensively for a small group of individuals [20]. Instead of merely describing the experiences of the study participants, researchers tend to focus on a small number of participants and interpret the importance of personal experiences to each individual [21]. The experience of one interviewee is expected to reflect the existence of other people who are psychologically, socially, and culturally related to that person, because individual human beings are interdependent in society [22]. According to Otani, [22] by conducting individual and specific in-depth examinations of a small number of research participants, it is possible to reveal the generalities and universals of the society that affected those participants. In other words, by interpreting the individual and specific importance of an experience to a person in relation to the context of the society with which that individual is associated, ideas can be revealed that are applicable to people with the same context.

## Context

In Japan, a two-year post-graduate clinical training program has been mandatory since 2004, and residents rotate through several medical departments either by necessity or by choice [23]. After completing post-graduate clinical training, residents undergo specialty training and are then certified as specialists. In Japan, a family medicine specialist system was initiated in 2006 by the former Japanese Academy of Family Medicine. This system was transferred to a primary care medical certification system by the Japan Primary Care Association, which was established in 2010 through an integration of the three societies [24, 25]. In 2018, the Japanese Medical Specialty Board, a third-party organization, initiated a specialist system to certify general practitioners. The organization also certifies attending physicians. Physicians who meet certain requirements, such as having at least 10 years of clinical experience after obtaining a medical license, are certified as attending general practitioners [26].

In Japan, general practitioners include hospitalists, who work in hospitals and see outpatients and inpatients, and family physicians, who work in clinics and provide

outpatient care and home medical care [24]. Both hospitalists and family physicians provide primary care, and the absence of a gatekeeper system in Japan means that patients can choose the medical facilities they prefer [24, 27]. Nevertheless, the roles that are considered important for hospitalists and family physicians differ to some extent. One study reported that hospitalists perceived diagnostic reasoning and inpatient medical management as important roles for their practice, whereas non-hospitalists perceived inpatient medical management and care for elderly patients as important [28]. Likewise, general practitioners in Japan have multiple roles depending on the size of hospitals at which they work.

## **Ethical statement**

Our study was approved by the bioethical review committee of Nagoya University Graduate School of Medicine (approval no. 2017-0294-4). Before each interview, NT provided written and verbal explanations of the study objectives to the participants and obtained written informed consent.

#### **Participants**

This study was conducted in Japan. Study participants were recruited via purposive sampling, with the goal of recruiting both male and female physicians who worked at hospitals of different sizes. The selection criteria were: physicians who graduated from medical school after 2004 (i.e., after the introduction of mandatory post-graduate clinical training), who were qualified as specialists in general practice or family medicine, and who were certified as attending general practitioners. Via email, author NT invited four physicians to participate. Three physicians who agreed to participate in the study were selected as interviewees. They were two men and one woman with 14-18 years of experience, and they worked in hospitals of different sizes (a large hospital, a clinic, and a mediumsized hospital, respectively). One physician did not participate in the study because of a conflict with their working hours and a lack of time.

# **Data collection**

From November 2022 to February 2023, EM and NT conducted semi-structured individual interviews with the three study participants using an interview guide. Each interview lasted between 50 and 100 min and was recorded. A follow-up interview was conducted with one of the study participants. The aim of this follow-up interview was to clarify the questions or issues that were identified in three prior interviews as needing to be resolved for the theorization procedure to be performed. The participant was selected because they appeared to be most able to verbalize their experiences related to these questions and issues. The total duration of the

four interviews was 287 min. All of these interviews were newly conducted for this study. During the interviews, the participants were asked what they thought about physician empathy and their personal experiences with empathy toward their patients. The interview guide containing major questions is presented in Additional file 1. In addition to these predetermined questions, we asked follow-up questions to help participants verbalize their experiences in detail. Periods of data collection were alternated with data analysis. After each interview, data analysis was conducted to identify the information that needed to be clarified and the corresponding questions to be asked in the next interview. An interview guide was then developed to include the new questions, and the next interview was conducted. Data collection was terminated when analyses of the individual and specific experiences and the context of such experiences were obtained, which was considered to be necessary for understanding the attending general practitioners' perceptions of empathy.

# Data analysis

The interviews were transcribed verbatim and analyzed using the Steps for Coding and Theorization (SCAT) qualitative data analysis method [22, 29]. There are four coding steps in the SCAT, as follows.

- 1) Extract the words and phrases to be highlighted from the text.
- Rephrase the words in 1) using words not included in the text (i.e., diverse words that the researchers know or that exist in related academic disciplines and societies).
- 3) Explain 1) and 2) using concepts not included in the text (e.g., from the literature and the Internet).
- 4) Describe the themes and the constructs that emerge from 1) to 3), considering the context of the text.

Then, describe the storyline using the codes in 4). Using these steps, we obtained a theoretical description from the storyline. The four components of empathy [15] were used as the theoretical framework for the analysis because we considered that this model best expresses the complex, multifaceted, and dynamic aspects of empathy [16]. Data analyses were conducted by EM and NT, and MA confirmed the validity of the analysis by reviewing the verbatim transcripts and results.

In interpretive phenomenological research, the hermeneutic circle is a crucial doctrine when conducting data analysis [21, 30]. Hermeneutics is generally regarded as a philosophy of understanding and a theory of interpretation, while also serving as a means of illuminating the conditions under which understanding, perception, experience, and knowing come into being [31]. The

hermeneutic circle is a continuous and iterative process in which researchers explore the experiences of research participants while reflecting on their own perceptions [30]. In this process, researchers' preunderstanding transforms into new understanding, or interpretation [31, 32]. To reach this understanding, researchers must consider the interaction between research data (parts) and their understanding of a phenomenon (whole) [33]. This is because the parts and the whole give meaning to each other, and the understanding of each deepens that of the other in a circular way [33]. Through the coding, development of storylines, and generation of theoretical descriptions in the SCAT process, the researchers in the present study sought to progress from understanding the parts to comprehending the whole. This progression was facilitated by the four-step coding process, which elucidated the deeper meanings of the segmented texts. Subsequently, the storyline articulated the interconnections among these deeper meanings, which ultimately led to the theoretical descriptions. In this sense, the theoretical descriptions represented the understanding of the deeper meaning of physicians' empathy, obtained through the interpretation of the text. A distinctive feature of the SCAT is the use of a unified data analysis sheet that explicitly documents these analytical processes. This feature allowed the understanding of the physicians' empathy and the factors that influenced it (whole) to highlight the meanings of the segmented text (part). In other words, the analysis sheet of the SCAT demonstrated the iterative relationship between the segmented texts and codes (part) and their underlying deeper meanings (whole).

During the data analysis, the authors discussed the theoretical descriptions obtained from each interview and compared the theoretical descriptions in the new interview with those from previous interviews. We repeated the cyclical procedure of data collection, analysis, and revision, in which we reviewed the text of each interview and revised the codes and theoretical descriptions.

# Reflexivity

Because EM was a pre-clinical medical student, he did not have many experiences with empathy in medical care and interaction with patients. Therefore, at the beginning of this investigation, his primary objective was to clarify the structure of the interactions between the four components of empathy by comparing the results from the participants with empathy in his own daily life. Later, as the study progressed, his research interests evolved to include factors that influence empathy in medicine, such as the emotional fluctuations that accompany empathy. Therefore, in the interviews, we focused on how the four components of empathy were used and how they interacted with one another. This allowed us to verbalize the

Muramatsu et al. BMC Primary Care (2025) 26:130 Page 5 of 12

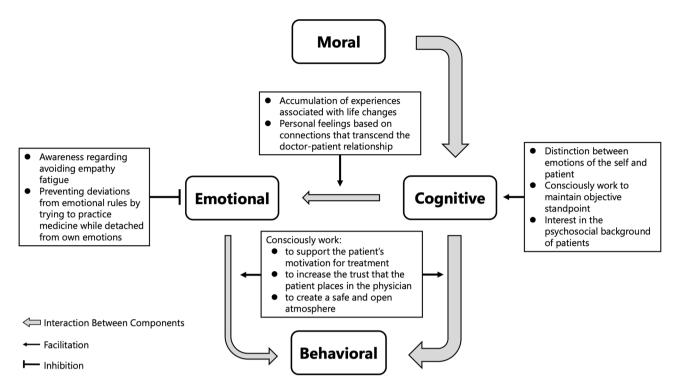


Fig. 1 Legend: Rounded corner squares: four components of empathy; bold arrows: interaction between components (thickness indicates the strength of the interaction); rectangles: factors influencing empathy; black line: facilitating (arrow) or inhibiting (T-arrow) empathy

study participants' experiences with empathy in view of their intentions and motivations regarding empathy, their cognitive processes when they empathized, and the ways in which their empathy was expressed via words and actions. Factors that influenced empathy were also described in terms of the components of empathy they influenced.

NT, who conducted the interviews together with EM, was a general practitioner, attending physician, and empathy researcher. From his own experiences as a general practitioner, he felt that empathy was important in general practice and that it could be maintained over time. This belief was reflected in his research interests. In other words, he was curious about the cognitive structure of empathy among attending physicians and the factors that might influence empathy changes. Because the study participants were colleagues with whom NT had once shared a clinical practice, the trusting relationship they had developed during their clinical practice may have influenced the interview discourse. MA and KM were general practitioners and attending physicians, and MS was a diabetes specialist with experience as a general practitioner. Each interviewer had research interests similar to those of NT regarding empathy.

# **Results**

We considered empathy in attending general practitioners using the four components of empathy. Our findings indicated that the attending general practitioners coordinated the components of empathy, and we identified experiences that influenced empathy in this group. Figure 1 illustrates participant perceptions of empathy in terms of the four components of empathy (Figure 1). In the following section, the perceptions of empathy among the attending general practitioners are described for each component.

#### Moral component

With respect to the moral component of empathy, we found that the study participants felt that they were on a mission to understand their patients. This perception stemmed from the awareness that patients relied on them, along with a motivation to meet patient expectations, which arose from concern regarding the patients' previous experiences. One participant described their mission as understanding patients who had not been understood by their healthcare providers in the past:

Many of the patients who come here say that they have talked about various instances of suffering in the past, but that they were not listened to or were told that it was all in their mind. Therefore, I feel that my mission is to understand their feelings as much as possible. (Physician 1)

Another moral component of empathy was the sense of responsibility to help patients maintain a positive daily life that enables them to cope effectively with their illness. Participants focused on patient experiences of illness as barriers to living a positive daily life, and their desire to be relieved of these difficulties. The participants sought ways to provide support for patients through conversation. One participant commented on their sense of responsibility to help patients who wished to be relieved of the suffering of their illnesses:

Patients come to the hospital because they are anxious or troubled about various illnesses, and they want to meet with us and have their concerns resolved. So, I think it is my role to help them. (Physician 3)

Another motivation for empathy was consciousness of their role as a family physician who is a familiar adviser. This led the participants to seek to establish a trusting relationship with their patients through empathy, expressed by Physician 2 as follows:

The purpose of empathizing is, whether or not their problems are resolved, to help people recognize that we will be here for them if they ever want to meet us to address their issues again.

## Cognitive component

Participants made a distinction between their own emotions and those of their patients, and they were conscious of understanding their patients from an objective standpoint as physicians. One participant reported that they would objectively infer patients' emotions, rather than experiencing the same emotions as them:

Physician 3: It doesn't mean that I become that emotion (the same emotion as the patient)...(omitted)... It doesn't mean that I become the emotion, but I infer (patients' emotion).

EM: It's like drawing a line from emotional engagements and inferring from an objective viewpoint. Physician 3: Yes. I think we have to be close to (the patient), but I don't think it is necessary to be emotionally engulfed in the first place.

Therefore, they viewed understanding via cognitive empathy as the main component of empathy, where they objectively deduced patients' emotions based on their understanding of the patients' past experiences. They engaged in cognitive empathy by focusing on the patients' emotions and needs regarding medical care.

One reason why it was important to understand the needs of patients via cognitive empathy was that the physician's desire to change the patients' behavior could often be inconsistent with the needs of patients regarding medical care. Physician 2 described such patient needs as "hidden SOS messages":

Whether patients want their symptoms taken care of, a diagnosis made, or simply to be listened to, doing things that are inconsistent with these requests will not increase their satisfaction with medical care at all....(omitted)... I think it is important to have the sensitivity to detect hidden SOS messages, such as the words and actions of the patients, and to properly infer them. (Physician 2)

In addition, the participants had an interest in the psychosocial background of patients as a prerequisite for understanding their needs via cognitive empathy. With their awareness of the importance of providing wholeperson support to the patients, i.e., not just treating their diseases, the physicians sought interventions to support the patients by inferring problems related to their illnesses and complaints that the patients left unsaid. One participant considered the patients' feelings and desires and also had an interest in the individual patients and their surroundings:

If I can grasp the patient's current problems, anxieties, and goals that the family wants to achieve, I can seek ways in which I can be involved and help the patient as much as possible. To do this, I pay attention to the kind of emotions the person is feeling and what he/she wants to dispel. (Physician 3)

I have become able to recognize the patient as an individual...(omitted). Therefore, I am also concerned about the environment surrounding the patient, his/her family, and so on, and I think we have a relationship in which I can naturally communicate with the patient with such words (empathic words). (Physician 3)

#### **Emotional component**

The accumulation of life experiences provided the participants with increased emotional empathy through the emotions tied to their own experiences. Physician 3 explained the impact of their own child-rearing experiences, as follows:

Now that I have raised my own children, it is easier for me to imagine what it is like to raise children, so I

am able to empathize more closely with the difficulties of child-rearing.

Study participants also reported feeling emotional empathy based on personal experience. They perceived this as support that exceeded the requirements of their work as physicians:

I think the way I empathize with them changes depending on whether they need me as a doctor or whether they want to talk to me as a person without the white coat, that is, without the doctor's job. (Physician 2)

I get the feeling that patients do not visit us simply because they are sick, but because they are relying on us...(omitted)...I feel I would like to go a little further and provide support. I guess it goes back to my first thought as a doctor, but nowadays we would call it supererogation. (Physician 2)

This included altruistic acts that were not aimed at treatment outcomes, and support for patients seeking psychological care. These actions were underpinned by personal feelings connected to the cumulative trust between the clinic and the community, along with their social ties as members of the community, which transcended the doctor-patient relationship.

Conversely, study participants described a low frequency of emotional empathy. They had experienced negative aspects of emotional empathy that led to empathy fatigue, such as the contagion of patient distress caused by similarities between themselves and their patients, and the outpouring of personal feelings of the physicians. They recognized the negative effects of empathy as the inhibition of their own emotional control, which was the result of excessive emotional empathy. Also, providing assistance beyond a physician's responsibilities based on personal feelings sometimes conflicted with the professionalism necessary to equally serve all patients. Therefore, they suppressed emotional empathy by drawing a line between the self and patient feelings. Other efforts to control their own emotions included self-insight through metacognition with the goal of maintaining the quality of their medical practice. The participants were aware of their own mental vulnerability and affirmed their internal negative emotions and self-objectification through self-reflection:

It is dangerous to think that you do not have negative feelings. Rather, it is better to understand that you do have them, so that you can view yourself objectively. (Physician 2)

Through these efforts, they maintained an objective position, which enabled them to make fair medical decisions. They attempted to practice medicine by staying detached from their own emotions and preventing deviations from the emotional rules that they wanted to follow as physicians. One participant was careful to distinguish between their own emotions and those of patients:

If I get too emotional, it's hard for me to examine the patient. I have to draw a line between the patient and myself. I have to keep my composure at all times... (omitted). Well, it may be difficult to empathize completely with the patient's feelings. I think that we have to be able to respond to the patient's emotions to the extent that we can continue to examine the patient calmly, otherwise we can no longer refer to our work as a physician's job. (Physician 1)

# **Behavioral component**

The study participants described the importance of communication, or behavioral empathy, not only in understanding patient feelings and experiences, but also in conveying to patients that they understand what the patient is feeling. The participants engaged in conscious behavioral empathy to show that they were listening to the patient complaints through nonverbal forms of communication such as backchanneling.

Participants also engaged in forms of behavioral empathy intended to provide reassurance to patients and their families, such as offering encouraging words to patients regarding their hardships. These words were based on their idea of the patient's burden before and after the visit, along with their understanding of the factors that lead to emotional burden for patients in healthcare institutions, described by Physician 3 as follows:

I have seen how difficult it is for some people to come to the hospital...(omitted). (The hardships on the way to the medical visit) are something I am aware of, so I sometimes say to them, "Thank you for your efforts".

When offering behavioral empathy via verbal and non-verbal communication, the participants were driven by a mission to support the patient's motivation for treatment and to increase the trust that the patient felt toward the physician. There was also an attempt to create an atmosphere in which the patients felt able to speak freely. Physician 2 created an atmosphere in which patients felt comfortable talking to their physician:

To create an environment where it is easy for patients to talk to the doctor, and to give them the

impression that this person (doctor) will understand them, it is important to have empathy.

The study participants stated that they were responsible for accepting the patient's feelings, which were elicited through behavioral empathy, because interrupting the patient's self-disclosure could disrupt the trusting relationship between physician and patient. Therefore, they were maintaining trust through active listening. One participant spoke of the responsibility of physicians to continue to listen to patients after asking questions about confidential problems:

As for listening to the patient, when I ask if the patient has any problems, I don't say, "No, I don't have time for this," or "I'm sorry, please go to another department to talk about that." It is a bit rude to the person who has finally told me something that he/she had been so reluctant to talk about. (Physician 2)

In addition, they mentioned that a high psychological capacity was essential in expressing empathy because behavioral empathy may lead one to encounter situations that require emotional labor, and that could lead to mental exhaustion. Physician 2 described controlling their expression of behavioral empathy:

When I don't have enough energy to spare, I may not express as much empathy. Of course, as a doctor, I always try to maintain my professionalism, but to be more supportive and empathetic, I need to have a certain psychological capacity.

# Discussion

In this study, we conceptualized attending general practitioners' perceptions of empathy using the four components of empathy. Our interview process revealed experiences that influenced participant perceptions of empathy. We found that the participants expressed a moral component of empathy, which reflected a sense of being on a mission to understand and support their patients. They mainly used cognitive empathy to understand their patients' feelings and thoughts. They also engaged in behavioral empathy to convey a sense of understanding their patients, which served to build trust between the physician and patient and to create an atmosphere in which the patient felt relaxed and able to speak freely. Conversely, emotional empathy was less frequent because the participants were aware of the need to have emotional boundaries to ensure professionalism. These findings reveal that attending general practitioners coordinated the components of empathy, thus providing new insight into previous research.

The study participants had an interest in the psychosocial background of their patients as a prerequisite for understanding their needs via cognitive empathy. They also sought ways to support patients holistically; through attention to their illnesses and inferences regarding the complaints that the patients kept unspoken. This consideration of factors that influence health, such as the patient's mental well-being, family relationships, and cultural background, along with a depth of scope that seeks to address underrepresented issues, is fundamental to whole-person care in general practice [34, 35]. Whole-person care that focuses on the patient's psychosocial background is a component of patient-centered medicine [36, 37]. That the participants were interested in the psychosocial background of their patients indicates that they practiced patient-centered medicine via cognitive empathy. Because patient-centered and wholeperson medicine is considered important in the practice and education of general practice and family medicine in Japan, [26, 38] the context of general practice in Japan could have influenced the cognitive empathy of the attending general practitioners.

The participants were conscious of suppressing emotional empathy and avoiding empathy fatigue by drawing a line between the self and patient emotions. They also controlled their emotions by objectifying themselves through self-reflection. This kind of emotional delineation and self-reflection is known to contribute to resilience [39]. Epstein and Krasner [40] describe resilience as "the ability of an individual to respond to stress in a healthy, adaptive way such that personal goals are achieved at minimal psychological and physical cost." Here, the study participants seemed to cope with emotional fluctuations as they carried out their medical practice by maintaining an awareness of the personal boundary between themselves and their patients, as well as by correctly recognizing their own physical and mental states. Ignoring one's own emotions and personal distress, the inability to recognize emotions, and selforiented negative emotions caused by witnessing others in distress can lead to empathy fatigue [41]. The participants used self-reflection to maintain an awareness of their own mental vulnerability through affirmation of the existence of their own internal negative emotions and objectification of themselves. These efforts are important for avoiding empathy fatigue and for sustaining empathy.

Although the study participants consciously suppressed their emotional empathy as described above, they also stated that their emotional empathy improved with the accumulation of life experience. In a previous study, medical residents showed reduced emotional empathy because of a decreased sensitivity to patient emotions [14]. Furthermore, first-year general practice trainees were not proficient in dealing with their own

Muramatsu et al. BMC Primary Care (2025) 26:130 Page 9 of 12

emotions, and reported a conflict between empathy for their patients and improving their medical skills [18]. In other words, less experienced physicians may have difficulty in empathizing with their patients because of a reduced sensitivity to patient emotions or difficulties in dealing with their own emotions. In contrast, attending general practitioners had a more subjective understanding of patient emotions through their own experiences, as well as a commitment to controlling their own emotions, enabling them to empathize with their patients appropriately.

The study participants sometimes engaged in emotional empathy based on personal experiences, i.e., as an altruistic act that was not aimed at a therapeutic outcome, which resulted from emotions related to a personal relationship that transcended the physician-patient relationship. Thomas et al. [42] reported that the relationship between a general practitioner and a patient includes not only a professional connection but also a "human connection" aspect, and that this connection may cause the physician to provide more support than required to a patient who is suffering. The cumulative trust described by participants between the clinic and the community, along with their social ties as members of the community, could be considered as a "human connection," which may have been influenced by the context of working in a clinic that has ties to the community. Although the care based on such connections is rewarding, it is also potentially burdensome and must be balanced with professional responsibilities and boundaries [42]. Similarly, Derksen et al. [43] reported that general practitioners make clear boundaries to comply with professionalism and maintain an emotional distance between themselves and their patients. Indeed, excessive emotional involvement should be controlled because it does not lead to the best outcomes for patients and interferes with the delivery of equitable treatment for all patients [6]. Consistent with these previous studies, our participants maintained their objective standpoint by controlling their personal emotions as the result of a conflict with their professionalism, which enabled them to provide equal support to their patients. Taken together, the current findings revealed that the interviewed attending general practitioners were aware of their professionalism and aimed to maintain a neutral and objective standpoint, and controlled their emotions through emotional delineation and self-objectification. Furthermore, for patients who needed care from a more humanistic perspective, attending general practitioners reported that they deviated from this position and provided support through emotional empathy.

Our findings suggest that attending general practitioners had acquired a proficient approach to emotional regulation compared with residents, who sometimes exhibited a reduced sensitivity to patient emotions and

experienced conflict between empathy for their patients and their professional development. Similar findings were reported by a study that explored the experience of empathy among senior doctors in various departments with five or more years of clinical experience [44]. In that study, empathy was described as an action performed for the benefit of the patient while balancing barriers that emerge in daily practice, such as the physician's own emotional load [44]. Conversely, in the present study, we found that attending general practitioners maintained a balance between humanistic care and their objective standpoint as physicians. This was achieved via emotional control that enabled them to separate their emotions from those of their patients, along with the development of self-insight. Additionally, participants used cognitive empathy to objectively infer patients' feelings and medical needs, and emotional empathy for patients who needed more humanistic care. This empathy did not appear to constitute mere "detachment," but was indicative of the coordination of cognitive and emotional components. Halpern reported that "physicians who cultivate curiosity about others, sensitivity to their own emotional reactions, and an ongoing capacity to see the patient's situation, motives, and reactions as distinct from their own are likely to develop increasing empathic skills." [9] The coordinated empathy of participants in the current study is consistent with this notion. This study is novel in that it characterizes empathy in attending general practitioners in terms of controlling emotional empathy and empathizing primarily with cognitive empathy. These findings could serve as a model for physicians who have difficulty coping with emotions or providing empathic care while maintaining a professional standpoint.

The study participants employed behavioral empathy to encourage patients and their families to feel safe via a trusting physician-patient relationship and the maintenance of a safe and open atmosphere. Proficiency in communication, such as that needed to build a relationship of ease and trust, along with a listening attitude that creates a comfortable atmosphere for patients to talk, have been reported in medical professionals [45]. Listening skills in health care providers have also been positively correlated with patient satisfaction, [46] and the patient's experience of "being listened to" is important to the provision of care [47]. Our present findings regarding the importance of behavioral empathy are consistent with these previous studies. In addition, in the present study, the participants discussed the negative effects of interrupting a patient in the middle of his or her story on patient-physician trust and the need for physicians to have the psychological capacity to engage in behavioral empathy. Thus, forms of behavioral empathy that consider conversational time constraints or psychological capacity are important Muramatsu et al. BMC Primary Care (2025) 26:130 Page 10 of 12

in achieving the positive effects of communication, as described above.

### Limitations

In Japan, general practitioners include both hospitalists and family physicians [24]. The study participants varied in gender and the size of the hospitals in which they worked, which may reflect the context of general practice in Japan. Therefore, we consider the results of this study to reflect the context of general practice in Japan. Nevertheless, our findings are not necessarily limited to a Japanese context: the conflicts that general practice trainees face in terms of emotional regulation and professional skill development, [18] along with the importance of the balance between emotional detachment and empathy, [7, 48] have been reported in other regions globally.

Another limitation is that no patients were included in the study. The study participants perceived their engagement with patients, such as using behavioral empathy to build trust with patients, as a component of empathy. However, it is unclear whether the patients viewed these behaviors as empathetic. It should be noted that interpersonal skills exhibited by physicians such as eye contact and listening are perceived as empathetic by patients, [49] and we expect that the behavioral empathy performed by the participants in this study was empathetic from the patient viewpoint. Further research is needed to explore how patients perceive the behavioral empathy of physicians. This would help to elucidate the behaviors and attitudes of physicians that contribute to a patient's sense of being understood.

# Conclusion

In this study, we identified a conceptual structure for perceptions of empathy and the experiences that influence them in attending general practitioners. A study highlight was the elucidation of the emotional regulation process by which, while being aware of the professionalism needed to maintain a neutral and objective standpoint as a physician, the participants deviated from their professional position to provide care as individuals to patients who needed support from a more humanistic perspective. Moreover, we found that efforts to prevent empathy fatigue included distinguishing between the self and patient and becoming aware of one's own mental vulnerability by viewing themself objectively. These findings may help physicians who face challenges in balancing their professional medical practice with empathic patient care.

# Abbreviations

SCAT Steps for Coding and Theorization

# **Supplementary Information**

The online version contains supplementary material available at https://doi.or q/10.1186/s12875-025-02834-w.

Additional file 1

#### Acknowledgements

We express our gratitude to the research participants who generously contributed their time and shared their experiences during the interviews. We thank Sydney Koke, MFA, from Edanz (https://jp.edanz.com/ac) for editing a draft of this manuscript.

#### **Author contributions**

EM contributed to the acquisition, analysis, interpretation, and presentation of data, and drafted the article. NT contributed to the design of the work, acquisition, analysis, interpretation, and presentation of data. He also drafted the article and revised it critically for important intellectual content. MA, MS, and KM contributed to the interpretation of data and revised the article critically for important intellectual content. All authors approved the final version of the manuscript to be published and participated sufficiently in the work to take public responsibility for appropriate portions of the content.

#### **Funding**

This work was supported by Japan Society for the Promotion of Science KAKENHI grants (JP20K10375, JP24K13338). The funding body had no involvement in the study design, data collection, administration, interpretation of the data, or writing of the paper.

#### Data availability

The data are not publicly available because they contain information that could compromise the privacy of research participants.

#### **Declarations**

#### Ethical approval and consent to participate

Our study was approved by the bioethical review committee of Nagoya University Graduate School of Medicine (approval no. 2017-0294-4). This study was conducted in accordance with the principles described in the Declaration of Helsinki. Before each interview, NT provided written and verbal explanations of the study objectives to the participants and obtained written informed consent.

#### Consent for publication

Not applicable.

# Competing interests

NT, MS, and KM declare that their current (NT and MS) and past (KM) affiliations received donations from Aichi Prefecture and Nagoya City, Japan. NT has received grants and personal fees from Novartis Pharma KK outside the submitted work. The other authors declare that there is no conflict of interest with respect to the research, authorship, and/or publication of this article.

Received: 19 December 2024 / Accepted: 14 April 2025 Published online: 26 April 2025

#### References

- Mercer SW, Reynolds WJ. Empathy and quality of care. Br J Gen Pract. 2002;52 Suppl:9–12. Available from: https://bjgp.org/content/52/supplement/S9
- Moudatsou M, Stavropoulou A, Philalithis A, Koukouli S. The role of empathy in health and social care professionals. Healthcare (Basel). 2020;8(1):26. https://doi.org/10.3390/healthcare8010026
- Derksen F, Bensing J, Lagro-Janssen A. Effectiveness of empathy in general practice: A systematic review. Br J Gen Pract. 2013;63(606):e76–84. https://doi. org/10.3399/bjqp13X660814.
- 4. Mercer SW, Higgins M, Bikker AM, Fitzpatrick B, McConnachie A, Lloyd SM, et al. General practitioners' empathy and health outcomes: A prospective

- observational study of consultations in areas of high and low deprivation. Ann Fam Med. 2016;14(2):117–24. https://doi.org/10.1370/afm.1910.
- Decety J. Empathy in medicine: What it is, and how much we really need it. Am J Med. 2020;133(5):561–6. https://doi.org/10.1016/j.amjmed.2019.12.012
- Gelhaus P. The desired moral attitude of the physician: (I) empathy. Med Health Care Philos. 2012;15(2):103–13. https://doi.org/10.1007/s11019-011-93 66-4
- Kerasidou A, Horn R. Making space for empathy: Supporting doctors in the emotional labour of clinical care. BMC Med Ethics. 2016;17:8. https://doi.org/1 0.1186/s12910-016-0091-7
- Halpern J. From idealized clinical empathy to empathic communication in medical care. Med Health Care Philos. 2014;17(2):301–11. https://doi.org/10.1 007/s11019-013-9510-4.
- Halpern J. From detached concern to empathy: Humanizing medical practice. New York: Oxford University Press; 2001.
- Andersen FA, Johansen AB, Søndergaard J, Andersen CM, Assing Hvidt E. Revisiting the trajectory of medical students' empathy, and impact of gender, specialty preferences and nationality: A systematic review. BMC Med Educ. 2020;20(1):52. https://doi.org/10.1186/s12909-020-1964-5.
- Neumann M, Edelhäuser F, Tauschel D, Fischer MR, Wirtz M, Woopen C, et al. Empathy decline and its reasons: A systematic review of studies with medical students and residents. Acad Med. 2011;86(8):996–1009. https://doi.org/10.10 97/ACM.0b013e318221e615.
- Howick J, Dudko M, Feng SN, Ahmed AA, Alluri N, Nockels K, et al. Why might medical student empathy change throughout medical school? A systematic review and thematic synthesis of qualitative studies. BMC Med Educ. 2023;23(1):270. https://doi.org/10.1186/s12909-023-04165-9.
- Yannamani P, Gale N. The ebbs and flows of empathy: A qualitative study of surgical trainees in the UK. BMC Med Educ. 2024;24(1):131. https://doi.org/10. 1186/s12909-024-05105-x.
- Aomatsu M, Otani T, Tanaka A, Ban N, van Dalen J. Medical students' and residents' conceptual structure of empathy: A qualitative study. Educ Health (Abingdon). 2013;26(1):4–8. https://doi.org/10.4103/1357-6283.112793.
- Morse JM, Anderson G, Bottorff JL, Yonge O, O'Brien B, Solberg SM, et al. Exploring empathy: A conceptual fit for nursing practice? Image J Nurs Sch. 1992;24(4):273–80. https://doi.org/10.1111/j.1547-5069.1992.tb00733.x.
- Jeffrey D. Empathy, sympathy and compassion in healthcare: Is there a problem? Is there a difference? Does it matter? J R Soc Med. 2016;109(12):446–52. https://doi.org/10.1177/0141076816680120
- Derksen F, Bensing J, Kuiper S, van Meerendonk M, Lagro-Janssen A. Empathy: What does it mean for GPs? A qualitative study. Fam Pract. 2015;32(1):94–100. https://doi.org/10.1093/fampra/cmu080
- Derksen FAWM, Olde Hartman TC, Lagro-Janssen ALM, Kramer AWM. Clinical empathy in GP-training: Experiences and needs among Dutch GP-trainees. "Empathy as an element of personal growth". Patient Educ Couns. 2021;104(12):3016–22. https://doi.org/10.1016/j.pec.2021.03.030
- Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. Perspect Med Educ. 2019;8(2):90–7. https://doi.org/10.1007/s40037-019-0509-2
- 20. Creswell JW, Poth CN. Qualitative inquiry & research design: Choosing among five approaches. 4th, International student ed. Los Angeles: Sage; c2018.
- Frechette J, Bitzas V, Aubry M, Kilpatrick K, Lavoie-Tremblay M. Capturing lived experience: Methodological considerations for interpretive phenomenological inquiry. Int J Qual Methods. 2020;19:1609406920907254. https://doi.org/1 0.1177/1609406920907254
- Otani T. Paradigm and design of qualitative study

  From research methodology to SCAT. Nagoya (JP): The University of Nagoya Press; 2019.
- Ministry of Health, Labour and Welfare. Ishi rinsyo kensyu seido no minaoshi ni tsuite [About the revision of the clinical training for medical practioners] [Internet]. Tokyo: Ministry of Health, Labour and Welfare of Japan. 2009 [cited 2023 August 5]. Available from: https://www.mhlw.go.jp/seisaku/2009/08/04. html
- Kaneko M, Matsushima M. Current trends in Japanese health care: Establishing a system for board-certificated GPs. Br J Gen Pract. 2017;67(654):29. https://doi.org/10.3399/bjgp17X688669
- Maezawa M. [General physician and internist: 4. From the standpoint of Japan Primary Care Association]. Nihon Naika Gakkai Zasshi. 2012;101(12):3557–61. https://doi.org/10.2169/naika.101.3557
- Japanese Board of General Medicine. Sogo shinryo senmon kensyu puroguramu seibi kijun [Criteria for general medicine specialty training program] [Internet]. Tokyo: Japanese Medical Specialty Board. 2024, February 16 [cited

- 2024 April 13]. Available from: https://jmsb.app.box.com/s/ugs2wtljj23vye2q yvbtojhf8lwrzhk5
- Kato D, Ryu H, Matsumoto T, Abe K, Kaneko M, Ko M, et al. Building primary care in Japan: Literature review. J Gen Fam Med. 2019;20(5):170–9. https://doi. org/10.1002/jgf2.252
- Miyagami T, Shimizu T, Kosugi S, Kanzawa Y, Nagasaki K, Nagano H, et al. Roles considered important for hospitalist and non-hospitalist generalist practice in Japan: a survey study. BMC Prim Care. 2023;24(1):139. https://doi.org/10.11 86/s12875-023-02090-w.
- Otani T. SCAT: Steps for coding and theorization. J Japan Soc Kansei Eng. 2011;10(3):155–60. https://doi.org/10.5057/kansei.10.3\_155
- Bynum W, Varpio L. When I say... hermeneutic phenomenology. Med Educ. 2018;52(3):252–3. https://doi.org/10.1111/medu.13414.
- Alsaigh R, Coyne I. Doing a hermeneutic phenomenology research underpinned by Gadamer's philosophy: A framework to facilitate data analysis. Int J Qual Methods. 2021;20:16094069211047820. https://doi.org/10.1177/160940 69211047820.
- 32. Laverty SM. Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. Int J Qual Methods. 2003;2(3):21–35. https://doi.org/10.1177/160940690300200303.
- Ajjawi R, Higgs J. Using hermeneutic phenomenology to investigate how experienced practitioners learn to communicate clinical reasoning. Qual Rep. 2007;12(4):612–38. https://doi.org/10.46743/2160-3715/2007.1616.
- Thomas H, Mitchell G, Rich J, Best M. Definition of whole person care in general practice in the English language literature: A systematic review. BMJ Open. 2018;8(12):e023758. https://doi.org/10.1136/bmjopen-2018-023758
- Thomas H, Best M, Mitchell G. Whole-person care in general practice: The nature of whole-person care. Aust J Gen Pract. 2020;49(1–2):54–60. https://doi.org/10.31128/AJGP-05-19-49501
- Brickley B, Sladdin I, Williams LT, Morgan M, Ross A, Trigger K, et al. A new model of patient-centred care for general practitioners: Results of an integrative review. Fam Pract. 2020;37(2):154–72. https://doi.org/10.1093/fampra/cm 2063
- Grover S, Fitzpatrick A, Azim FT, Ariza-Vega P, Bellwood P, Burns J, et al. Defining and implementing patient-centered care: An umbrella review. Patient Educ Couns. 2022;105(7):1679–88. https://doi.org/10.1016/j.pec.2021.11.004
- Tago M, Watari T, Shikino K, Sasaki Y, Takahashi H, Shimizu T. Five tips for becoming an ideal general hospitalist. Int J Gen Med. 2021;14:10417–21. http s://doi.org/10.2147/ijgm.s341050.
- Zwack J, Schweitzer J. If every fifth physician is affected by burnout, what about the other four? Resilience strategies of experienced physicians. Acad Med. 2013;88(3):382–9. https://doi.org/10.1097/ACM.0b013e318281696b.
- Epstein RM, Krasner MS. Physician resilience: What it means, why it matters, and how to promote it. Acad Med. 2013;88(3):301–3. https://doi.org/10.1097/ ACM.0b013e318280cff0
- Gleichgerrcht E, Decety J. Empathy in clinical practice: How individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. PLoS One. 2013;8(4):e61526. https://doi.org/10.1371/journal.pone.0061526
- Thomas H, Lynch J, Burch E, Best M, Ball L, Sturgiss E, et al. Where the joy comes from: A qualitative exploration of deep GP-patient relationships. BMC Prim Care. 2023;24(1):268. https://doi.org/10.1186/s12875-023-02224-0.
- Derksen FA, Olde Hartman TC, Bensing JM, Lagro-Janssen ALM. Managing barriers to empathy in the clinical encounter: A qualitative interview study with GPs. Br J Gen Pract. 2016;66(653):e887–95. https://doi.org/10.3399/bjgp1 6X687565
- von Knorring J, Lehti A, Fahlström M, Semb O. Empathy as a silent art– A doctor's daily balancing act: A qualitative study of senior doctors' experiences of empathy. PLoS One. 2022;17(12):e0277474. https://doi.org/10.1371/journal.pone.0277474
- Verheijden M, Giroldi E, van den Eertwegh V, Luijkx M, van der Weijden T, de Bruin A, et al. Identifying characteristics of a skilled communicator in the clinical encounter. Med Educ. 2023;57(5):418–29. https://doi.org/10.1111/medu.14953
- Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: A systematic review. Perspect Public Health. 2017;137(2):89–101. https://doi.org/10.1177/1757913916634136.
- Bradshaw J, Siddiqui N, Greenfield D, Sharma A. Kindness, listening, and connection: Patient and clinician key requirements for emotional support in chronic and complex care. J Patient Exp. 2022;9:23743735221092627. https://doi.org/10.1177/23743735221092627

- 48. Austen L. Increasing emotional support for healthcare workers can rebalance clinical detachment and empathy. Br J Gen Pract. 2016;66(648):376–7. https://doi.org/10.3399/bjgp16X685957.
- Al-Habbal K, Arawi T. Physicians' empathy levels in a primary care setting: Perceptions of patients and their physicians, a qualitative study. Fam Pract. 2020;37(6):834–8. https://doi.org/10.1093/fampra/cmaa073

# Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.