Clinicians' Voices on a Disciplinary Approach to Teaching Clinical Communication in the Chinese Context: Priorities, Challenges, and Scope

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Research Article

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Abstract

Background: In the absence of a well-rounded syllabus to teach clinical communication, emphasising both interpersonal and medical dimensions, medical students in the early stages of their career may find it challenging to effectively communicate with patients, especially those from different cultural backgrounds.

Aims: To explore the priorities, challenges and scope of teaching clinical communication in a Chinese context using a disciplinary approach, and to investigate how medical educators and clinicians teach clinical communication in their respective clinical disciplines.

Design: Interpretative phenomenological analysis.

Data sources: Nine medical educators, all experienced frontline clinicians from 7 clinical disciplines, were recruited from 7 Hong Kong hospitals and 2 medical schools. They were interviewed to seek their views on teaching clinical communication in the Chinese context, specifically its priorities, challenges, and scope.

Results: The interview data revealed 5 themes related to the priorities, challenges, and scope of teaching clinical communication across a wide range of clinical disciplines in the Chinese context, namely (1) showing empathy with patients; (2) using technology as a modern teaching approach to combine medical and interpersonal dimensions; (3) shared decision-making, reflecting the influence of Chinese collectivism and cultural attitudes towards death on communication with patients and their families; (4) interdisciplinary communication between medical departments; and (5) the role of language in clinician–patient communication.

Conclusions: Taking a disciplinary perspective, the clinicians in this study approached the complex nature of teaching clinical communication in the Chinese context in different ways. The findings illustrated the need to teach clinical communication using a disciplinary approach in addition to teaching it generically across specialties. This is particularly important in the Intensive Care Unit (ICU), where clinicians frequently cooperate with physicians from other departments. This study also highlighted how non-verbal social cues, communication strategies, and the understanding of clinical communication in the Chinese context operate differently from those in the West, because of socio-cultural factors such as family dynamics and hierarchical social structures. We recommend a dynamic teaching approach using role-playing tasks, scenario-based examples, and similar activities to help medical students to establish well-rounded clinical communication experiences in preparation to overcome challenges in their future real-life clinical practice.

Introduction

The teaching of clinical communication has been extensively explored in the field of medical education in the West, including curriculum, assessment, learning outcomes and educator training [1–5]. The

expansion of this area has been reflected in the increased emphasis on communication skills in many medical education programmes worldwide. However, the teaching of clinical communication itself remains peripheral; training in communication skills is often not routinely implemented in healthcare professional programmes [6]. Despite theoretical exploration of the teaching of communication skills, relatively few studies have explored the effectiveness of specific communication training programmes.

Noting this research gap, researchers have begun to conduct empirical studies to test the feasibility of different teaching models. For example, Brown and Dearnaley [7] investigated the effectiveness of an integrated clinical communication programme involving a medical school and a hospital. The study concluded that such an integrated approach to teaching clinical communication can motivate students to reflect on the model of patient-centred care, its usefulness in collecting clinical histories, and its role in building rapport with patients. The study thus demonstrated that an integrated approach can help medical students bridge the gap between learned theory and practice with real patients in terms of delivering a holistic approach to clinical communication. In addition, a quasi-experimental study conducted by Rashwan et al. [8] further proved the effectiveness of holistic training designed for medical students through evaluating the outcomes of the Scenario-Based Clinical Simulation (SBCS) experience and the students' anxiety level. According to the findings, all the participating students (100%) in the intervention group achieved satisfactory total percent scores of skills after two weeks of SBCS sessions while only 20% of those in the control group performed well ($p < 0.001$). To be specific, it was found out that the two groups of students exhibited psychomotor, cognitive and interpersonal skills simultaneously in one particular clinical scenario during a simulation session. Training sessions such as this allow medical students to collaborate and reflect on each other's performance [9], thus preparing them to work as teams in highly complex medical settings.

According to an ethnographic case study conducted by Quilligan [10], it is important to ensure that medical students participate in ward rounds, as this ensures that the teaching of clinical communication can be woven into authentic real-time communicative routines on the ward. The findings also showed that the students who participated in the project respected the senior doctors as role models and integrated their knowledge of theories from their classes into their emerging medical practices and future professional identities. Quilligan [10] found that medical students can maximise their experiential learning in busy wards by practising their communication skills across a wide range of scenarios. The findings also revealed medical students' ability to adapt their communication based on the needs of an environment made complicated by the diversity of patient groups and their different health literacy levels, the nature of observed interactions, their own actions, and input from role models. Experiential learning is thus another approach to teaching clinical communication that help connect theories to real practice.

Experiential learning and holistic and integrated approaches to teaching clinician communication can thus help medical students gain practical and real-life experience of encountering patients. However, these methods might not be sufficient to help students learn how to deal with certain rare but critical clinical situations. This is one of the reasons why, as Shorey et al. [11] noted, medical educators use technological tools such as virtual reality platforms for modern pedagogical purposes. Their study, which

used the Virtual Counselling Application using Artificial Intelligence (VCAAI) developed by the National University of Singapore, found that the use of virtual patient simulations enhanced the studied students' sense of preparedness and confidence, thus helping them to become more effective communicators. Thus, despite the relative lack of authenticity of the AI tool and its limited ability to recognise non-verbal expressions and speech, their study indicated that it is worthwhile to develop and further refine virtual patient simulations to help medical students become familiar with a wide range of scenarios.

This body of research, which also includes a study by Hargie et al. [12], has informed many models for teaching clinical communication, such as the apprenticeship model, which uses experiential learning as a pedagogical foundation for medical education. However, many of these studies were conducted in the West, and many of the resultant models were focused on English-speaking countries, with far less focus on technological methods developed in Asia. Thus, studies may not yet have accounted for how clinical communication may differ across socio-cultural contexts, as outlined by Ishikawa and Yamazaki [13]. Their compositional approach to culture was founded on the idea that culture is a manifestation of all aspects of social life and is a layered structure of rituals, practices, hidden beliefs, and assumptions. They noted some core cultural differences between the East and the West that affect physician–patient relationships: (1) individualism vs collectivism and (2) high-context cultures vs low-context cultures. To cite a specific example, Chinese people in general are evasive about death; some even believe that mentioning the word 'death' can lead to actual deaths [14]. Such beliefs lead many patients' families to misguidedly believe that modern medicine is always able to prevent deaths; they thus see death as evidence of doctors' 'failure' [14]. This all makes end-of-life communication in the Chinese context very different from that in the West. Bearing in mind these cultural particularities, the path to achieving patient-centred care requires research into the lived experiences of medical educators to explore the teaching of clinical communication in culturally specific contexts; this can facilitate the development of local and culturally appropriate teaching models for cultural competence.

Teaching clinical communication in the Chinese context

As noted by Lu et al. [15], globalisation has made it necessary for medical educators to respond to increased cultural diversity. Cultural competence, an attribute that has been stressed by the Association of American Medical Colleges [16] and the UK General Medical Council [17], is important for medical professionals because it prevents miscommunication and establishes culturally appropriate expectations of healthcare [18]. The role that medical educators play in helping medical students prepare to communicate effectively with their future patients, regardless of the latter's social or cultural backgrounds, has thus become widely recognised [16, 17, 19].

This has in the past few decades led to an increased focus on cultural competence within research on teaching clinical communication, which itself has been investigated widely in recent years. Within the international medical community, the capacity to communicate effectively with patients from specific cultural backgrounds has often been recognised as a desirable attribute of a graduate [20–23], and a comprehensive system for evaluating cultural competencies in medical education has been developed

[15]. However, there has been a dearth of studies exploring this topic in the Chinese context, and the lack of attentiveness in these settings to the diversity of patients' cultural contexts has meant that local curricula have not considered cultural competence to be a core element of medical professionalism [24].

A number of studies highlighting the particularities of East Asian clinical contexts have demonstrated the importance of filling this gap and moving beyond a preference for merely Western models of communication practices in clinical settings. For instance, as elaborated by Pun et al. [25] in a review article regarding health professional–patient communication practices in East Asia, patients from different Asian countries have been found to have different attitudes towards death and terminal illnesses. Taiwanese patients' families are often reluctant to discuss end-of-life issues. Upon receiving bad news, both Taiwanese and Korean patients' families leave decision-making to the oldest family member. Japanese patients' families tend to bring patients home for end-of-life care. By highlighting the role of families in decision-making on treatments, Pun et al. [25] demonstrated the complexity and heterogeneity of clinician–patient communication in East Asia. These findings indicate the necessity of developing culturally appropriate approaches that are relevant to specific cultural contexts, when incorporating the teaching of cultural competence in local medical education systems.

To teach clinical communication in a culturally appropriate way to medical students in a Chinese context, it is important to first break down the cultural homogeneity inherent in the existing medical education system. In Hong Kong, for example, there are two official languages, namely Chinese (both written Chinese and its spoken varieties, including Cantonese and Putonghua) and English [26], which leads to difficulties specific to medical practice in the region. In a study examining clinical handover in a bilingual setting, Pun [27] found that bilingual staff in Hong Kong usually had little to no familiarity with Chinese medical terminology and thus read and recorded almost all of the medical information in written English during their everyday routine work, while using Cantonese verbally to converse with their patients. Pun [28] thus noted the potential communication gap faced by medical students who study medical curricula in English but speak to patients in Cantonese. As for clinician-to-clinician communication, Pun [27] observed that most of the staff in this bilingual context code-switched or engaged in translanguaging between spoken Cantonese and English-language medical terminologies. These findings confirmed the problem of miscommunication that may arise because of the difference in the language used for medical terms and everyday conversation, as indicated in Pun et al.'s [29] earlier study, which observed that medical information was altered when staff switched between spoken Cantonese explanations and spoken English terms. The findings of these studies indicate that among medical students, the homogenous use of English in the teaching of clinical communication leads to gaps in communication training for real-life scenarios, potentially leading to miscommunication with Cantonese-speaking local patients in real-life practice. Such observations highlight the importance for a more inclusive approach to communicating with patients. There is a need to conduct communication training in native languages to prepare medical students to develop rapport with their patients and accurately and clearly deliver medical information in the patients' native languages.

Apart from linguistic concerns, doctors in Chinese settings have been found to rely on their own experiences rather than formal medical education to learn about and adapt to different cultural contexts [15]. In a study conducted in Taiwan, Lu et al. [15] found that the lack of materials for teaching cultural competence in the context of clinical communication had led to culturally essentialist beliefs, by which Taiwanese doctors tended to stereotype and oversimplify certain cultures that they encountered instead of seeking to understand their complexity. Therefore, in Asia, medical schools had few communication training programmes that focused on the Chinese context, such that students were prepared only to communicate medical information and not to address patients' emotional needs [30].

A scenario in which this may become especially problematic is in palliative care, as noted by Pun [28]. This is due to the cultural differences in terms of death between Western philosophies and Chinese beliefs [28]. Therefore, it is essential for medical educators to teach their students that Chinese patients and their families have a negative attitude towards EOL conversations and are usually unwilling to talk about death for fear of bringing bad luck [31–33]. In this sense, effective end-of-life communication is important: it is crucial for doctors to honestly discuss treatment expectations with dying patients to enable them to have a 'good death', which is consisted of 7 major elements: awareness, hope, comfort, the possession of personal control, the emphasis of between social relationships, preparations for departing, and accepting the timing of one's death with a sense of completion [34]. This then should be beneficial to patients and their care givers [35]. Noting the importance of understanding local cultures in mind, better training can help clinicians deal with such scenarios. Slade et al. [36] found that clinicians trained in bedside handovers tended to demonstrate more effective clinical communicative interactions: the trained clinicians delivered medical information more clearly and interacted with patients more respectfully and multifacetedly, which allowed the clinicians to include their patients in the process of decision-making. Similarly, if medical educators can familiarise themselves with teaching trends and adapt them to the local culture, they may be able to help local medical students become more skilled at end-of-life communication in the Chinese context, and more generally, develop a more inclusive approach to encounters with patients.

The unique linguistic and socio-cultural features of the Chinese context make Western teaching models inapplicable to such settings. This signals the need for a new, culturally appropriate approach to teaching clinical communication that is grounded on an understanding of the specific clinical needs in each field of medicine. Addressing this research gap can help build an effective system for teaching clinical communication in such cultural settings. This study, which took a disciplinary approach, aimed to improve clinician–patient relationships by informing medical educators about current trends in teaching approaches, issues, and topics relevant to clinical communication.

A disciplinary approach to clinical communication

In the early stages of their medical careers, it is important for clinicians to be trained in clinical communication using multidisciplinary approaches that integrate care strategies from different disciplines, as confirmed by Tahir et al. [37] in their investigation of interprofessional relationships and medical school teaching in primary social care settings. Despite the established benefits of cross-

disciplinary training, only a few empirical studies have gathered data from across disciplines to investigate doctor–patient encounters in hospitals, as noted by Jensen et al. [38]. One was their own study conducted in Norway, in which Jensen et al. [38] found that the ‘four habits’ training model (invest at the beginning; elicit the patient’s perspective; demonstrate empathy; and invest at the end), was a suitable generic postgraduate teaching tool for clinical communication across different clinical settings (except psychiatry): anaesthesiology, paediatrics, surgery, internal medicine, gynaecology/obstetrics, neurology, orthopaedics, and ear–nose–throat medicine. They also found that a 20-hour intervention derived from the Four Habits model was able to improve doctors’ communication skills and lead to the implementation of a more patient-centred model when treating patients. As the outcomes of that study showed, discipline-focused research can inform the development of medical communication training programmes that are applicable across many clinical settings; such programmes can more effectively teach clinical communication, particularly for scenarios such as the Intensive Care Unit (ICU), where physicians from different departments frequently cooperate with each other.

Extensive discipline-focused research on clinical communication has been conducted using interdisciplinary approaches in the US and European countries (e.g., Jensen et al, 2011 [38]; Tahir et al., 2018 [37]). However, such studies are lacking in Asian contexts, and in Chinese settings in particular. The importance of context-specific research that assesses the suitability of particular teaching approaches to clinical communication is illustrated by the study conducted by Bellier et al. [39]. Their cross-cultural study sought to explore the feasibility of implementing the ‘four habits’ coding scheme in France. According to the findings, the French version demonstrated satisfactory internal consistency, but the real effects were moderate, and 2 raters were needed to effectively assess the clinical communication skills acquired by medical students. Therefore, considering the specific cultural contexts of different Asian and Chinese-speaking regions and the need to develop culturally appropriate approaches to teaching clinical communication across disciplines, it is necessary to conduct discipline-focused research on the topic across various specialties, to gain a comprehensive overview of this area of medical education.

Methods

Research design

A cross-sectional, qualitative research design was used for this study. Specifically, the research team analysed interview data using interpretative phenomenological analysis (IPA), an approach originating in the field of psychology, which focuses on the examination of personal lived experiences. According to Smith and Osborn [40], IPA is founded on individuals’ personal experiences and how they make sense of these experiences. Researchers who use IPA assume that individuals engage actively and continuously with their environments and then reflect on and integrate their personal experiences [40]. Therefore, using IPA to examine data on participants’ personal experiences is fundamentally a type of allegorical analysis conducted by both the participants and the researchers involved. To understand how participants understand their surrounding world, a dual interpretation process, called the ‘double hermeneutic’, is carried out, involving both the participants and the researchers. During the process, the researchers

actively seek to determine how the participants engage in and make sense of their surrounding world [40]. In light of the diverse experiences of teaching cultural competence in the area of medical education, this analytical approach was chosen for this study because of its seminal nature and its capacity to examine participants' complex real-life lived experiences.

In addition, a disciplinary approach to the studying of clinical communication was taken to draw out a wide range of views and ideas on this specific research topic and demonstrate the contributions made by each discipline to patient care in terms of clinical communication in light of the specific purpose that the teaching of this topic has in their discipline [41]. To arrive at this more comprehensive overview of the current state of teaching clinical communication, the study analysed the teaching approaches used by experts from different disciplines, including surgery, geriatrics, neurology, ICU medicine, nursing, oncology, and palliative care. To contribute to the development of discipline-focused and interdisciplinary teaching programmes for medical schools, the researchers identified different teaching strategies currently used and the communication skills considered to be important in each discipline.

Data collection

The research team conducted one-on-one, face-to-face semi-structured interviews with the participating clinicians. In this study, all of the participating clinicians were proficient in speaking Cantonese, had been working for 6 years or more at a local hospital, and had earned a postgraduate degree in their specialty.

Each interview lasted about 30–60 minutes, during which the team explored the interviewed clinician's lived experiences, particularly in terms of the communication challenges they encountered when interacting with their colleagues across disciplines, patients, and patients' families, and their teaching of clinical communication.

Participant Demographics

Table 1 illustrates the participants' demographic details. The participating clinicians' ($n = 9$) clinical specialties spanned 7 disciplines, namely surgery, geriatrics, neurology, critical care medicine in the ICU, nursing, oncology, palliative care, and obstetrics and gynaecology. Of the 9 participants, 5 were male and 4 were female. The interviewed clinicians had been working in clinical settings (either territory hospitals or teaching hospitals) for between 9 and 13 years.

Table 1
Demographic details of the healthcare professional participants

Participant	Gender	Speciality	Work experience (in years)	Clinical setting
A	M	Surgery	10	Territory hospital
B	F	Geriatrics	13	Teaching hospital
C	M	Neurology	13	Teaching hospital
D	F	Critical care medicine in the ICU	10	Teaching hospital
E	F	Nursing	14	Teaching hospital
F	M	Oncology	9	Territory hospital
G	M	Palliative care	11	Territory hospital
H	M	Surgery	11	Territory hospital
I	F	Obstetrics and gynaecology	13	Teaching hospital

Analysis

Using IPA, an idiographic approach, allowed the researchers to analyse a tightly defined group of participants who drew from their lived experiences to express their opinions on the focal area of research. The research team comprised multidisciplinary experts (M = 3, F = 2), including two linguists (PhD) who had extensive research experience in health communication, one physician (MD) from the accident and emergency department, one professor (PhD) in nursing, and one nursing manager (PhD). The team adopted the suggestion proposed by Smith et al. (1996) of analysing the interview transcripts in stages. Following the IPA model, the team first analysed the transcripts on an individual and descriptive level. Based on these analyses, the data were then interpreted to suggest new teaching approaches to different medical disciplines. The researchers read through the transcripts carefully line by line and noted down exploratory comments based on their interpretations of the participating clinicians' use of language and teaching strategies. As noted by Smith et al. [42], such an approach, consisting of the techniques of subsumption and abstraction, is helpful in constructing thematic analyses.

Patient and public involvement

No patients were involved.

Ethics

This study was approved by the ethics committee of the City University of Hong Kong. All methods were performed in accordance with the Declaration of Helsinki. Written consent was obtained from all 9 eligible clinician participants.

Results

Five themes emerged from the thematic analysis. These were (1) showing empathy with patients; (2) using technology as a modern teaching approach for combining medical and interpersonal aspects; (3) shared decision-making, reflecting the influence of Chinese collectivism and cultural attitudes towards death on communication with patients and their families; (4) interdisciplinary communication between medical departments; and (5) the role of language in clinician–patient communication.

Showing empathy with patients

Empathising with patients is the core element of patient-centred care. As discussed by Quince et al. [43], clinicians who express empathy help their patients feel more satisfied, comfortable, and confident in them, and thus reassured. This may result in better diagnoses and smoother processes of shared decision-making because of the caring attitudes established by both parties, which is extremely important during the phases of diagnosis and treatment in Hong Kong [44]. In the Chinese context, showing empathy is particularly important and is treated as one of the core communication skills in any medical education programme.

However, a recent study indicated that medical students trained in Asia showed less empathy than those in North America and Europe, due to Asian medical schools' science-oriented selection systems [43]. In addition, in the Chinese context, male doctors are perceived by patients to have more trustworthy clinical skills than female doctors, a perception that is mostly due to traditional beliefs about gender roles in Chinese social culture [45]. These underscore the need for Asian and specifically Chinese medical students to be trained to empathise with patients.

Some aspects of Hong Kong culture are similar to those of other Chinese cultures, but Hong Kong also has distinctive cultural features that have implications for clinical communication education in Hong Kong. In one study, Hong Kong patients were found to be keen to appropriate the Western model of patient-centred care [25]. In another, they were found to be open to discussions of advanced malignancy and willing to be directly involved with their end-of-life arrangements [46]. These preferences expressed by patients in Hong Kong can be addressed by helping medical students to develop greater rapport and empathy with patients [47]. At the same time, such a teaching approach can counter the patriarchal elements of Chinese culture present in Hong Kong medical settings.

The following interview quotations reveal how the interviewed clinicians specialising in surgery, oncology, and nursing perceived the communication strategy of showing empathy with patients.

Surgery

Surgeries are very important and sometimes life-saving procedures in the clinical context. Thus, it is important for surgeons to equip themselves with the communication skills of developing rapport and

showing empathy when delivering bad news [47], not unlike the discourse strategy used in Chinese medical clinics, which emphasises patients' emotional needs [28]. Interviewee A (surgery) noted:

The most important thing is to have empathy. I think it really needs practice and also requires life experience in the outside world. You have to be engaged in the outside world. — Interviewee A (Surgery)

Related to this, surgeons tend to show their care by create a space for patients' families to tell their stories, as Interviewee A described:

If you are concerned about a patient, ask the patient's family questions and make sure that your communication is not abrupt or brutal. In this way, they will sense that you care. — Interviewee A (surgery)

Practice is required to develop the ability to engage in empathetic dialogues. Interviewee H (surgery) noted that he usually assigns two students to act as the patient and the doctor, respectively. The roleplaying task involves the following:

... one tries to convey the bad news to the patient, and the patient tries to be a difficult patient, so tries to act out, tries to be emotional and sees how they cope with that. — Interviewee H (surgery)

Oncology

The interview data indicated that the oncologists focused on patients' emotions. Interviewee F (oncology) stressed that

you have to be ready to consider your clients' emotions. ... [and] learn to provide reflective feedback by empathetic dialogues and communication protocols. — Interviewee D (oncology)

Interview D also stressed the importance of striking as oncologists should considered the need for time management

a balance of distance – you have to think yourselves as both a healthcare provider and a friend of your client to bring your client closer; but sometimes when they ask for something that you cannot provide, you, in turn, will have to remind them of your role and your limitations. — Interviewee D (oncology)

Accordingly, the oncologists adopted the communication strategy of interspersing medical talk with interpersonal chat (Slade et al., 2015). Interviewee D mentioned that although doctors should show care towards their patients, they should also manage their time and be

ready to interrupt gently by moving on according to your agenda when time is pushing to make sure everything needed is covered. — Interviewee D (oncology)

Nursing

Nurses were found to attend very specifically to patients' particular needs. Interviewee E (Nursing) noted that she and her students had

produced two sets of videos to try to help everybody in the community to [...] enhance their health literacy about infection control measures. I still remember, because I was the core team member responsible for producing that video, we added a little square for one of my students who knew sign language. — Interviewee E (nursing)

The nurses aimed to accommodate patients' special needs by explaining medical concepts to them clearly, in ways that were adaptive to patients' relevant health issues.

Using technology as a modern teaching approach for combining medical and interpersonal dimensions

Contemporary students have been exposed to technology since childhood [48, 49]. This has led medical educators to incorporate the use of technology into tertiary training programmes to teach clinical communication. Interviewee H (surgery) and Interviewee E (nursing) both confirmed this trend when they recalled their experiences of teaching clinical communication. Based on their responses, both surgeons and nurses at the focal hospital used video technology to educate their students in the area of healthcare communication. Senior surgeons and senior nurses used the technology in distinct ways, showing the various ways that videos could help students develop empathy for patients.

Surgery

Interviewee H reported that senior medical staff from the surgery department screened instructional videos for their students that showed

how it should be done, how we actually tell our patients when they have terminal disease or so on, and also bad examples that may negatively influence the relationship between patients and doctors. — Interviewee H (surgery)

Such training practices prepare medical students to implement the strategy of interspersing medical talk with interpersonal chat by demonstrating how medical students should deal with difficult and emotional patients [47].

Nursing

Interviewee E said that she included students in the process of creating video content to promote healthcare information:

We produced two sets of videos to try to help everybody in the community to [...] enhance their health literacy about infection control measures. — Interviewee E (nursing)

Shared decision-making: the influence of Chinese collectivism and cultural attitudes towards death on communication with patients and their families

In Hong Kong clinical settings, patients' low levels of involvement in the decision-making about their treatments often leads to their dissatisfaction with their healthcare providers [46]. This is because the local patient population overwhelmingly prefers models that involve patient participation [50]. For example, according to Tam and Lau's [51] study of patients' complaints conducted in Hong Kong, almost half of the studied patients were concerned about the lack of communication with their clinicians. These findings imply that clinicians in Hong Kong can improve their clinical communication by being more attentive to their patients' emotional needs and taking their opinions into consideration when making decisions about treatments. Through shared decision-making, clinicians can thus ensure patients' compliance with treatment plans [52]. However, although many recent studies have shown that Hong Kong patients desire greater participation in decision-making [53], a very limited number of clinicians involve their patients in planning the course of their treatments, as demonstrated in a study by Chandler et al. [53] of communication in local accident and emergency departments (AEDs). According to the findings of the current study, patients' desire to participate in decision-making processes is not limited to AED settings. Interviewed geriatric doctors, ICU-based critical care clinicians, and palliative care specialists all observed the need to include their patients throughout the process of making decisions about treatments.

Geriatrics

Considering the age of the patients received by the department of geriatrics, according to Interviewee B (geriatrics), their goal

is not necessarily to care for our patients in terms of curing them of their medical problems; a lot of times our patients have illnesses that can't be cured. — Interviewee B (geriatrics)

Because the goal of patient care in these cases is not always to cure patients' illnesses, geriatricians have to adopt the communication strategy of creating space for patients to tell their stories to understand their needs and offering treatments that aligned with what they value the most [47]. Interviewee B further elaborated that the team then negotiated shared decision-making about treatments [47], arriving at

a mutual understanding [with patients and their families] of what a treatment is able to achieve and what it is not able to achieve. — Interviewee B (geriatrics)

ICU-based critical care

The daily routine in the ICU involves a lot of communication between various medical disciplines, as the patients

might have problems simultaneously with their heart, with their lungs, their kidneys, these are major organs that are involved in an acute illness. .. [and they have to] be in close communication with a cardiologist, respirologist [or] surgeon if an operation is planned or if the patient is in the early post-operative stage. And then we also speak with dieticians to try to optimise nutrition. We have to speak to

physiotherapists and speech therapists and come up with a plan for management as a whole team. — Interviewee D (ICU)

The communication strategy of negotiating shared decision-making [47] on treatments is therefore important as they try

to bring all parties together to formulate a plan that's best for the patient. — Interviewee D (ICU)

Moreover, because of the complexity of the patients' diseases, patients' families often find it difficult to digest all of the medical information. Therefore, ICU doctors find themselves

repeating similar information over the course of a few days; only then does the information start to sink in and relatives start to understand and come on board with us [...] in terms of the plan for management. — Interviewee D (ICU)

ICU doctors also adopt inclusive approaches regarding the patient [47] when making decisions, because *maybe more often than you think, our patients are actually conscious, and it helps to conduct the interview in the presence of the patient as well. — Interviewee D (ICU)*

Palliative Care

Medics from the department of palliative care added that family culture and beliefs regarding death also had to be taken into consideration when negotiating the direction of treatments. Family dynamics play an important role in the process of decision-making, especially in end-of-life situations. As stated by Interviewee G (palliative care):

One must be proactive in preparing carers' expectations along the course of the disease. They have to be told what to expect, such as the gradual deterioration of the patient, and how to act. When, for example, breathing is becoming difficult, they have to call the ambulance. They have to be told what to discuss with the patient, such as their will, last wishes, advanced directives, and the aftermath. All of this has to be done tactfully over time and by developing rapport. Essential family dynamics must also be observed, as well as family culture regarding death and dying and suffering. — Interviewee G (palliative care)

Therefore, patients' families are an important stakeholder in healthcare communication. These delicate situations have to be dealt with carefully, because

families can help to ease patients' suffering but can also pose a huge problem [if not well-handled]. — Interviewee G (palliative care)

The above data show that the communication strategy of negotiating shared decision-making on treatments is particularly important to this field.

Interdisciplinary communication between medical departments

As discussed by Bok et al. [54], effective interprofessional communication between healthcare professionals from various disciplines helps facilitate negotiation and shared decision-making [55]. The strategy of shared decision-making is thus not limited to clinicians' interactions with patients and their families; it is also applicable to interactions between clinicians from different disciplines and between clinicians and external supporting parties. Both the neurology specialist and the intensive care specialist interviewed in this study expressed the belief that medical students should learn how to collaborate with medics from other disciplines.

Neurology

When bad news has been made available to all parties, neurologists are able to provide support for patients and family members by collaborating with

nurses, allied health workers, psychologists, social workers. — Interviewee C (neurology)

ICU-based critical care

The nature of the ICU is primarily interdisciplinary, because

in critical illness often more than one organ system is involved, so it really takes a lot of time and repeated interviews to try to get the patient to understand what is happening to them and to have a realistic expectation of how things will progress. — Interviewee D (ICU)

This involves a lot of communication between various medical disciplines, as patients

might have problems simultaneously with their heart, with their lungs, their kidneys, these are major organs that are involved in an acute illness. .. [and they have to] be in close communication with a cardiologist, respirologist [or] surgeon if an operation is planned or if the patient is in the early post-operative stage. And then we also speak with dieticians to try to optimise nutrition. We have to speak to physiotherapists and speech therapists and come up with a plan for management as a whole team. — Interviewee D (ICU)

Language and clinician–patient communication

In the study by Pun et al. [29] of clinicians' perceptions of communication challenges in the trilingual environment of a local emergency department, Hong Kong clinicians felt that they were unable to engage in interpersonal communication with their patients because of the linguistic complexity, long working hours, time constraints, and high patient loads. Although most of the respondents in the study recognised patient-centred care to be optimal, they hardly listened to their patients [29] and prioritised basic duties over developing empathy or rapport with their patients through interpersonal communication [47].

Moreover, as mentioned in the literature review above, Hong Kong clinicians speak in their mother tongue Cantonese but receive their medical school training in English [29]. Because of the high number of immigrants from mainland China, they also speak with some patients in Mandarin [56], making local clinical settings trilingual and thus linguistically complex. Coupled with the high pressure of Hong Kong's clinical environments, language plays an important role when clinicians attempt to intersperse medical talk with interpersonal chat with patients [47], because they have to translate English medical jargon into plain language. Clinicians working in the disciplines of neurology, intensive care, and nursing said that they addressed this challenge by shifting between technical and conversational language to explain medical concepts clearly, repeating key information [47], and communicating through both verbal and non-verbal means.

Neurology

To clearly describe diseases and medical concepts to patients and their families, neurologists at the focal hospital moved between technical and conversational language [47]. Interviewee C noted that it is essential

to break down messages in small chunks, into very very simple messages, and then ask the translator to tell them or to back translate. — Interviewee C (neurology)

Such a communication strategy requires neurologists

to use as little medical jargon and complex terminology as possible, and to use simple sentences and simple phrases. — Interviewee C (neurology)

Interviewee C, for instance, used analogies or examples

day in and day out [...] I use examples to convey complex problems to our patients and caregivers, so they can relate to what is going on. — Interviewee C (neurology)

For example, Interviewee C often compared the functioning of the heart to the mechanism of a kitchen tool:

It is like your blender in your kitchen. If you press different buttons to change the speed of the blender, 0 1 3 2 4, it will not blend nicely and it will form curves, so on and so on, and if you imagine this is the heart, if it is not beating regularly, then clots can form, but then obviously if these block any blood vessels, then there can be detrimental consequences. — Interviewee C (neurology)

By making medical knowledge accessible, the neurologists stepped into the shoes of others, making their clinical interactions

a two-way process [of] mutual respect. — Interviewee C (neurology)

ICU-based critical care

Due to the complexity of the diseases among patients in the ICU, it is hard for patients' families to digest all of the medical information being communicated to them. Therefore, ICU doctors find themselves

repeating similar information over the course of a few days; only then does the information start to sink in and relatives start to understand and come on board with us [...] in terms of the plan for management.

— Interviewee D (ICU)

In addition to the communication strategy of repeating key information [47] through verbal communication, ICU doctors also

give them some information, leaflets to take home or some resources to go back to that helps them digest the information we are trying to convey. — Interviewee D (ICU)

Nursing

To meet the needs of patients with disabilities such as hearing loss, Interviewee E (nursing) used non-verbal languages such as sign language. For example, she and her students produced two sets of videos, the objective of which was

to try to help everybody in the community.. .. We added a little square for one of my students who knew sign language. — Interviewee E (nursing)

Discussion

As stated in the results section, the 5 themes that emerged from the thematic analysis were as follows: (1) showing empathy with patients; (2) using technology as a modern teaching approach to combine medical and interpersonal dimensions; (3) shared decision-making the influences of Chinese collectivism and attitudes towards death on communication with patients and their families; (4) interdisciplinary communication between medical departments; and (5) the role of language in clinician-patient communication.

Teaching clinical communication can have a significant effect on the development of medical students' communication skills, which are important for communicating with colleagues, patients, and patients' families. The types of teaching approaches used are particularly important in the design of medical education programmes [26]. To implement patient-centred care, it is important for medical students specialising in different areas to equip themselves with different communication strategies suitable to specific cultural contexts. For example, as concluded by Pun et al. [25] in their literature review, Confucian values in mainland China lead medical students there to follow a more clinician-led model [57], whereas those in Hong Kong have to adopt communication strategies to increase patients' level of involvement in decision-making. In this discipline-focused study based in a Hong Kong hospital, the research team analysed the data thematically and thus laid a foundation for developing suitable communication training programmes for medical students across disciplines.

Showing empathy with patients

The clinicians from the disciplines of surgery, nursing, and oncology all noted the importance of showing empathy. This finding echoed the results of Slade et al. [47] in which surgeons and oncologists in particular stressed the communication strategy of interspersing medical talk with interpersonal chat [47]. The observations of these clinicians echoed recent research on the topic that has found a causal relationship between clinical communication skills and medical outcomes. For example, non-technical skills including interpersonal skills in surgery have been found to have an important effect on surgical outcomes [58], especially when it comes to adverse events [59]. Oncologists' communication skills have also been found to have a large impact on patients' satisfaction, health outcomes and compliance with treatments [60].

Because of this, within the international healthcare community, organisations like the Accreditation Council for Graduate Medical Education in the U.S. have established tests to assess students' interpersonal and communication skills [61]. In the current study, the clinicians from these three disciplines all mentioned specific teaching approaches to encourage students to engage in empathetic conversations with patients. For example, the surgeons said that they trained their students to be empathetic by asking them to connect with the wider social environment and reflect on the similarities between patients' situations and their own life experiences. The oncologists interviewed said they used a similar teaching approach when they encouraged their students to view themselves as both their patients' healthcare providers and their friends. Such approaches indicate that medical students should focus not only on their patients' physical needs but also their emotional ones, and that they should converse empathetically with their patients. This is supported by the finding of Slade et al. [47] that incorporating medical talk into interpersonal conversations improves patients' evaluations of the quality of care they have received and increases patients' involvement in decision-making on their treatments [47]. This thus indicates that the strategy can facilitate the effective implementation of patient-centred care; it also indicates the importance of including this strategy when teaching clinical communication. The data from the current study also suggested that it is important for medical students to be strategic in their use of this approach, engaging in interpersonal conversations but preventing such conversations from encroaching on the time allocated for treatments.

The stressful environment in Hong Kong hospitals makes it difficult for nurses to meet patients' holistic needs [62]; that is, their spiritual, psychological, and emotional needs [63]. In the East Asian context, one study suggested that Chinese nurses lacked a focus on emotional support and instead prioritised patients' physical comfort, a phenomenon connected to the family-centredness of Chinese culture and the exclusion of nurses from challenging end-of-life conversations. As a result, nurses become hesitant to talk about terminal illnesses to dying cancer patients as death is a taboo subject in traditional Chinese culture, making it hard for nurses to provide further emotional support to these patients [25]. However, Interviewee E (nursing) noted the necessity for nurses to attend to patients' needs. These reflections coincide with the findings of research conducted by Liu et al. [64] on the relationship between Chinese cancer patients and supportive communication systems. They found that Chinese patients valued nurses'

emotional support and caring behaviours despite the stated cultural preference in Chinese clinical settings. In addition, nurses play a central role in the delivery of culturally competent healthcare services, especially to patients affected by linguistic and cultural barriers in Chinese contexts [65]. Therefore, it is necessary to help nursing students develop empathy with their patients, especially as the scope of real-life nursing practice includes patient advocacy, education, and the promotion of health [16, 66].

This need is especially important in cases in which patients have disabilities such as deafness, which makes linguistic barriers especially difficult to surmount. To guarantee equal access to healthcare information and services for such patients, it is important to help nursing students gain the experiential learning experience of communicating with them.

The findings of these abovementioned studies highlight the need to review the current approach to nurse–patient relationships. Our interviewee from the discipline of nursing focused especially on the concerns of patients with special needs. Interviewee E explained that senior nurses in Hong Kong clinical settings tended to train their students to attend to patients’ special needs. This was done, for example, by involving the students in the processes of helping patients with special needs to understand medical information. She cited the specific instance of creating instructional healthcare videos with her students, in relation to which she emphasised the importance of empathetically bearing in mind the needs of patients with hearing loss. The interviewee also mentioned that, in turn, this process could raise the students’ awareness about disabilities and make them more empathetic towards disabled patients.

The findings in this study indicate that the communication skill of being empathetic is also important in clinicians’ encounters with patients’ families. The importance of the family in Asian clinical settings was highlighted by Ishikawa and Yamazaki [13], who observed that within Asian cultures, patients are treated not as individual units but as parts of larger social units, particularly in the context of decision-making. Western individualistic models are thus inapplicable to Asian contexts. Rather, in Asia, it is crucial for medical students to acquire the skills needed to communicate with patients’ families. The interviewed surgeons highlighted the need for medical students to ask patients’ families questions and express care for them, thereby giving them the space to tell their stories. By adopting such a strategy, students can demonstrate empathy with patients’ families, thus facilitating shared decision-making processes. These insights underscore that it is important for medical education programmes to include the teaching of communication skills, with a focus on showing empathy. To this end, the design of clinical communication training sessions should align with students’ interests and current trends.

Using technology as a modern teaching approach for combining medical and interpersonal dimensions

One of the surgeons interviewed mentioned the use of videos as an instructional strategy to teach clinical communication. According to Interviewee H, videos are effective in showing medical students how to communicate with patients about terminal illnesses; they are also useful for demonstrating examples of ineffective doctor–patient communication. These findings indicate the feasibility of using videos as instruction materials for medical students to acquire clinical communication skills. Many studies have

shown that video instruction helps ensure performance outcomes and boost students' confidence, because students find videos particularly useful for revision and preparation for medical practices [67]. As a result, students prefer instructional videos to conventional face-to-face instruction [67–69]. Videos are also easily accessible because of the ubiquity of portable video-playing devices such as smartphones [70].

Most of these studies, however, have been conducted in English-speaking countries and have not focused on the teaching of clinical communication. The researchers in the current study noted this research gap and sought feedback on the suitability of using videos for teaching communication in the specific setting of Hong Kong. The interviewee from the discipline of surgery confirmed that instructional videos showcasing scenarios in Hong Kong clinical settings could help surgical students prepare to adopt the strategy of interspersing medical talk with interpersonal chat [47].

Interviewee E (nursing) described a different approach to using video technology in teaching clinical communication. She mentioned that seniors involve students in the process of creating healthcare-related video content. Through this approach, nurses encourage their students to think of unconventional ways of communicating with patients. Nurses also help their students see how technological advances have helped to facilitate interactions between nurses and patients, particularly with disabled patients with linguistic barriers [65]. Such an inclusive approach also considers students' interests, as technological devices are a ubiquitous feature of nursing students' lives nowadays, as suggested by Kelly et al. [49]. Apart from maximising students' interest in technology, the use of digital mediums allows medical educators to inform students how information technology can be used for delivering healthcare information to the public. Medical educators can also thus encourage more creative uses of evolving digital technologies in medical settings by involving students in the process of creating relevant content. Interviewee E's approach of using videos as a teaching tool was also consistent with the current trend of nursing education in Asia. For example, an interviewed nurse supervisor who participated in Huang's [62] study had received extensive training on the latest technology in nursing care. Building on similar learning experiences, students can learn to increase patient engagement through technological means and explore how health information technology can create new modes of media interaction between patients and clinicians [71].

Shared decision-making: the influence of Chinese collectivism and cultural attitudes towards death on communication with patients and their families

In this study, interviewees working in various disciplines, including geriatrics, ICU-based critical care, and palliative care, noted the communication gap between most clinicians and their patients. As a result, they deemed it necessary to teach their students to develop strategies for decision-making.

One of the strategies mentioned by Interviewee B, a geriatric doctor, was creating space for patients to tell their stories [47], such as by asking them what their goals are and what 'they value the most' before coming to a 'mutual understanding of what a treatment [would be] able to achieve' Interviewee B noted that to allow patients to participate in decision-making on medical treatments and plans, it is important

for medical students to understand their patients' goals, in light of the incurability of many illnesses. The interviewee thus found it particularly important for clinicians, patients, and their families to come to a consensus regarding the benefits and limitations of certain treatments and which choices best aligned with the patients' interests through the strategy of negotiating shared decision-making about treatment [47].

Clinicians working in the ICU and the department of palliative care also reported negotiating shared decision-making about treatment [47]. For instance, clinicians from the ICU said that they discussed their patients' conditions with those from other departments to negotiate and arrive at the best treatment plan. Apart from involving different parties of medical experts in the decision-making process, the interviewed ICU clinician also noted that they took an inclusive approach, even with patients who could not speak. The interviewee believed that in many cases these patients – such as those who were intubated – were actually conscious and desired to actively participate in medical discussions, as the study by Leung et al. [72] showed. Therefore, it was important to conduct interviews in front of these patients.

Moreover, given the collectivist attitude of Chinese culture, as mentioned above [13], clinicians usually advise their students to involve patients' families when negotiating shared decision-making on treatment [47]. In this study, this theme was mentioned by interviewed ICU clinicians and palliative care specialists. In many East Asian cultures, there is a three-way clinician–patient–family dynamic [73, 74] and decision-making is family-centred [75]. As the interviewed ICU clinician stated, it is important to ensure that patients' families understand different treatment options and agree with the potential decisions; this can be facilitated by the strategy of repeating key information [47]. Information was often repeated in both verbal and written forms such as interviews and leaflets. The interviewed palliative care specialist further discussed the importance of observing family dynamics when engaging in end-of-life communication, in which clinicians have to manage the expectations of the patients' families, such as those pertaining to patients' deterioration, measures to take in emergencies, and patients' last wishes. The interviewee emphasised that it is important for students working on such cases to learn about the family's dynamics and attitudes towards death; in such cases, clinical communication is highly dependent on the context, especially in light of Chinese cultural taboos regarding the discussion of death [25]. Therefore, in end-of-life scenarios, medical educators in Chinese contexts should teach students not to engage in explicit conversation about death but rather be attuned to the high-context nature of such scenarios and develop strategies of using indirect expressions or non-verbal communication [76].

Interdisciplinary communication between medical departments

The importance of acquiring the skill of negotiating shared decision-making inter-professionally is mainly due to the interdisciplinary nature of most medical procedures; for example, the interviewed neurologist described the need in their discipline to offer emotional and physical support to patients and their families by working with nurses, allied health workers, psychologists, and social workers. An ICU clinician also stated that it was often necessary to work in an interdisciplinary manner with other clinicians, such

as surgeons and cardiologists, because patients tended to have more than one damaged organ. Clinicians are only able to design the best treatment plans and give appropriate support to patients and their families through inter-departmental collaborations. However, in study conducted by Ng et al. [77] on the speak-up culture at a local ICU, many interviewees found that the culture of speaking up was not well-developed when it came to intradepartmental communication, because of hierarchies between clinical departments.

Although some existing programmes aim to help medical students develop the skills for implementing effective interdisciplinary communication, most programme designs lack a longitudinal perspective and effective means to appraise competency [54]. Therefore, it is important for medical educators to consider recent studies and cultural contexts when designing interprofessional communication training programmes aimed at helping students identify the interwoven nature of cognitive and procedural knowledge across different clinical settings [54]. This should make the process of shared decision-making smoother across disciplines and allow for better cohesion and interdisciplinary communication.

The role of language in clinician–patient communication

The final theme that emerged from this study was the role that language plays in clinician–patient communication. Interviewee C, a neurologist, for example, described the way that he encourages students to adopt the communication strategy of explaining medical concepts clearly by shifting between technical and plain language [47]. Interviewee C said that to do so, it is important for translators to first break down medical information ‘into small chunks’ to convey ‘simple messages’ without excessively using English ‘medical jargon and complex terminology’. In addition to providing medical information in clear and simple ways, Interviewee C gave additional examples of interspersing medical talk with interpersonal chat [47]. One strategy he mentioned was to ‘convey complex problems’ to patients using everyday examples, such as comparing the mechanism of the heart to the motion of a blender. Such a strategy demonstrates empathy because the clinician shows the patient that he or she values ensuring that the patient understands the medical information. By shifting between technical and plain language and interspersing medical talk with interpersonal talk, clinicians are able to first communicate medical knowledge to patients and then develop good clinician–patient relationships [47].

To make sure that clinicians clearly convey medical knowledge to patients and sometimes patients’ families, this study also found that some clinicians use the strategy of repeating key information [47], as mentioned above. For instance, Interviewee D, an ICU-based critical care physician, noted that it was sometimes important to repeat ‘similar information’ to patients’ family members until they complied with treatment plans. This particular strategy, along with the delivery of additional information in written form, was identified as being able to help patients’ families understand the different treatment options and their respective benefits and drawbacks. Moreover, by couching this information in plain language, patients’ families could easily digest the medical information before making shared decisions.

The varieties of languages used in clinical communication are not limited to verbal languages, because some patients have disabilities such as hearing loss. Many deaf patients experience medicine-related

mistreatment because of ineffective communication and a lack of access to information [78]. Such cases fall short of the standards described in the United Nations' Disability Rights Agreement, which advocates equal access to healthcare services for the disabled [79]. To implement patient-centred care, it is necessary to take patients with special needs into consideration. Interviewee E, who is a nurse, noted this issue and described how nursing students were involved in the process of creating media content that had sign language subtitles. Such an inclusive approach to treating deaf patients runs counter to the Chinese cultural norm whereby a functional approach is adopted to meet patients' medical and emotional needs [64, 80]. The example raised by Interviewee E indicates the need for medical students to consider ways of communicating medical knowledge with patients with disabilities, such as by asking medically experienced sign language interpreters for help.

Conclusion

Over the decades, medical education programmes in the West have developed in important ways. While programmes in Western countries have benefited from research, testing, and innovative reforms [30], those in Asian countries and regions have lagged behind. To implement patient-centred care in Asian cultural contexts, it is necessary for medical educators to train medical students to be culturally competent. This study reflected on clinicians' observations, opinions, teaching approaches, and experiences across disciplines and drew on the collected qualitative data to suggest possible teaching approaches to clinical communication based on specific cultural values. These suggestions encourage future medical education programmes to focus on developing medical students' communication skills and cultural competency by implementing their local adaptations of patient-centred models.

This study is significant for comprehensively conducting research across 7 disciplines in Hong Kong hospitals, and for advocating the teaching of interdisciplinary communication to more effectively achieve the goal of shared decision-making. The findings of this study indicate the value of conducting nationwide quantitative and interdisciplinary research on clinical communication, which may guide future researchers based in Asia.

Abbreviations

AEDs: Accident and emergency departments

ICU: Intensive Care Unit

IPA: Interpretative phenomenological analysis

SBCS: Scenario-Based Clinical Simulation

VCAAI: Virtual Counselling Application using Artificial Intelligence

Declarations

Ethics approval and consent to participate

This study was approved by the ethics committee of the City University of Hong Kong. All methods were performed in accordance with the Declaration of Helsinki. Written consent was obtained from all participants.

Consent for publication

Any identifying personal or clinical details of participants have been re-identified to preserve anonymity.

Availability of data and material

Interview data can be found in this website: <https://jackpen.wixsite.com/clinicalcomm>

Competing interests

The author declared no competing interests.

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Authors' contributions

JP contributed to the conception, design, data collection, analysis and interpretation of data, and writing the manuscript.

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