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Community nursing delivery in urban China: A social power perspective

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ABSTRACT

Community nurses remain understudied in research on interactional power, especially in China where community healthcare is an emerging practice. Grounded in French & Raven's typology of social power, this article conceptualises the power of community nurses in a Chinese urban context. Through thematic analysis of textual data from 26 semi-structured interviews and two additional focus group discussions with community nurses in Shenzhen, we identified six power varieties, i.e. indirect reward, indirect coercion, legitimate position, peer reference, field expertise, and caring information. We classified these powers trichotomously, as nurse-to-doctor, nurse-to-nurse, and nurse-to-patient, to show the potential influences nurses bring to healthcare relationships. Our analysis indicated nurses' exercise of some powers was constrained by two elements, i.e. doctor-nurse power polarity and patient prejudices against nursing, which together contributed to nurses' adverse power loss. These power adversities permeated the community health environment, contributing to healthcare delivery dysfunctions by undermining nurses' self-improvement, self-assurance, enthusiasm, and cooperation in care. Our analysis, using the insights of social power, develops a novel reading of community nursing delivery in urban China. We argue that nurse empowerment could promote community healthcare delivery. Role enhancement and pro-nursing policy development would reduce adverse power scenarios for community nurses and help convert their potential power resources into practical powers in support of patients' needs.

1. Introduction

Social science disciplines distinguish several types of power, generally recognising the essence of power as within the dyadic relationship between two agents (French and Raven, 1959). Mutual influences of this relationship shaping agent behaviours are ubiquitous within society (Dahl, 1957). Clinical services delivery literature considers power dynamics between participants during interactive caring processes (De Swaan, 1989). Public health scholarship, however, seldom examines the multi-dimensional effects of power on healthcare in community environments where interpersonal relationships are particularly complex (Lehmann and Gilson, 2013). Thus, unlike hospital nurses, community nurses and their professional relationships remain understudied in power literature. This article, set in the context of urban China where community healthcare is an emerging practice, speaks to existing blind-spots regarding social power experienced by community nurses in healthcare delivery.

Community healthcare is a platform for primary care and public health services and a driver for engaging communities in health (World Health Organization [WHO] & UNICEF, 2020). Building upon its inclusive services, community healthcare is an essential part of health systems and crucial to universal health coverage (WHO, 2016). As a populous country with rapidly expanding global influence, China plays a vital role in promoting human health (Li and Chen, 2022). Market-oriented reforms of the late 1970s contributed to the historically unparalleled surge of China's urban population, from less than 20% to over 60% of total population, currently exceeding 900 million (National Bureau of Statistics, 2022). This demographic transformation, combined with threats to public health arising from societal ageing, chronic diseases, multimorbidity, and epidemics, overwhelmed the hospital-centric health system in Chinese cities, leading to the predicament of "too difficult to see a doctor and too expensive to seek healthcare" (Hu et al., 2008).

Economic opening sparked a wave of healthcare privatisation in China, causing health impoverishment and widening health inequities (Ramesh et al., 2014). To address public discontent with the health

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system and to align resources efficiently with clinical needs, the Chinese government began restructuring its once-acclaimed primary care system in the late 1990s, positioning community health services as entry point for healthcare in urban areas (Bhattacharyya et al., 2011). A three-tier health system has since developed (Fig. 1), with community health service agencies providing primary care and public health services, and secondary and tertiary hospitals providing comprehensive and specialty care (Jiang et al., 2020).

Emphasising strengthening health performance at grassroots level, 2009 health reforms further accelerated the evolution of China's community healthcare. The approximately 250,000 practitioners in 27,000 community health service agencies nationally at the outset of this reform, reportedly increased to 520,000 and 35,000 by 2020 respectively (National Health Commission, 2020). This substantial growth suggests remarkable progress in China's community healthcare, but significant inhibitors prevent catalysing a system that delivers high-quality community health services to urban dwellers (Li and Chen, 2022).

While extensive literature examines delivery of community health services in urban China, much of it is macro-observational, focusing on health insurance, medical information management, professional training and staffing, and equipment and facilities (e.g. Li et al., 2019; Xia et al., 2020; Yin et al., 2015). Although these studies provide insights, the absence of conceptualisation makes these contributions theoretically inadequate to further understanding of delivery processes (Li and Chen, 2022). Additional to this under-theorisation, community nurses – though at the vanguard of caring practice with acknowledged importance in promoting health (WHO, 2017) – remain underexplored. Consequently, we have few explicit theorised accounts capturing the quintessence of community nursing, thus reducing the likelihood of advancing knowledge of nursing practice, limiting our ability to design approaches to improving the caring environment, and making public perceptions of community healthcare negative and overly avoidant (Yue et al., 2020).

To fill these two research lacunae, we studied Chinese community nurses from a theoretical perspective of *social power*, elucidating the ways community nursing delivery was shaped by specific types of interactional power. Using power as the basis for enquiry was not only because power has had little academic attention in community health nursing (Lehmann and Gilson, 2013) – *so our study can enrich the literature*, but, more importantly, power is central to any understanding of human behaviour and society (Haugaard and Clegg, 2009) – *so should not be overlooked in community health services research*. Additionally, as the nature of social power is in influencing and being influenced within interpersonal relationships and such relationships are critical to caring performance and patient outcomes (Budge et al., 2003), decrypting power can both further our understanding of care relationships and help improve nursing practice.

Our analysis served three research objectives. First, as there exist no related studies, we sought to develop an initial conceptualisation of power for community nursing in urban China, to draw a theoretical frame of reference and provoke debates on power in community nursing. Second, we investigated nurses' experiences of power use, to distinguish actual power exercise from theoretical power resources and unravel power constraints. Third, we analysed the impacts of identified power on healthcare delivery, offering insights for promoting nursing from an empowerment perspective. In pursuing these objectives, we used a reading of French & Raven's typology of social power to describe power dynamics within community nursing and identify power constraints and their impact on healthcare delivery. Below, we outline this seminal power theory and its potential usefulness.

2. Conceptualisation

French & Raven's typology of social power begins with interpretations of change – "*alternation of the state of some system over time*" (French and Raven, 1959, p. 151) and social influence – "*change in the belief, attitude, and behaviour of a person, resulting from the action of another person*" (Raven, 2008, p. 1). French and Raven defined power as "*the potential for such influence, the ability of the influencing agent or power figure to bring about such change, using resources available to him/her*" (Raven, 2008, p. 1). They interpreted 'resources' as bases of power within the dyadic relationship between influencing agent and target of influence, and identified five power bases, namely *reward*, *coercion*, *legitimacy*, *reference*, and *expertise* (French and Raven, 1959).

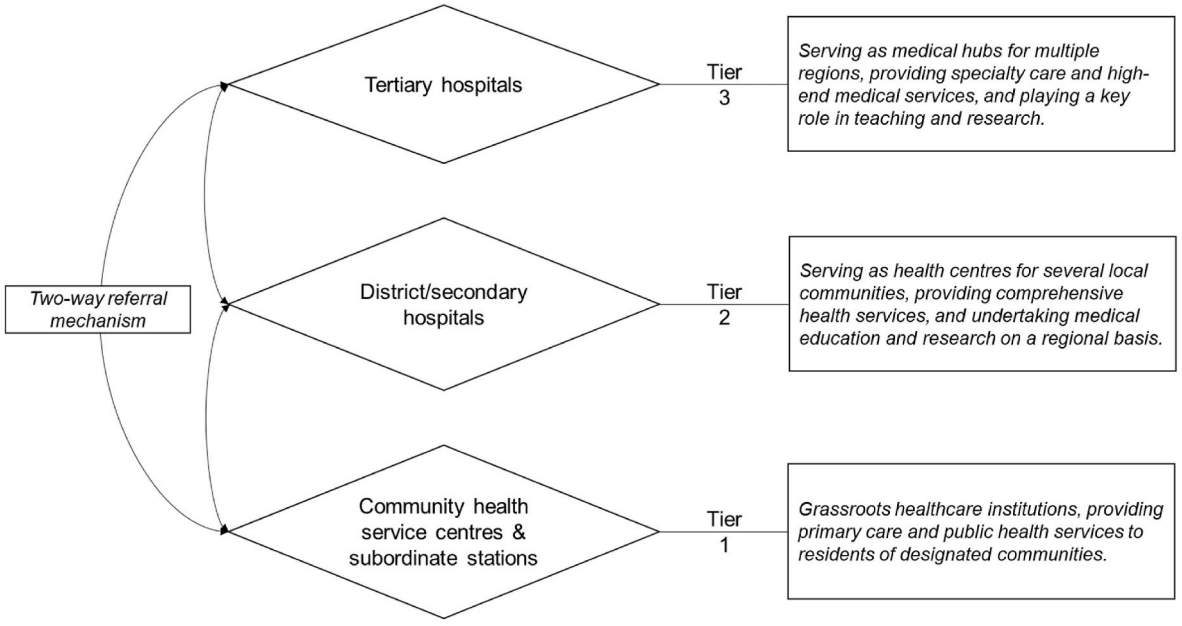

Fig. 1. Three-tier health system in urban China
Compiled by authors from the literature (Jiang et al., 2020).
The three-tier health system stems from the 'Hospital Accreditation and Management Measures' promulgated in 1989, which stipulates grading indicators of medical institutions, i.e. overall scale, technical capabilities, equipment, management capabilities, and comprehensive service quality. The two-way referrals are the link between different layers of healthcare institutions.

Considering a broader range of dimensions determining the form of influence and compliance, Raven (2008) posited a sixth power resource *information*, and further differentiated certain power bases to conceptualise a total of 11 forms of social power (Fig. 2).

Reward power derives from the ability of the agent to give or withhold positive incentives and remove or decrease negative ones. Coercive power is the punitive threat from the ability of the agent to bring about undesirable consequences. Reward power and coercive power are dichotomised as impersonal (or formal) and personal (or informal), with the former being tangible (e.g. pay raise, promotion, demotion, dismissal) and the latter being dependent on personal attitude towards the power wielder (e.g. someone we like can wield power over us). Legitimate power hinges upon the target's internalised beliefs that the agent has a right to influence and the target has an obligation to comply, further sub-categorised through legitimate position (e.g. subordinates complying with supervisors), legitimate equity (i.e. a compensatory norm, in which one feels that hard work or suffering enables a right to ask others to make-up for it in some way), legitimate reciprocity (i.e. people feel an obligation to reciprocate if others do something beneficial for them), and legitimate dependence (i.e. people feel an obligation to assist others in need). Referent power has its basis in the target's identification with the agent, viewing the agent as a model that earned admiration and likeability from the target. Expert power results from the target's faith that the agent has superior knowledge, skill, or insight within a given area. Informational power pertains to the ability of the agent to persuade the target through presentation of logical argument.

French & Raven's power typology remains prevalent in the literature (Kovach, 2020), and its micro perspective on social interactions fits well with our study scope. Rather than focusing on the power of the powerful, French & Raven's typology can equally be applied to those with less power (Raven, 2008). This is particularly relevant for our study, as nursing staff may have less power within the healthcare context (Radcliffe, 2000), enabling us to explore, delineate, and interpret power for community nurses from multiple perspectives.

3. Methodology

3.1. Study design

We chose a case study design, following normative procedures (Crowe et al., 2011). Our interpretation of this naturalistic research approach was committed to obtaining in-depth appreciation of our specific issue of enquiry, namely uses of power in nursing delivery. Case studies are particularly desirable to explore a complex phenomenon in its real-world setting and thereby effective in providing insights into our *what* and *how* questions (Crowe et al., 2011), including: (i) what powers do community nurses have?; (ii) what might prevent nurses exercising these powers?; and (iii) how does the power environment affect healthcare delivery?

We adopted qualitative methods, based upon our epistemologies and concerns about research achievability. As Erasmus and Gilson (2008) argued, "generating information that reveals the influence of power is not very straightforward" (p. 364), qualitative methods helped in observing both visible and invisible, direct and indirect power phenomena.

3.2. Case selection

Our research questions determined the attributes of our case study, identifying research topic, social group, and geographical area of interest as key elements for case definition (Crowe et al., 2011). Accordingly, we defined our topic as social power in community nursing delivery, our social group as community nurses holding non-managerial positions, and our research area as Shenzhen – a fully urbanised Chinese city with a population of nearly 18 million (Shenzhen Municipality Bureau of Statistics, 2023).

Nurses with managerial roles (i.e. head nurses) who do not provide direct patient care were not pertinent to our research focus on care delivery. We could not take urban China as case site owing to its vastness and diversity. Given our focus on constructing a thick description of power phenomena, a single case appeared preferable than multiple cases

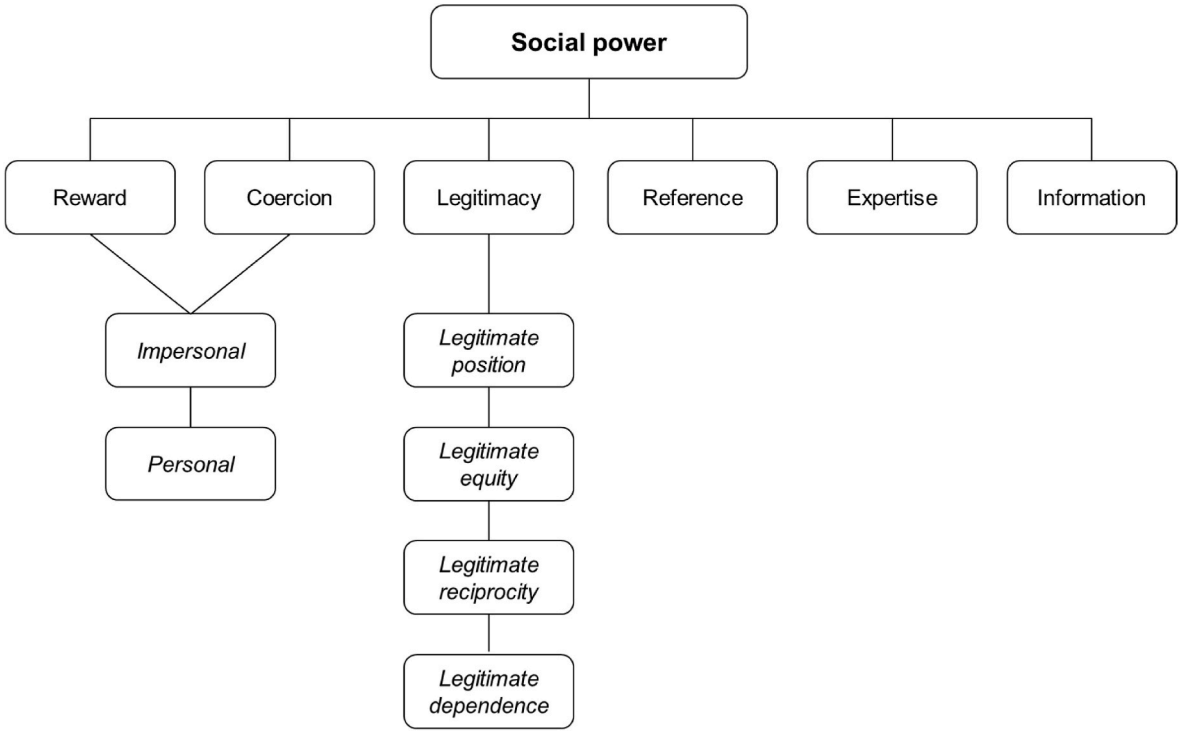

Fig. 2. Typology of social power
Authors' synthesis from the literature (French and Raven, 1959; Raven, 2008).

(Stake, 1995). We selected Shenzhen as the case site for the following reasons. First, often dubbed China's Silicon Valley, Shenzhen has demonstrated a remarkable economic transformation over the past four decades. Its GDP surpassed RMB three trillion (about US$ 430 billion) in 2021, making it the country's third-largest city economically after Shanghai and Beijing (Upton and Huld, 2022). Shenzhen authorities used this prosperity to establish an extensive community health network, with more than 12,000 practitioners working in over 750 community health service agencies (Shenzhen Municipal Health Commission, 2022). Using Stake's (1995) criteria, this made it *hospitable* for our study, providing sufficient resources on community healthcare and thus facilitating data collection. Moreover, as the Demonstration Zone of Socialism with Chinese Characteristics, Shenzhen leads national experiments and reforms in a range of aspects, including primary care and public health services (Wu et al., 2016). This demonstrating role helps transfer experiences from Shenzhen to other Chinese cities through policy learning, diffusion, and replication. We argue that choosing Shenzhen as the representative city made our case study *instrumental* (Stake, 1995), thus aiding conceptual transferability of findings (Crowe et al., 2011).

Shenzhen's community health service agencies are the first stop for most residents in accessing healthcare, with their scope continually expanding (Wu et al., 2016). In addition to primary care and basic clinical services, public health services (Fig. 3) are now an important part of routine work for community health practitioners (Ke et al., 2020). Moreover, national policies (e.g. Chinese Medicine Health Services Development Plan) emphasise applying traditional Chinese medicine in community healthcare (Meng et al., 2020). These accelerate the transformation of community health service agencies in Shenzhen from primary care-focused service providers to a platform integrating primary care, clinical care, public health services, and complementary and alternative medicine.

As such, community health services in Shenzhen accommodate residents with various backgrounds and health needs (e.g. women and children needing vaccinations; elderly people wanting physical examinations; the chronically ill requiring medication; those seeking physiotherapies).

Fig. 4 shows community health service centre departments. The diversity of service users ensures varied community health practitioner interactions with clients, including roadshows, home visits, and telephone follow-ups (Wang et al., 2019). Most interactions occur in community health service agencies because: (i) many services cannot be delivered outside professional settings (e.g. vaccinations, blood tests); (ii) doctor/nurse-patient encounters occur primarily for basic health services, requiring few special care arrangements (e.g. family beds) (Zhou et al., 2013); and (iii) staff shortages are common (Li and Chen, 2022), hindering varied caring interactions.

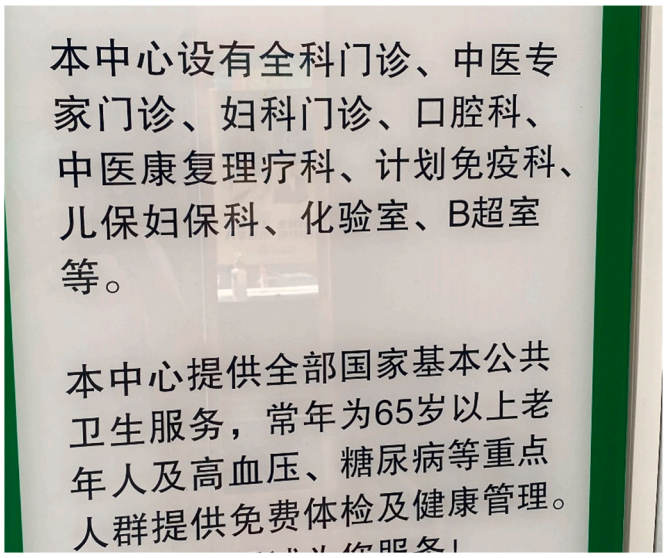

Fig. 4. Departmental setting of a community health service centre in Shenzhen
Photo taken by authors.
Paragraph one: The centre consists of a range of service and functional departments, including general practice, traditional Chinese medicine, gynaecology, stomatology, rehabilitation and physiotherapy, immunology, childcare and women's health, laboratory, and type-B ultrasound. Paragraph two: All basic public health services are available in the centre. People aged >65 and those with hypertension and diabetes can enjoy free physical examination and health management services.

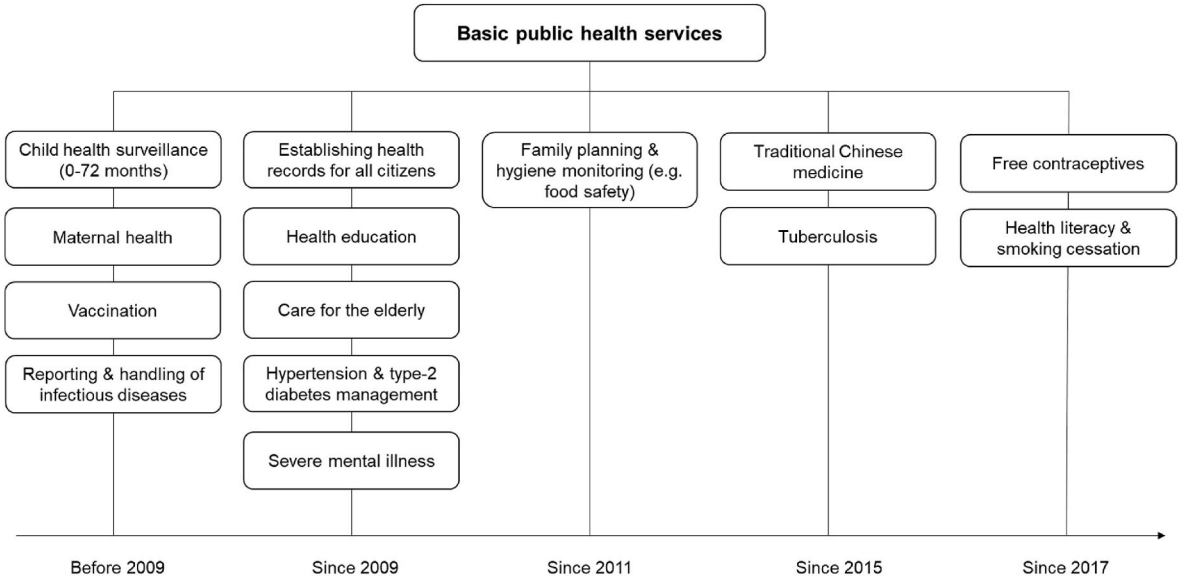

Fig. 3. Basic public health services in urban China
Compiled by authors from the literature (Yuan et al., 2019).
The timeline shows when a specific service was bundled into the basic public health services package.

3.3. Sampling and participant recruitment

We used purposive sampling to select information-rich participants (Palinkas et al., 2015). To gather diverse opinions, we did not set excessive eligibility criteria. Instead, community nurses with at least one-year full-time work experience were deemed eligible. Our sampling was iterative to ensure key differences were represented while providing flexibility in final sample composition (Robinson, 2014). We refined our sample and recruited new participants during provisional data analysis to achieve information *redundancy* (Bernard, 2011), which made our recruitment efficient, reduced selection bias by avoiding premature closure of selection, and helped us stay reflective to maximise neutrality of the selection results (Francis et al., 2010).

We invited eligible potential participants from eligible WeChat contacts with community health practitioners established during previous research. We obtained individual electronic informed consent via WeChat prior to interview or group discussion. To avoid inadvertent disclosure of identities, all participants remained anonymous throughout research.

3.4. Data collection and analysis

We collected data through semi-structured individual interviews and group discussions, to provide participants with freedom to express their ideas and enable us to modify questions as we progressed. We designed our interview guides to explore: (i) experiences of interacting with care participants; (ii) understandings of influencing and being influenced by others involved in care; and (iii) attitudes towards care delivery under the circumstance of interpersonal influence. We included core questions to elicit participant views regarding specific power types (e.g. *How do you positively or negatively influence doctors?* – reward/coercion; *How do older nurses influence you?* – legitimacy; *How do model nurses influence you?* – reference; *How do patients respond to your care?* – expertise/information).

Interviewees' vocabulary, concepts, and ideas contributed to these modifications (Britten, 1995). For example, we started our first interview with little awareness that nurses' influence on doctors and fellow nurses could be distinct, so we simply asked '*How do you influence your co-workers?*' However, we realised the term *co-worker* was not specific enough, as the interviewee, *ipso facto*, had different perceptions of influence on doctors and nurses. Thus, in subsequent interviews, we revised this as: '*How can you influence doctors and other nurses?*', and introduced as follow-up '*How does your influence on doctors and nurses differ, and why?*' This refinement helped us gain deeper understanding of participant perspectives, informing the profession-based power dynamics we constructed.

BL remotely interviewed 26 nurses (Table 1) in 14 community health service centres through WeChat between July and September 2022 (Douedari et al., 2021). We randomly selected ten of these nurses to participate in two group discussions of five nurses each in October 2022, to clarify and expand initial findings (Krueger, 2014). To create a comfortable environment and minimise distractions, we chose a café in the city centre for discussions. We provided a hotpot dining voucher worth 200 *yuan* to each participant, and an additional 100 *yuan* in cash to those who attended group discussions. Interviews and group discussions, lasting 40–120 min, were conducted in Mandarin and digitally audio-recorded.

BL transcribed audio recordings verbatim and subjected transcripts to quality checks to ensure contents of digital files and transcripts were identical. We conducted thematic analysis (Braun and Clarke, 2006) using ATLAS.ti software. First, we attained familiarisation with the textual data by a close reading of transcripts. We then used open coding to generate descriptive and interpretive codes. By collapsing and clustering codes, we outlined potential themes and reviewed them in relation to the coded data to ensure consistency of interpretation. We then used axial coding to link categorised themes. BL served as primary coder with JC and NH aiding in validating codes and interpreting themes. To improve coding trustworthiness, we performed member checking with three randomly selected participants (Morse, 2015). We determined thematic saturation was achieved when further analysis revealed no new themes (Guest et al., 2020).

3.5. Reflexivity

Research was conducted by a PhD student (BL), supervised day-to-day by a professor (JC) in Hong Kong who was leading the grant, with intellectual contributions from an associate professor (NH) in Singapore. All were familiar with conducting interpretivist health research. We intentionally positioned ourselves collaboratively with participants, aiming to co-create knowledge.

3.6. Ethics

We obtained ethical clearance from The Hong Kong Polytechnic University Institutional Review Board.

4. Findings

We identified three superordinate themes, discussed below: (i) trichotomous power dynamic; (ii) power constraints; and (iii) care delivery in conditions of power adversity.

Table 1
Research participants.

Code	Age	Gender[c]	Educational level	Code	Age	Gender[c]	Educational level
IW1[a]	23	Male	SV diploma	IW14	26	Female	Bachelor's degree
IW2[a]	25	Female	PSV diploma	IW15[b]	25	Female	PSV diploma
IW3	24	Female	PSV diploma	IW16	26	Female	SV diploma
IW4[a]	31	Female	PSV diploma	IW17[b]	29	Female	SV diploma
IW5	42	Female	SV diploma	IW18	34	Female	PSV diploma
IW6	29	Female	PSV diploma	IW19	25	Male	PSV diploma
IW7	27	Female	PSV diploma	IW20	37	Female	PSV diploma
IW8	24	Female	Bachelor's degree	IW21	41	Female	SV diploma
IW9	29	Female	SV diploma	IW22[b]	25	Female	PSV diploma
IW10[a]	30	Female	PSV diploma	IW23	43	Female	SV diploma
IW11[a]	35	Female	SV diploma	IW24	34	Female	PSV diploma
IW12	40	Female	SV diploma	IW25[b]	24	Female	SV diploma
IW13	45	Female	SV diploma	IW26[b]	27	Female	PSV diploma

[a] First focus group discussants (G1).
[b] Second focus group discussants (G2).
[c] We attempted to diversify our sample by including more male participants, but male nurses are exceedingly rare in study areas, preventing us from doing so. SV – secondary vocational; PSV – post-secondary vocational.

4.1. Trichotomous power dynamic

Following French & Raven's typology, we identified and conceptualised powers around the six core power bases of reward, coercion, legitimacy, reference, expertise, and information. To align with different targets over whom power is exercised, we segregated these powers into three clusters of nurse-to-doctor, nurse-to-nurse, and nurse-to-patient. This tripartition marshals the potential influences of community nurses in relation to major healthcare actors (Fig. 5).

4.1.1. Nurse-to-doctor: indirect reward and indirect coercion

Reward and coercion herein are concerned with the relationship between nurses and doctors, showing stimulus-led (positive or negative) influence of the former over the latter. Community health service agencies operate a clear division of stewardship, with doctors diagnosing patients and nurses providing treatment. A continuum of care can thus be seen as requiring cooperative interaction between these two clinical practices. Doctors' job performances, to a large extent, rely on nurses' dedication to cooperation. For example, if nurses are not fully committed to teamwork, doctors' efforts would need to increase and their outputs would likely drop, which would be perceived badly by the directors assessing their job performance. From this perspective, community nurses are capable of indirectly inflicting (un)desirable consequences for doctors by manipulating their caring input. Reward and coercion did not come directly from nurses but were contingent upon the – relatively predictable – actions of directors. We thus describe the two types of influence exerted by nurses on doctors through the power of a third-party director as *indirect reward* and *indirect coercion* (Raven, 2008). A typical perspective of nurses' influence on collaborative care acknowledges awareness and use of these powers:

> "*The work of doctors and nurses is interdependent. … My job is to treat patients based on doctors' opinions. … I might not be fully engaged when working with a doctor I dislike, in which case care would be compromised. As a result, not only me but also the doctor would be penalised by our director. Conversely, I gave my all when working with a doctor I like, such that we would both be rewarded [*by the director*] for better achievements.*" (IW7)

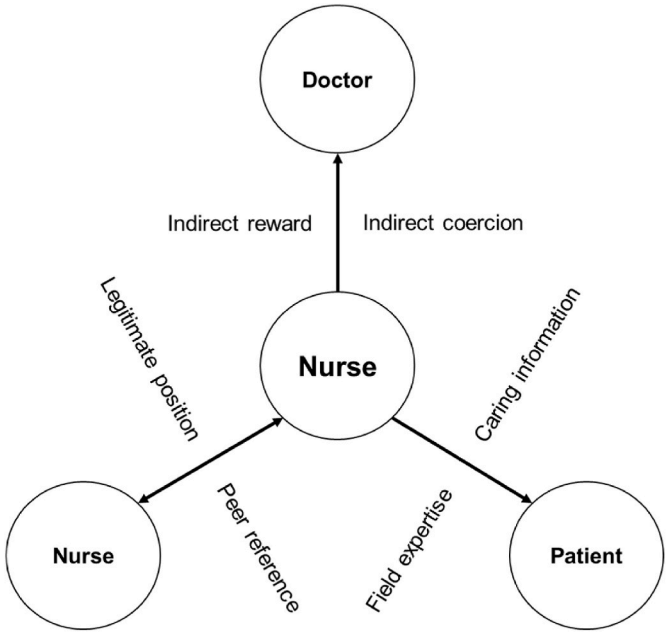

Fig. 5. Trichotomous power within community nursing
Authors' work.
Arrows indicate the direction of power flow.

A nurse shared her interaction with a doctor, illuminating the coercive power she exerted:

> "*One day, we vaccinated children against influenza. A doctor on duty for immunisation was responsible for billing and I was in charge of injections. As the crowd grew, her attitude became bad, yelling at me in a commanding tone. I was thinking: 'You are tired, so am I! I am not resting on the couch! … You are not my boss, why yell at me?!' Then I became inactive, slowing down injections [*imposing negative influence*]. … We worked overtime that day, but still did not complete the tasks, …causing criticism [*soft punishment*] from our director.*" (IW8)

Not every nurse was 'unforgiving'. Whether or not to use coercion depended on both situation and personalities, as another commented:

> *"Coercion causes conflicts. … I do not want to get involved in a conflict with anyone, including doctors. … I am not an aggressive person."* (IW20)

4.1.2. Nurse-to-nurse: legitimate position and peer reference

We noted influence and compliance between nurses, particularly older over younger nurses due to the age advantage embedded within social norms (Raven, 2008). Age-based influence was thus accepted by most – if not all – nurses, with older nurses granted authority to prescribe behaviour for younger nurses. Acceptance of such influence constituted a superior position for older nurses (French and Raven, 1959), legitimising their dominant power role. We thus identify age-based influence as *legitimate position* power. As a group discussant noted:

> "*It is older nurses who like to call the shots, and younger nurses comply with their orders just because they are older. The age advantage gives older nurses special rights. … The compliance reflects the acceptance of younger nurses of the influence from older ones.*" (G2)

Secondly, we found that some nurses demonstrated charisma and earned admiration from peers over time. For example, a nurse exhibiting energy, stamina, and diligence, could become a model nurse. These informal role models were imbued with – sometimes significant – power to influence others, such that peers followed model nurses' advice, instructions, and even values to forge stronger bonds with their 'idols'. We thus define influence that model nurses exerted over peers as *peer referent* power, epitomised by an interviewee's description of her colleague:

> "*Chen [*26 years old*] is someone I admire because she is hardworking. … Chen joined the centre not long before COVID swept the city. Since then, in addition to health education, she has also been in charge of nucleic acid testing of community residents who underwent residential quarantine. Almost every working day, she visited dozens of households, went upstairs and downstairs, and often sweated profusely. … She rarely complained, though the work was stressful. … Chen's attitudes towards work have a strong impact on me, making me feel invigorated. … Chen is a real model of community nurse, so I am disposed to follow in her footsteps at work.*" (IW9)

4.1.3. Nurse-to-patient: field expertise and caring information

Community nurses had influence over patients. Most nurse behaviours during caring were perceived as rational and essential by patients, due to patients' confidence in nurses' mastery of clinical knowledge and skills. Patient dependence on nurses pervaded the course of care. When caring on-site in community health service agencies, such dependence was reflected in patients' obedience, enabling nurses to exert influence and even control over their patients. Informed by French & Raven's elucidation of expert power, we chose the term *field expertise* to conceptualise the impact community nurses imposed on patients combined with the obedience resulting from patients' faith in nurses' competence. A group discussant observed this articulation of expert

power:

> "*As registered nurses, we are specialised in care. Patients know little about professional healthcare and must rely on us for treatment and medication; otherwise, who else can they bet on?*" (G1)

This power enabled nurses to persuade patients, both through easier communications with patients when providing services and readier patient acceptance of nurse advice on health promotion. While additional effort was sometimes required to convince patients, this did not indicate patient compliance with nurses or the healthcare information they provided would dissipate. Community nurses carried the aureole of health professionalism and were generally deemed authoritative and wise by patients, so their persuasion could potentially lead to behavioural change, especially when providing follow-up services for chronic illnesses. Drawing on Raven's definition of informational power, we describe this power of persuasion as *caring information*. As an interviewee noted:

> "*I followed up with hypertensive patients by not only monitoring their physical condition and medication, but also giving them advice on improving lifestyle. Sometimes, convincing patients to change lifestyle was difficult and I would have to explain it over and over again, but reassuringly, most of them followed my guidance. After all, I am a nurse, so the information I provided about care is considered reliable.*" (IW3)

Frequent interactions increased patients' trust in community nurses, strengthening the foundation for nurses to use informational power. As an interviewee shared:

> *"There is a patient suffering from chronic disorders. At first, she came to me once a month for check-up. As we interacted more, she became my regular visitor. … I could feel her trust in me growing day by day, because she often consults me [*advantage to using informational power*] about health.*" (IW11)

4.2. Power constraints

Despite having power bases to influence other care actors, community nurses could struggle in exercising social power within an unequal power system. The three powers we identified (i.e. indirect coercion, field expertise, caring information) were constrained by two seemingly immutable factors, namely doctor-nurse power polarity and patient prejudices against nursing, which adversely affected nurses' power use. Doctors held most power in community health services, which is reflected in our tripartite power model as a constraining influence on nurses' experiences of their own social power (Fig. 6).

4.2.1. Doctor-nurse power polarity

Community doctors were powerful due to their dual role in the system as clinicians and managers. We note that community health services in China are provided primarily through family-doctor teams of one doctor and several nurses. As team leaders, doctors are not only seen as responsible for patient care, but most also play the role of managers with the right to supervise team members and rearrange team affairs. This dual clinical and administrative role granted community doctors authority that was unlikely to be significantly jeopardised by nurses' behaviour. Thus, nurses seldom used coercive power as the chances of winning a power battle with doctors were slim and the consequence of involvement in power antagonism could be catastrophic. Instead, nurses most frequently used reward power to cater to doctors' wishes and avoid potentially substantive reprisals from doctors. A group discussant explained:

> "*Indeed, what we do can be the determinant of doctors' job performance. If we do not do well, doctors will not do well either. Doctors would then be punished [*by directors*]. However, very few nurses would resort to the 'do-not-do-well' approach to penalising doctors. In order not to be forced to wear tight shoes, no one even wants to upset doctors. Instead, pretty much everyone is scrambling to keep doctors happy [*e.g. following their orders*]. After all, our professional development is in the hands of those in power like doctors.*" (G1)

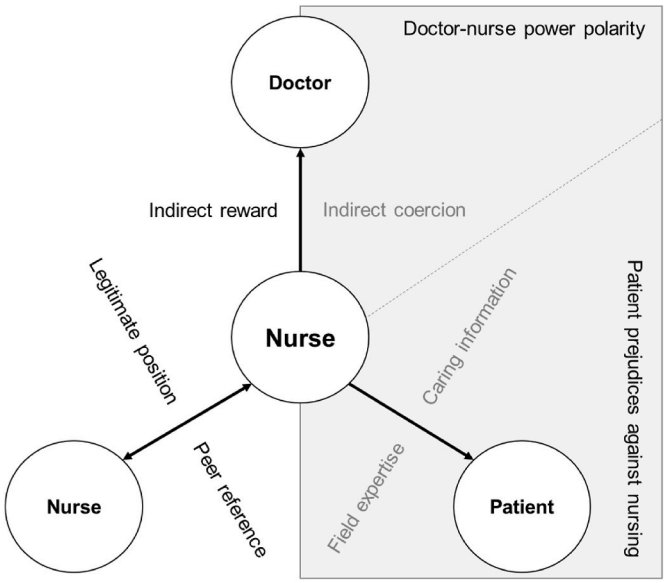

Fig. 6. Constraining power use by doctors and patients
Authors' work.
Shaded areas include three community nurse powers that are adversely affected by two contextual factors of doctor-nurse power polarity and patient prejudices against nursing, dichotomised based upon two power relations of nurse-doctor and nurse-patient.

However, we noted some nurses' fearlessness of doctors' 'repressive' authority. Again, described in terms of personality by an interviewee:

> "*Whenever someone deliberately harms my interests, I will fight back, whether he/she is a doctor or a nurse. … I am kind of a vengeful person.*" (IW7)

Still, doctors' visible power served to reduce nurses' power and accentuate the power differential. At community level, most nurses had no advantages of professional titles or specialisation, instead working as general nurses. Additionally, unlike hospitals, the structure of community health service agencies was primarily horizontal, resulting in a lack of substantial promotion differentiation. A mediocre education could further reduce nurses' chances of career advancement, placing them at the bottom of the hierarchy. This resulted in a perceived sense of powerlessness among nurses, particularly younger ones who were often labelled inexperienced. One interviewee noted with frustration:

> "*The key [*to be powerful*] is promotion. … Getting promoted is dependent on education background or work experience. Sadly, I have neither an outstanding diploma nor enough work experience. So, for me, this state [*powerlessness*] seems to never end.*" (IW22)

Nurses' inferiority compared to doctors' supremacy constituted a polarised power structure, functioning as an internal contextual constraint on the exercise of coercive power by nurses. This led to greater power differentials and asymmetries in the community health system. As a group discussant observed:

> *"Power inequality between doctors and nurses is pervasive. This is more of a tradition in the system. … Nurses and nursing are always inferior, … which is not going to change anytime soon.*" (G2)

4.2.2. Patient prejudices against nursing

This power differential was further reflected in patient attitudes.

Prejudice against nursing was another salient barrier to community nurses exercising power. Specifically, some patients perceived nurses as secondary to doctors and their services as less important. This detrimentally affected patients' trust in nurses, not only reducing the perceived dependence of patients on nurses, but also challenging communications between both parties. Worse, it could increase patients' resistance to nurses' healthcare information. Hence, community nurses observed that the process of exerting influence on patients did not always go smoothly. As one interviewee remarked:

> "*Some patients were reluctant to communicate with me and showed impatience and even inhospitality in front of me. I could tell by their reaction that they did not trust me. … They saw doctors as far more important and treated them completely differently, which made me feel underprivileged and reduced the effectiveness of care I provided.*" (IW2)

Another interviewee vividly described this prejudice in a nurse-patient scenario:

> "*Once a hypertensive patient came to us for consultation. He met me first and asked me about drugs. After a while, he saw a doctor walked by. Then he suddenly stood up, stopped the doctor, and asked the same questions! This made me feel disrespected. … Hypertension medication is a basic knowledge area for almost every health professional in the centre. Doctors know, so do we nurses! … In fact, he got the same answers from the doctor as I told him [I heard those because I was sitting right next to them]. Perhaps he wanted to check with the doctor whether I was right? But whatever the reason, clearly, he trusted the doctor more [*sigh*].*" (IW24).

Such prejudice not only dimmed the professional aura of community nurses when facing patients, but also reduced their ability to persuade. As an external contextual factor, patient prejudices hindered nurses' exertion of expert and informational powers. It disempowered younger nurses particularly, as patients tended to consider them less competent. A younger interviewee noted:

> "*Some patients thought that I was not only inferior to doctors, but inferior to other nurses who are older. They trusted older ones because they looked more experienced. This perception undermined my authority in care.*" (IW16)

4.3. Care delivery in conditions of power adversity

Power adversities resulting from both contextual constraints impacted care delivery significantly. We examine these impacts through four dimensions derived from our analysis: self-improvement, self-assurance, enthusiasm, and cooperation, which are, from a provider perspective, essential for a robust care delivery system.

First, the adverse power environment obstructed nurses' self-improvement. The quality of medical staff is vital to care delivery, and self-improvement – an embodiment of subjective initiative in learning – is an important way to strengthen caring capacity. As learning progresses and competence increases, nurses' power also likely increases. Generally, nurses who are perceived as more capable are more likely to be relied upon. However, due to the polarised power structure, nurses' motivation to gain power through upskilling remained low, as most believed that self-improvement was of no help in altering their relative powerlessness against doctors but instead brought extra pressure. Thus, quality-of-care was unlikely to improve through training. As one interviewee said:

> "*Training may help improve myself technically, but it did not level up my standing in the organisation. … It is a pipe dream to become more powerful through improving skills. I would rather not have the trainings because they brought me nothing but fatigue.*" (IW1)

Second, the adverse power environment reduced nurses' self-assurance. Patient prejudices against nursing and consequent loss of trust predisposed nurses to question their own abilities and behave more indecisively, further diminishing patients' trust in nurses, their expertise, and the healthcare information they provided. A vicious circle of distrust, indecision, and perceived care thus had potential to emerge. An interviewee noted:

> "*I am not so assured of my abilities, and this feeling becomes stronger when faced with the suspicious eyes of patients. Sometimes, I subconsciously knew I was right, still I had to double check with my colleagues. While this did not affect the care much, it has created a gap of communication and trust between patients and me, and left patients with the impression that I was incapable.*" (IW26)

Third, the adverse power environment reduced nurses' enthusiasm. For most participants, relative powerlessness meant being at the mercy of someone more powerful, or even being bullied. When hard work failed to change this underprivileged status quo, many chose not to devote their energies to caring but instead viewed their work as a job requiring minimal effort. Thus, inertia and the intent to quit were not exceptional among nurses. When passion for care has passed, how can nursing be strengthened or sustained? A group discussant commented:

> "*We do this job not because we love it but because we need it for a living. … We want to work in hospitals because there are more opportunities for promotion, better welfare and pay. All these would give us power. Where we work is otherwise. … We feel little hope and cannot feel energetic or positive in work. … Many just deal with their assignments mechanically.*" (G2)

Fourth, power adversities jeopardised the normality of teamwork, erecting an invisible wall blocking cooperation among community health professionals. Power differentials between doctors and nurses and between senior and junior nurses prevented establishing professional relationships marked by rapport, trustworthiness, solidarity, and mutual respect. Without good-quality cooperation, the process of care remained fragmented. An interviewee shared:

> "*I dislike some co-workers, especially the older ones, who are bossy for power they have. … Sometimes, I turned a deaf ear to what they said. … Once our director asked me to do a free medical consultation with such a colleague, I refused because I simply did not want to work with her [*the activity did not proceed*].*" (IW14)

5. Discussion

5.1. Key findings

This article examined the power of community nurses and its impact on healthcare delivery in urban China using French & Raven's typology. We delineated a trichotomous power dynamic, showing three power interfaces in community health settings, i.e. nurse-doctor, nurse-nurse, and nurse-patient. This dynamic was dominated by doctors' greater power, informing analysis of the two contextual constrains on nurses' exercise of social power, i.e. doctor-nurse power polarity and related patient prejudices. These, in turn, impacted nurses' reported self-improvement initiatives, self-assurance, enthusiasm, and cooperation and, by inference, the delivery of clinical care.

Nurse-doctor power dynamic. Stein (1967) used the term 'doctor-nurse game' to outline the relationship between both professions and argued that nurses' passivity safeguarded the professional hierarchy in which doctors occupied a paramount position. Due to redefinitions of nursing roles and other important social changes, the game has been transformed, with nurses striving for expertise, discretion, respectability, and equality (Stein et al., 1990). Role enhancement portends that the power of nurses is apt to grow, the hierarchy can be flattened, and the game may die (Brown, 2019). This could occur in hospital settings where emergency, specialty, and intensive care requires powerful nurse figures (Phillips and Norman, 2020). However, our data contradict the empowering nursing scenarios anticipated by Stein and many feminists,

instead echoing Radcliffe's (2000) assertion of 'new game, same result'. With its focus on general practice, community healthcare is less sophisticated than hospital care and does not require advanced nursing. This caring nature prevents community nurses from increasing power through role enhancement by *specialist training* (Brown, 2019). We found that specialisation was lacking and not considered useful among community nurses, which, combined with educational mediocrity, contributed to nurses' sense of professional powerlessness. In accordance with Nickelsen's (2019) discourse on care infrastructure, relatively flat community health service organisations and consequent dearth of promotion opportunities impaired nurse empowerment, sustaining felt oppression and inferiority. James and Bennett (2022) described clinical leaders (e.g. directors in our study) as catalysts in leading change in the doctor-nurse game by counteracting nurse disempowerment. This supports Raven's (2008) third-party perspective and our findings of indirect reward and indirect coercion. Nevertheless, clinical leaders do not always act to mediate power differentials, especially within the community health context where *organisational conventions of leadership* are established around doctors (Nickelsen, 2019). In effect, doctors' dual role in China's family doctor system reinforced their preferential power polarity and related power adversities for nurses. Therefore, not only did nurses' motivation to gain power through self-improvement remain muted, but their enthusiasm towards caring also ebbed. Power adversities also discouraged cooperation, giving rise to *mutual non-supportiveness* in care delivery (Daiski, 2004).

Nurse-nurse power dynamic. Considerable discussion exists on the inter-professional relationship between doctors and nurses, but relatively little on intra-professional interactions among nurses. We elaborated influences between community nurses as legitimate position and peer reference. Legitimate position power was marked by age advantage and based on social norms. As such, it was exerted by older nurses, especially in traditional societies like China where 'respecting the older' – from Confucianism – is a moral norm. This cultural value nourished the age-based power differentials (Raven, 2008), undermining younger nurses' enthusiasm towards caring. In contrast, peer referent power from *alluring dispositions* (Vecchio, 2007) transcends age and is individual-oriented (Kovach, 2020). Holders of this power do not necessarily take formal or managerial roles, but, with peers' identification, they do exert leadership influence in workplaces (Kovach, 2020). Our study implies that, with its positive attributes, peer referent power could reinforce cohesion among nurses, differing from the ways age-based influence alienated younger nurses and impaired care delivery by interrupting cooperation and *collective commitment* (Kunze et al., 2010).

Nurse-patient power dynamic. We specified two powers community nurses mobilised in front of patients, i.e. field expertise and caring information. Both were associated with patients' perceptions of nurses' clinical knowledge and skills (Kettunen et al., 2002). Power imbalances between nurses and patients are well-described, especially in hospital settings where patient empowerment fails due to nurses' unwillingness to share power (Henderson, 2003). However, our study indicates that, in the Chinese community health context, nurses' influence over patients could be reduced alongside emergent patient resistance against nursing, resulting from social stereotypes that nurses are merely 'ancillaries' to doctors. This prejudice contributed to reduced patient trust in community nurses, interrupting communications between both parties. In hospitals, communication is a key method to equalise powers for care participants (Tan et al., 2017), while open communication is often lacking among nurses when facing patients (Hewison, 1995). In contrast, community nurses expressed willingness to involve patients in communication, but patients could refuse due to low trust in nurses. Younger community nurses were further disadvantaged by this 'trust crisis' as they were often perceived as inexperienced by patients due to social norms around age advantage. Our study suggests that, as opposed to a nurse-patient power asymmetry marked by nurses' dominance in hospital scenarios (Henderson, 2003), patients' prejudice and consequent low trust contributed to an adverse power environment for community nurses, jeopardising nurses' self-assurance in care delivery.

5.2. Nurse empowerment

Community nurses are on the front lines of care and have potential to shape the entire community healthcare landscape. Therefore, nurse empowerment appears essential to promoting community healthcare delivery in Chinese cities and beyond. Our case study in Shenzhen identifies two implications for empowering community nurses.

First, health professionals' roles in China's family doctor system need to be reconstructed. To increase equity in doctor-nurse power relations, doctors' dual role must be abolished and nurses' roles strengthened. Nene et al. (2020) proposed a framework to promote nursing in the context of primary care, yielding potential guidance for role enhancement for community nurses in China. Additionally, the role of clinical leaders can be further galvanised, as it is capable of mediating power confrontations and balancing power relations between health professionals (James and Bennett, 2022).

Second, nurse empowerment requires policy support. Despite commendable progress in China's community healthcare over the past decade, policymaking for community nursing remains stagnant. Taking Shenzhen – a city at the forefront of China's policy reforms – as an example, policies on community healthcare were promulgated, but few were tailored to community nursing. Community nursing development was noted in some public health policies, e.g. Shenzhen Special Economic Zone Medical Ordinance (Health Commission of Shenzhen Municipality, 2022). Still, this is inadequate to ensure the considerable changes needed to address community nurses' professional vulnerabilities.

While we argue for nurse empowerment, checks and balances on community nurses' power should not be overlooked. Over-empowerment is parlous because it would invoke 'metamorphic effects of power' (Raven, 2008). Achieving real power equalities thus necessitates a mechanism capable of empowering and overseeing the empowering process to avoid creating 'unrivalled' nurse figures, thus maximising the merits of power interactions on care delivery.

5.3. Limitations

Theoretically, our conceptualisation of six social powers fleshes out French & Raven's typology, facilitating interpretation of this seminal power theory within community health nursing. However, two limitations should be noted. First, while we hold that community nurses are best placed to tell their own experiences of social power, failure to include the views of other care participants (i.e. doctors and patients) potentially prevented us telling the whole story of power interactions. Second, we did not conduct field observations (mainly constrained by the zero-COVID policy). Given the obscurity and complexity of interpersonal interactions and influences, observations may facilitate exploration and decipherment of power phenomena. Thus, the perspectives of other care participants and field research methods should be considered in future research.

6. Conclusions

In nursing literature, power is 'buzz word' and is often examined within two forms of interplay, i.e. nurse-doctor and nurse-patient. These may show very different power landscapes for nurses, from relatively powerless when interacting with doctors to generally powerful when facing patients (Henderson, 2003; Svensson, 1996). Thus, the power dynamic for nurses varies by relationship. Instead of taking these two fashions of critique, our study adopted a new lens for reading nurses' power, namely theoretical power base versus practical power use. As such, this article opens up new perspectives for interpreting power dynamics in nursing practice.

In China, the environment for nurses to gain power remains unfavourable. Nursing is characterised by heavy workloads, low wages, and poor working conditions, resulting in low motivations to choosing nursing as a career and thus a shortage of nursing professionals (Yang and Hao, 2018). The social stereotypes, which value doctors over nurses, reduce nurses' relative standing (Yang and Hao, 2018).

Unlike studies providing a macro-description of Chinese nurses' powerlessness and its associations with organisational issues such as job satisfaction and burnout (e.g. Cai and Zhou., 2009), our study conceptualised nurses' power through a micro lens of interpersonal relationships and identified potential power bases on which nurses can exert influence during caring, laying a theoretical foundation for studying interactional power in nursing.

Author contributions

Bo Li: Conceptualisation, Methodology, Investigation, Data curation, Formal analysis, Resources, Software, Visualisation, Writing—Original draft preparation. **Juan Chen:** Conceptualisation, Methodology, Validation, Supervision, Writing—Review and editing, Funding acquisition, Project administration. **Natasha Howard:** Conceptualisation, Methodology, Validation, Writing—Review and editing.

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Ethics approval statement

The Hong Kong Polytechnic University Institutional Review Board provided ethics approval (reference HSEARS20210417003).

Declaration of competing interest

The authors have no conflicts of interest to declare.

Data availability

Data will be made available on request.

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References

Bernard, H.R., 2011. Research Methods in Anthropology: Qualitative and Quantitative Approaches, *fifth ed.* Rowman Altamira, New York.

Bhattacharyya, O., Delu, Y., Wong, S.T., Bowen, C., 2011. Evolution of primary care in China 1997–2009. Health Pol. 100 (2–3), 174–180. https://doi.org/10.1016/j.healthpol.2010.11.005.

Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 2, 77–101. https://doi.org/10.1191/1478088706qp063oa.

Britten, N., 1995. Qualitative research: qualitative interviews in medical research. BMJ 311 (6999), 251–253. https://doi.org/10.1136/bmj.311.6999.251.

Brown, J.S., 2019. Ending the doctor-nurse game by enhancing the role of the ward nurse. BMJ 364, l698. https://doi.org/10.1136/bmj.l698.

Budge, C., Carryer, J., Wood, S., 2003. Health correlates of autonomy, control and professional relationships in the nursing work environment. J. Adv. Nurs. 42 (3), 260–268. https://doi.org/10.1046/j.1365-2648.2003.02615.x.

Cai, C., Zhou, Z., 2009. Structural empowerment, job satisfaction, and turnover intention of Chinese clinical nurses. Nurs. Health Sci. 11 (4), 397–403. https://doi.org/10.1111/j.1442-2018.2009.00470.x.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., Sheikh, A., 2011. The case study approach. BMC Med. Res. Methodol. 11, 100. https://doi.org/10.1186/1471-2288-11-100.

Dahl, R.A., 1957. The concept of power. Behav. Sci. 2 (3), 201–215. https://doi.org/10.1002/bs.3830020303.

Daiski, I., 2004. Changing nurses' dis-empowering relationship patterns. J. Adv. Nurs. 48 (1), 43–50. https://doi.org/10.1111/j.1365-2648.2004.03167.x.

De Swaan, A., 1989. The reluctant imperialism of the medical profession. Soc. Sci. Med. 28 (11), 1165–1170. https://doi.org/10.1016/0277-9536(89)90009-9.

Douedari, Y., Alhaffar, M., Duclos, D., Ai-Twaish, M., Jabbour, S., Howard, N., 2021. 'We need someone to deliver our voices': reflections from conducting remote qualitative research in Syria. Conflict Health 15, 28. https://doi.org/10.1186/s13031-021-00361-w.

Erasmus, E., Gilson, L., 2008. How to start thinking about investigating power in the organizational settings of policy implementation. Health Pol. Plann. 23 (5), 361–368. https://doi.org/10.1093/heapol/czn021.

Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P., Grimshaw, J.M., 2010. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. Psychol. Health 25 (10), 1229–1245. https://doi.org/10.1080/08870440903194015.

French Jr., J.R.P., Raven, B.H., 1959. The bases of social power. In: Cartwright, D. (Ed.), Studies in Social Power. Institute for Social Research, Ann Arbor, pp. 150–167.

Guest, G., Namey, E., Chen, M., 2020. A simple method to assess and report thematic saturation in qualitative research. PLoS One 15 (5), e0232076. https://doi.org/10.1371/journal.pone.0232076.

Haugaard, M., Clegg, S.R., 2009. Why power is the central concept of the social sciences. In: Clegg, S.R., Haugaard, M. (Eds.), The SAGE Handbook of Power. Sage, London, pp. 1–24.

Health Commission of Shenzhen Municipality, 2022. Shenzhen Special Economic Zone Medical Ordinance. http://wjw.sz.gov.cn/xxgk/zcfggfxwj/mybh_5/content/post_10139263.html.

Henderson, S., 2003. Power imbalance between nurses and patients: a potential inhibitor of partnership in care. J. Clin. Nurs. 12 (4), 501–508. https://doi.org/10.1046/j.1365-2702.2003.00757.x.

Hewison, A., 1995. Nurses' power in interactions with patients. J. Adv. Nurs. 21 (1), 75–82. https://doi.org/10.1046/j.1365-2648.1995.21010075.x.

Hu, S., Tang, S., Liu, Y., Zhao, Y., Escobar, M.L., De Ferranti, D., 2008. Reform of how health care is paid for in China: challenges and opportunities. Lancet 372 (9652), 1846–1853. https://doi.org/10.1016/S0140-6736(08)61368-9.

James, A.H., Bennett, C.L., 2022. From empowerment to emancipation – developing self-leadership. In: Stanley, D., Bennett, C.L., James, A.H. (Eds.), Clinical Leadership in Nursing and Healthcare. John Wiley & Sons, Newark, pp. 403–420.

Jiang, S., Gu, Y., Yang, F., Wu, T., Wang, H., Cutler, H., Zhang, L., 2020. Tertiary hospitals or community clinics? An enquiry into the factors affecting patients' choice for healthcare facilities in urban China. China Econ. Rev. 63, 101538 https://doi.org/10.1016/j.chieco.2020.101538.

Ke, X., Zhang, L., Li, Z., Tang, W., 2020. Inequality in health service utilization among migrant and local children: a cross-sectional survey of children aged 0–14 years in Shenzhen, China. BMC Publ. Health 20, 1668. https://doi.org/10.1186/s12889-020-09781-4.

Kettunen, T., Poskiparta, M., Gerlander, M., 2002. Nurse–patient power relationship: preliminary evidence of patients' power messages. Patient Educ. Counsel. 47 (2), 101–113. https://doi.org/10.1016/S0738-3991(01)00179-3.

Kovach, M., 2020. Leader influence: a research review of French & Raven's (1959) power dynamics. J. Value-Based Leader. 13 (2), 15. https://doi.org/10.22543/0733.132.1312.

Krueger, R.A., 2014. Focus Groups: A Practical Guide for Applied Research. Sage, London.

Kunze, F., Boehm, S.A., Bruch, H., 2010. Age diversity, age discrimination climate and performance consequences—a cross organizational study. J. Organ. Behav. 32 (2), 264–290. https://doi.org/10.1002/job.698.

Lehmann, U., Gilson, L., 2013. Actor interfaces and practices of power in a community health worker programme: a South African study of unintended policy outcomes. Health Pol. Plann. 28 (4), 358–366. https://doi.org/10.1093/heapol/czs066.

Li, B., Chen, J., 2022. Barriers to community-based primary health care delivery in urban China: a systematic mapping review. Int. J. Environ. Res. Publ. Health 19 (19), 12701. https://doi.org/10.3390/ijerph191912701.

Li, H., Zhu, W., Xia, H., Wang, X., Mao, C., 2019. Cross-sectional study on the management and control of hypertension among migrants in primary care: what is the impact of segmented health insurance schemes? J. Am. Heart Assoc. 8 (16), e012674 https://doi.org/10.1161/JAHA.119.012674.

Meng, F., Ji, Z., Song, F., Bai, T., Fan, X., Wang, D., 2020. Patients' familiarity with, trust in and willingness to pay for traditional Chinese medicine in Chinese community health care centres. Eur. J. Integr. Med. 36, 101118 https://doi.org/10.1016/j.eujim.2020.101118.

Morse, J.M., 2015. Critical analysis of strategies for determining rigor in qualitative inquiry. Qual. Health Res. 25 (9), 1212–1222. https://doi.org/10.1177/1049732315588501.

Municipality Bureau of Statistics, Shenzhen, 2023. Shenzhen Statistical Yearbook 2022. China Statistics Press, Beijing.

National Bureau of Statistics, 2022. China Statistical Yearbook 2021. China Statistics Press, Beijing.

National Health Commission, 2020. China Health Statistical Yearbook. Peking Union Medical College Press, Beijing.

Nene, S.E., Ally, H., Nkosi, E., 2020. Nurse managers experiences of their leadership roles in a specific mining primary healthcare service in the West Rand. Curationis 43 (1), a2129. https://doi.org/10.4102/curationis.v43i1.2129.

Nickelsen, N.C.M., 2019. The infrastructure of telecare: implications for nursing tasks and the nurse-doctor relationship. Sociol. Health Illness 41 (1), 67–80. https://doi.org/10.1111/1467-9566.12781.

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., Hoagwood, K., 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Adm. Pol. Ment. Health 42 (5), 533–544. https://doi.org/10.1007/s10488-013-0528-y.

Phillips, N., Norman, K., 2020. A case study of frontline nurse leadership informed by complex responsive processes of relating. J. Clin. Nurs. 29 (13–14), 2181–2195. https://doi.org/10.1111/jocn.15091.

Radcliffe, M., 2000. Doctors and nurses: new game, same result. BMJ 320, 1085. https://doi.org/10.1136/bmj.320.7241.1085.

Ramesh, M., Wu, X., He, A.J., 2014. Health governance and healthcare reforms in China. Health Pol. Plann. 29 (6), 663–672. https://doi.org/10.1093/heapol/czs109.

Raven, B.H., 2008. The bases of power and the power/interaction model of interpersonal influence. Anal. Soc. Issues Public Policy 8 (1), 1–22. https://doi.org/10.1111/j.1530-2415.2008.00159.x.

Robinson, O.C., 2014. Sampling in interview-based qualitative research: a theoretical and practical guide. Qual. Res. Psychol. 11 (1), 25–41. https://doi.org/10.1080/14780887.2013.801543.

Shenzhen Municipal Health Commission, 2022. A Summary of Shenzhen Health Statistics in 2021. http://wjw.sz.gov.cn/xxgk/tjsj/zxtjxx/content/post_9896167.html.

Stake, R.E., 1995. The Art of Case Study Research. Sage, London.

Stein, L.I., 1967. The doctor-nurse game. Arch. Gen. Psychiatr. 16 (6), 699–703. https://doi.org/10.1001/archpsyc.1967.01730240055009.

Stein, L.I., Watts, D.T., Howell, T., 1990. Sounding board: the doctor-nurse game revisited. N. Engl. J. Med. 322 (8), 546–549. https://doi.org/10.1056/NEJM199002223220810.

Svensson, R., 1996. The interplay between doctors and nurses—a negotiated order perspective. Sociol. Health Illness 18 (3). https://doi.org/10.1111/1467-9566.ep10934735.

Tan, T.C., Zhou, H., Kelly, M., 2017. Nurse-physician communication – an integrated review. J. Clin. Nurs. 26 (23–24), 3974–3989. https://doi.org/10.1111/jocn.13832.

Upton, P., Huld, A., 2022. Investing in Shenzhen: Industry, Economics, and Policy. https://www.china-briefing.com/news/shenzhen-city-profile-industry-economics-and-policy-trends/.

Vecchio, R.P., 2007. Power, politics, and influence. In: Vecchio, R.P. (Ed.), Leadership: Understanding the Dynamics of Power and Influence in Organizations. Notre Dame: University of Notre Dame Press, pp. 69–95.

Wang, J., Zuo, H., Chen, X., Hou, L., Ma, J., 2019. Analysis of factors influencing the frequency of primary care visits among diabetic patients in two provinces in China. BMC Publ. Health 19, 1267. https://doi.org/10.1186/s12889-019-7591-6.

World Health Organization, 2016. Community-based health services: a vital part of universal health coverage. https://apps.who.int/iris/handle/10665/277187.

World Health Organization, 2017. Enhancing the Role of Community Health Nursing for Universal Health Coverage. https://apps.who.int/iris/handle/10665/255047.

World Health Organization, 2020. Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic. UNICEF. https://www.who.int/publications/i/item/WHO-2019-nCoV-Comm_health_care-2020.1.

Wu, J., Zhang, S., Chen, H., Lin, Y., Dong, X., Yin, X., et al., 2016. Patient satisfaction with community health service centers as gatekeepers and the influencing factors: a cross-sectional study in Shenzhen, China. PLoS One 11 (8), e0161683. https://doi.org/10.1371/journal.pone.0161683.

Xia, Z., Gao, W., Wei, X., Peng, Y., Ran, H., Wu, H., Liu, C., 2020. Perceived value of electronic medical records in community health services: a national cross-sectional survey of primary care workers in mainland China. Int. J. Environ. Res. Publ. Health 17 (22), 8510. https://doi.org/10.3390/ijerph17228510.

Yang, J., Hao, D., 2018. Dilemmas for nurses in China. Lancet 392 (10141), 30. https://doi.org/10.1016/S0140-6736(18)31185-1.

Yin, X., Gong, Y., Yang, C., Tu, X., Liu, W., Cao, S., et al., 2015. A comparison of quality of community health services between public and private community health centers in urban China. Med. Care 53 (10), 888–893. https://www.jstor.org/stable/26418062.

Yuan, B., Balabanova, D., Gao, J., Tang, S., Guo, Y., 2019. Strengthening public health services to achieve universal health coverage in China. BMJ 365, 12358. https://doi.org/10.1136/bmj.l2358.

Yue, P., Xu, T., Greene, B., Wang, Y., Wang, R., Dai, G., Xu, L., 2020. Caring in community nursing practice: inductive content analysis reveals an inter-dynamic system between patients and nurses. J. Clin. Nurs. 29 (15–16), 3025–3041. https://doi.org/10.1111/jocn.15312.

Zhou, W., Dong, Y., Lin, X., Lu, W., Tian, X., Yang, L., Zhang, X., 2013. Community health service capacity in China: a survey in three municipalities. J. Eval. Clin. Pract. 19 (1), 167–172. https://doi.org/10.1111/j.1365-2753.2011.01788.x.