

# “Bridging Gaps, Distorting Emotions”: The Double-Edged Sword of Surrogate Communication in Online Medical Consultations for Elderly Patients

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## Abstract

The digital divide in an aging China has fostered the prevalent phenomenon of "surrogate seeking" in online healthcare, where family members consult doctors on behalf of elderly patients. However, the impact of this mediation on the emotional dynamics of physician-patient communication remains critically under explored. Grounded in Social Support Theory and the Model of Patient-Centered Empathic Communication, this study employs discourse analysis of 100 consultation transcripts from leading Chinese online health platforms to unravel the patterns of emotional interaction. Our findings reveal a distinct divergence in emotional appeals: surrogates express concerns explicitly, while elderly patients convey them indirectly. Physicians predominantly respond with non-immediate empathy, prioritizing medical task completion. Furthermore, surrogate involvement demonstrates a dual-edged effect, acting as both an informational bridge and a source of emotional distortion. This study provides critical insights for designing age-friendly telemedicine interfaces and refining physician communication strategies in surrogate-facilitated consultations.

## Keywords

Online Healthcare; Elderly Patients; Discourse Analysis; Physician-Patient Communication; Surrogate Seeking.

## 1. Introduction

Population aging poses a profound challenge to healthcare systems worldwide, significantly escalating the medical demands of older adults. In response, telemedicine has emerged as a pivotal solution to enhance accessibility and convenience. In China, online consultation platforms have rapidly become a vital channel for older patients to bridge the gap in offline healthcare services.

However, the digital divide often prevents older patients from directly using these platforms, leading to a prevalent phenomenon of "surrogate seeking" — where family members, primarily adult children, act as intermediaries in doctor-patient communication. This triangular interaction fundamentally alters the dynamics of emotional communication. Surrogates tend to express explicit anxiety about disease risks and prognosis, while older patients often convey their concerns indirectly through detailed descriptions of physical discomfort. Consequently, physicians are faced with the complex task of adapting their emotional responses to this dual-audience, making the surrogate-patient-doctor emotional interplay a critical yet under-explored area of research.

Existing literature has primarily focused on either the operational barriers faced by older users of digital health platforms or broadly analyzed general physician-patient emotional communication. Little is known about the specific patterns of emotional expression and response within the unique context of surrogate-seeking. This creates a significant research gap:

the transfer of emotions, the divergence in needs between the parties involved, and the corresponding adaptation strategies of physicians remain unexamined.

To address this gap, this study employs discourse analysis to examine authentic online consultation transcripts. We aim to uncover the nuanced patterns of emotional interaction in surrogate-seeking scenarios and to theorize the dual-edged effect of surrogacy—as both an informational bridge and a potential source of emotional distortion. Our findings offer empirical evidence to optimize age-friendly online consultation design and physician communication strategies in an increasingly aging and digitally mediated society.

## 2. Literature review

### 2.1. Doctor-Patient Communication and Emotional Interaction in Online Consultations

With advancements in information technology, online medical consultation has emerged as a mainstream healthcare delivery model, prized for its convenience and accessibility [1]. Unlike traditional face-to-face interaction, online consultation relies on text-based media for communication. This characteristic reshapes doctor-patient interaction while simultaneously presenting new opportunities and challenges for emotional exchange.

On one hand, scholars widely recognize that the dual provision of informational and emotional support is crucial for successful online consultations. Empirical research by Si et al. [2], grounded in Social Support Theory, clearly indicates that when doctors' informational support—such as explaining disease risks and professional knowledge—is coupled with positive emotional expression, it significantly enhances patients' positive feedback and satisfaction. This confirms that in the virtual medical space, the accurate transmission of professional content is as important as empathetic resonance and reassurance.

On the other hand, the limitations of asynchronicity and the text-based medium pose obstacles to online emotional interaction. Communicating parties cannot utilize non-verbal cues such as facial expressions and body language to convey or interpret emotions [3]. To address this challenge, doctors have developed unique online empathy strategies. For instance, Hsu et al. [4] categorized these into *immediate empathy* (e.g., directly using reassuring language) and *non-immediate empathy* (e.g., indirectly alleviating patient anxiety by providing professional solutions). This task-oriented response mode has become a common choice for online doctors balancing efficiency and care.

However, the aforementioned conclusions are primarily based on an idealized model of direct, dyadic interaction between doctor and patient. When we turn our attention to the specific group of elderly patients, the situation becomes more complex. Due to the digital divide, they often cannot be the direct conductors of online consultations. This has led to the widespread phenomenon of "surrogate questioning," which introduces a critical third-party communicator, fundamentally altering the dyadic structure of emotional interaction described above. Consequently, the identification and response to emotions, already challenging in online communication, become considerably more complex and less predictable within a triadic relationship involving the surrogate, the patient, and the doctor.

### 2.2. Social Support Theory

Social Support Theory refers to the multidimensional resources individuals obtain from social relationships that promote physical and mental health, typically categorized into core dimensions such as instrumental, emotional, informational, and appraisal support [5]. In doctor-patient communication research, this framework is often used to analyze the assistance patients receive from doctors and caregivers. In the traditional dyadic doctor-patient communication model, the doctor is often presumed to be the primary provider of

informational and instrumental support, while also undertaking some role in emotional support.

However, in the triadic communication context of 'surrogate questioning,' the pathway for providing social support undergoes a structural shift. The surrogate (typically an adult child) assumes a dominant role in information transmission and instrumental help-seeking, while the elderly patient's own appeal for emotional support may be marginalized or distorted. Most existing research rigidly applies the dyadic support framework, overlooking the inherent tensions arising from this role separation. Specifically, they fail to address a key question: How do instrumental and emotional support interact when their providers are no longer the same person? And how does this interaction affect the quality of doctor-patient emotional communication? Therefore, this study will employ Social Support Theory to focus specifically on the interaction and tension between the instrumental support provided by surrogates and the emotional support needs of the patients themselves, thereby addressing the aforementioned gap.

### 2.3. Physician-Patient Empathy Theory

Physician-patient empathy is central to effective communication, referring to the process by which a doctor identifies and responds to a patient's emotional appeal[6]. The text-mediated and asynchronous nature of online consultations has reshaped the manifestation of empathy. Research shows that doctors' online empathy strategies can be broadly divided into two categories: immediate empathy (e.g., directly comforting emotions) and non-immediate empathy (e.g., indirectly responding to emotions by providing medical advice or solving problems).

Nevertheless, this classic empathy model is built upon an idealized conception of a "pure" dyadic doctor-patient relationship. When a surrogate intervenes as an "emotional interpreter," the doctor no longer faces a single source of emotion but rather a complex emotional composite comprising the "explicitly anxious surrogate" and the "implicitly anxious patient," which can be sometimes congruent and other times conflicting. Existing research has scarcely addressed the logic of empathy adaptation within this triadic communication. It cannot answer: Facing dual emotional signals, how should the doctor's empathetic resources be allocated? Should priority be given to responding to the high-volume surrogate, or to decoding the faint yet authentic signals of the patient? How does the application strategy of "immediate" versus "non-immediate" empathy systematically shift? Consequently, this study integrates the Model of Empathic Communication with Social Support Theory, aiming to construct an integrated analytical framework to systematically reveal the logic of doctors' emotional responses within the complex communication field of the surrogate questioning scenario.

## 3. Research Design

### 3.1. Data Sources

This study collected a corpus of 100 publicly available authentic doctor-patient dialogue transcripts from three leading online healthcare platforms in China: "Haodf.com," "Dingxiang Doctor," and "Chunyu Doctor." The final corpus comprises over 300 conversational turns and more than 30,000 words. It covers 17 medical departments, including Gastroenterology, Internal Medicine, Cardiothoracic Surgery, Spinal Surgery, Dermatology, Cardiovascular Medicine, and Neurology, encompassing both common and severe medical conditions.

The transcript selection adhered to the following criteria: (1) the patient's age was 60 years or older; (2) the session was complete, containing a description of symptoms, the doctor's response, and subsequent follow-up exchanges, forming at least one complete conversational turn. Transcripts containing advertisements or invalid inquiries were excluded. All selected

transcripts underwent rigorous anonymization to remove any personally identifiable information, ensuring compliance with academic research ethics. Within the final sample, 70 sessions were initiated by surrogates, while 30 were initiated by the patients themselves.

### 3.2. Research Method

This study employs a qualitative research approach, utilizing discourse analysis. This method focuses not only on the meaning and structure of language itself but also emphasizes its function and use within specific social contexts, such as online medical consultations.

The analytical process proceeded as follows: Preliminary cleaning of the corpus was conducted to remove content unrelated to emotional interaction, such as phatic communions and formalities. The researchers repeatedly reviewed the collected transcripts to gain an immersive understanding. This constituted the core of the analysis. We first performed open coding, allowing initial concepts like "fear of recurrence" and "describing pain" to emerge naturally from the data. This was followed by axial coding, which categorized these initial concepts into broader themes. For instance, "fear of recurrence" and "inquiries about cure rates" were grouped under the theme "risk anxiety regarding prognosis." Finally, through selective coding, core categories were established, namely "direct/indirect emotional appeals" and "immediate/non-immediate empathetic responses." The entire coding process was conducted independently by the researcher, with ambiguous cases subjected to repeated discussion and confirmation to ensure the reliability of the analysis.

### 3.3. Research Questions

This study is guided by the following three research questions:

RQ1: What are the types and distinctive expressive features of emotional appeals made by elderly patients versus their surrogates on online consultation platforms?

RQ2: What are the types of emotional responses deployed by doctors towards elderly patients and their surrogates, and what strategic differences exist in these responses?

RQ3: How does the phenomenon of surrogate questioning influence the dynamics and effectiveness of emotional interaction within the doctor-patient-surrogate triad?

## 4. Findings

### 4.1. Differences in Emotional Appeals Between Elderly Patients and Surrogates

Patients' emotional appeals can be categorized into direct and indirect types. The core features, manifestations, and distribution of these appeals are systematically presented in Table 1 below.

Table 1. Typology and Distribution of Emotional Appeals in the corpus (n=100)

Type of Emotional Appeal	Core Features & Definition	Primary Manifestations	Data Distribution
Direct emotional appeal	Conveying worries and anxiety explicitly through direct questions and the unambiguous use of emotional vocabulary, without implicit or ambiguous expression.	Use of negative verbs or adjectives such as "worry", "fear", "anxiety", and "suffering".	54 cases (54%)
Indirect emotional appeal	Signaling anxiety implicitly through context, behavior, or indirect expression	1. Verbal Hints (Core type): Questions or exclamations regarding abnormal symptoms or uncertainty about the	76 cases (76%)

	rather than direct emotional words; the cues are subtle.	illness. 2. Neutral Expressions: Repeatedly inquiring about the condition; mentioning practical constraints like financial costs.	
Note: 40 cases employed both types of appeals concurrently.			

The analysis further distinguishes between appeals expressed by patients themselves and those by surrogates.

**4.1.1. Patients Themselves**

Direct Emotional Appeals from Patients

Example 1: A patient (67 years old, with a history of cerebral thrombosis), after describing redness and swelling of the right eyelid, explicitly stated: "I'm mainly worried it's related to cardiovascular or cerebrovascular disease," and asked, "Could it be related to cerebral thrombosis?"

Analysis: This case, through the direct use of the word "worried" (担心), exemplifies how elderly patients overtly express health anxiety by linking new symptoms to their pre-existing conditions, representing a typical direct emotional appeal.

Direct Emotional Appeals from Patients

Example 2: Patient's Utterance: "For many years, I've felt gas in my stomach. Recently, I can't even walk properly. At night, when I lie down, I feel the gas choking my throat and then wake up in the middle of the night. The medicine didn't work... What I hope to get help with: Could it be some malignant disease?" (After the doctor suggested a follow-up gastroscopy) The patient added: "I feel uneasy in my heart, just afraid it might be some bad disease."

Analysis: This patient extensively used vague somatic sensation descriptors like "gas in the stomach" and "choking my throat," emphasizing the chronicity ("many years") and intractability ("didn't work") of the symptoms before finally hinting at the fear of a "malignant disease." This typically illustrates how elderly patients transform abstract health anxiety into repeated statements about specific, persistent, and abnormal bodily feelings—a highly covert form of emotional appeal.

**4.1.2. Surrogates**

Direct Emotional Appeals from Surrogates

Example 3: An elderly patient, initially treated for leg pain as an orthopedic issue, was found to have lung shadows on a CT scan after a fall resulting in a knee fracture, later diagnosed with lung cancer bone metastasis. The family member, acting as surrogate, expressed anxiety about the treatment direction, fearing it would "only prolong life with medication/chemotherapy," worried about the possibility of no cure, and urgently sought to clarify the next steps.

Surrogate's Utterance: "It's confirmed lung cancer with bone metastasis. What should we do now? Can it still be treated?"

...

Surrogate's Utterance: "For a condition that has metastasized like this, in the later stages, you can only rely on drugs or chemotherapy to prolong life, right? There's no possibility of a cure, right?"

Analysis: The surrogate employs absolute and negatively hypothetical sentence patterns like "only...right?" and "no...right?" to verbalize the worst-case fears of "treatment ineffectiveness" and "incurability." This directly exposes the surrogate's core emotional appeal, reflecting both fear of the disease itself and direct doubt about the "meaningfulness of treatment."

Indirect Emotional Appeals from Surrogates

Example 4: Neutral Expression: Repeated Confirmation

Surrogate's Utterance: "How should my mother take Amlodipine? Does she need to continue taking Calcitriol?"

(After the doctor's explanation)

Surrogate: "So, should she continue with the Calcitriol?"

(After the doctor suggested a blood test)

Surrogate: "Is the check-up necessary? What specific results would indicate she needs to take it?"

Surrogate: "What items should be included in the re-examination in one month?"

Analysis: The surrogate repeatedly ask about the mother's medication regimen. Throughout this exchange, no explicit emotional vocabulary is used. However, the intensive seeking of confirmation regarding medication details, test indicators, and follow-up plans powerfully and indirectly exposes the surrogate's profound anxiety about treatment safety and illness monitoring.

Example 5: Neutral Expression: Practical Constraints

Surrogate's Utterance: "What is the approximate cost of the immunotherapy?"

...

Surrogate: "If we come to see you on the 2nd, can all the procedures be completed on the same day? Because we are from Huangshi, it's a bit inconvenient."

Analysis: The surrogate's first question focuses directly on the economic cost of treatment. The subsequent question, using the neutral term "inconvenient," indirectly reveals the underlying anxiety about the complexities and additional burdens of seeking medical care in another city. By focusing on these practical constraints 'beyond the illness itself,' the surrogate indirectly communicates implicit anxiety about the financial pressure and overall feasibility of the treatment, aligning with the provision of instrumental support while simultaneously signaling an emotional appeal.

**4.1.3. The Surrogate Effect: A Typifying Case**

Example 6: When a family surrogate sought consultation regarding alcohol withdrawal symptoms, they first clearly stated: "My father has a 20-year history of alcohol use and alcoholic liver disease. On the second day after quitting drinking three days ago, he developed weakness in all four limbs." (Informational Supplementation). Subsequently, they expressed extreme anxiety: "I'm really scared... Could he develop delirium tremens? Is there any life danger?... I'm truly afraid of subsequent sequelae, like a sudden epileptic seizure." (Emotional Distortion).

Analysis: This case vividly encapsulates the dual role of the surrogate. On one hand, they function as an efficient information integrator (providing instrumental support), supplying the physician with critical medical history. On the other hand, they act as an amplifier of anxiety (resulting in distorted emotional support), superimposing their own panic and unverified extreme speculations onto the narrative.

**4.1.4. Divergence in Emotional Expression Focus Between Elderly Patients and Surrogates**

Table 2. Contrasting Focus in Emotional Expression: Elderly Patients vs. Surrogates

Analytical Dimension	Elderly Patients	Surrogates
Primary Type of Emotional Appeal	Predominantly Indirect / Implicit	Predominantly Direct / Explicit

Core Expressive Focus	Somatic Sensations & Immediate Discomfort	Disease Prognosis & Risk Assessment
Typical Discourse Features	Descriptive, narrative language, detailing physical feelings.	Interrogative, inquisitive language, frequently using questions to seek certainty.
Core Concerns	Alleviation of current suffering and implicit anxiety about the meaning of symptoms.	Treatment safety, long-term outcomes, and concerns regarding their own guardianship responsibility.
Underlying motivation	Higher sensitivity to bodily changes. Tendency to use concrete sensations as proxies for abstract concerns. Psychology of "unwillingness to be a burden."	Fulfillment of guardianship and instrumental support duties. Perceived responsibility for the patient's health translating into risk anticipation.

This table systematically presents the significant divergence in emotional expression between elderly patients and their surrogates within the online consultation context. This divergence reveals fundamental differences in their cognitive dimensions, communicative roles, and core concerns, which constitute the structural underpinnings of the observed phenomenon wherein surrogates become the explicit voice while patients recede into implicitness during triadic emotional interaction.

#### 4.2. Analysis of Doctors' Emotional Response Strategies

Doctors' emotional responses can be broadly categorized into immediate empathy and non-immediate empathy. Through our coding analysis of the corpus, we identified a distinct pattern: doctors' responses are predominantly characterized by non-immediate empathy (86%) and are guided by a core logic of task-prioritization. The specific strategies, discursive features, and distribution of these responses are detailed in Table 3 below.

Table 3. Strategies and Distribution of Physicians' Emotional Responses (n=100 Sessions)

Type of Response	Specific Strategies	Discursive Features	Distribution
Immediate Empathy	Eliminating Negative Emotions Emotional Normalization Understanding and Concern	Phrases such as: "Don't worry," "No need to worry," "This is quite common."	42 cases (42%)
Non-Immediate Empathy	1. Providing Medical Advice 2. Minimizing the Problem	Offering specific treatment, medication, or examination plans; alleviating excessive patient anxiety through professional interpretation.	86 cases (86%)

Note: 14 cases incorporated strategies from both categories.

##### 4.2.1. Immediate Empathetic Responses

Immediate empathetic responses are categorized into eliminating negative emotions, emotional normalization, and demonstrating understanding and concern. Among these, eliminating negative emotions was the most frequently observed type.

#### Example 7: Eliminating Negative Emotions

Patient: "If conservative treatment is ineffective, will I be able to walk and run normally after synovectomy? I have pain in both knees."

Doctor: "Surgery would only be considered if a clear lesion is identified. Generally, conservative treatment is sufficient. There's no need to worry too much. Take medication for a period, and we can reconsider if it proves ineffective."

Analysis: The doctor strictly confines the scenario for surgery with the phrase "only...if a clear lesion is identified" and emphasizes the efficacy of conventional treatment with "conservative treatment is sufficient," thereby fundamentally lowering the perceived threat level of the condition. Finally, by directly reassuring the patient ("no need to worry too much") and providing a clear plan of action ("take medication...reconsider if ineffective"), the doctor effectively transforms the patient's anxiety into a controllable process.

#### Example 8: Emotional Normalization

Patient: "Otherwise, I'm okay, just worried that the urinary tract infection might affect wound healing. Fortunately, there's some improvement after taking oral medication."

Doctor: "It's not a major issue. This situation is quite common. Just ensure you drink plenty of water and get more bed rest. It will get better."

Analysis: This response employs a universality strategy—"quite common"—to reframe the patient's individual worry as a frequently encountered problem. Combined with the direct qualification of "not a major issue" and subsequent behavioral guidance, it swiftly dispels the patient's anxiety.

#### Example 9: Demonstrating Understanding and Concern

Patient: "Thank you for your care, Dr. Kong."

Doctor: "You should also take good care of your own health."

Analysis: The doctor directly expresses concern for the patient's well-being, moving beyond a mere polite acknowledgment of the thanks. This response serves to redirect the focus onto the patient's self-care, reinforcing the health message within a supportive context.

### 4.2.2. Non-Immediate Empathetic Responses

#### Example 10: Providing Medical Advice

Patient (Elderly): "Have had liver cirrhosis for over 5 years. Doctor, is my condition serious? Am I taking the right medications? Or should I switch to others? What should I pay attention to in daily life? What foods should I eat more of, and what should I avoid? Thank you very much. How often should I get check-ups normally? What tests should be done? Things like ultrasound, liver function, viral load, tumor markers? Should I avoid catching a cold and keep warm? I've always had hepatitis B. Here is my recent ultrasound report."

Doctor: "You can increase your water intake a bit more; ideally, your daily urine output should reach 2.0-2.5 liters. If amlodipine controls your blood pressure well, you can stop taking benazepril. We aim to keep blood pressure consistently below 130/80. You should moderately control protein intake in your diet. Roughly estimating, one egg per day, two to three ounces of lean meat or fish, one cup of milk—other high-protein foods need to be restricted. If a recheck of serum creatinine in one month still shows an upward trend, we may need to add intestinal detoxification medication. Next month, check complete blood count, renal function, electrolytes, blood lipids, blood PTH, and urinalysis."

Analysis: The doctor completely bypasses the emotional core of the patient's question—"Is my condition serious?"—and instead provides extremely detailed instrumental support regarding fluid intake, medication, diet, and follow-up plans. This follows an "action precedes emotion" logic. By constructing a clear pathway of medical actions, the doctor resolves the

anxiety stemming from uncertainty and guides the patient away from feelings of helplessness towards controllable, operational steps.

Example 11: Eliminating / Minimizing the Problem

Patient: "I've had persistent pain in my right rib cage for a week after being kicked. Could it be a liver rupture?"

Doctor: "Don't worry. It's been a week; it absolutely cannot be a liver rupture."

Analysis: Using the definitive professional assertion—"absolutely cannot be"—based on the progression timeline of the condition, the doctor directly and thoroughly severs the patient's "catastrophic thinking." Although this response lacks explicit emotional vocabulary, it rapidly eradicates the primary source of fear, thereby creating the necessary psychological space for subsequent rational diagnosis and treatment recommendations.

**4.2.3. Group-Specific Differences in Doctors' Emotional Responses**

Doctors' emotional responses exhibited significant adaptive differences based on the recipient. As detailed in Table 4 below, their strategies were flexibly adjusted depending on whether they were communicating with the elderly patient themselves or with a surrogate. This variation essentially represents the concrete application of the core "task-prioritization logic" to different interlocutors.

Table 4. Adaptation of Doctors' Empathetic Response Strategies by Communication Partner

Communication Partner	Immediate Empathy Strategies	Non-Immediate Empathy Strategies
Elderly Patient	Focused on direct reassurance, e.g., "Don't worry, we'll know more after some tests."	Focused on direct procedural guidance, e.g., "Just get a blood count and renal function test next month."
Surrogate	Incorporated information verification, e.g., "Please confirm if the patient has hypertension. Don't be too anxious."	Incorporated risk explanation, e.g., "The follow-up tests should include blood PTH to avoid missing the risk of renal osteodystrophy."

This systematic differentiation reveals doctors' role-management competence within complex communication environments. When engaging with surrogates, their role aligns more closely with that of a "Supervisor," necessitating the assurance of information accuracy and informed decision-making. Conversely, when interacting with the elderly patients themselves, their role shifts predominantly to that of a "Comforter," dedicated to providing a clear, simplified pathway and direct emotional support.

**5. Discussion**

**5.1. Underlying Causes of Divergent Emotional Appeals Between Patients and Surrogates**

The observed divergence in emotional appeals—"explicit in surrogates versus implicit in patients"—can be effectively interpreted through the lens of Social Support Theory, revealing a fundamental role conflict inherent in this triadic communication. The implicit expression of elderly patients stems not only from a psychological mechanism of "unwillingness to be a burden" but also reflects their primary role positioning within the medical encounter as seekers of emotional support. When they describe concrete symptoms like "gas in the stomach," they are, in essence, expecting the doctor to interpret and respond to the health anxiety concealed behind these somatic sensations.

Conversely, the explicit anxiety exhibited by surrogates originates from their assumed duty of providing instrumental support. Their persistent inquiries about "sequelae" and "cure rates" are a direct manifestation of their fulfillment of guardianship responsibilities and their engagement in risk assessment. This divergence uncovers a core contradiction in the online surrogate-consultation context: while surrogates efficiently provide instrumental support, they may inadvertently overlook or even substitute the patient's core need for emotional support, thereby obstructing the channel of emotional transmission.

## 5.2. The "Task-Prioritization" Logic of Physician Empathy

The high prevalence of "non-immediate empathy" and the overarching "task-prioritization logic" among doctors can be deeply explained from the perspective of the Model of Empathic Communication. The text-mediated nature of online consultations amplifies the risk of informational misunderstanding. Facing elderly patients whose statements are often characterized by informational redundancy (as exemplified by the patient in Example 10 inquiring simultaneously about condition, medication, diet, and follow-up), the doctor's primary empathetic act is not immediate emotional synchrony but rather prioritizing the safeguarding of medical safety through professional information integration.

Consequently, the physician's "non-immediate empathy" can be understood as a "safety-first" mode of empathy. For instance, in Example 11, the doctor eliminates the patient's catastrophic thinking by stating, "Don't worry, it absolutely cannot be a liver rupture." In Example 10, certainty is constructed by providing detailed guidance on hydration, medication, and follow-up plans. The essence of both strategies lies in achieving a deeper and more responsible form of empathy by addressing the root cause of the anxiety itself.

## 5.3. The Double-Edged Sword of the Surrogate Effect

The dual-edged effect of "compensatory bridging" and "emotional distortion" presented by surrogates is rooted in the intrinsic role conflict illuminated by Social Support Theory. Surrogates simultaneously play two roles: the "information agent" and the "emotional guardian." A natural tension exists between the types of support demanded by these dual roles. As an "information agent," the surrogate's core function is to provide instrumental support. As seen in Example 6, the family member clearly outlined the patient's drinking history, underlying conditions, and the timeline of withdrawal reactions. This compensatory behavior efficiently remedied the patient's own expressive limitations, provided the doctor with crucial professional information, and significantly enhanced the efficiency and accuracy of the consultation.

As an "emotional guardian," however, the surrogate almost inevitably becomes an interferer with emotional support. Driven by a profound sense of responsibility and concern for the patient's health, their own anxiety is unconsciously projected into the consultation. Again, in Example 6, the surrogate's addition of extreme worries about "epilepsy" and "life danger" constitutes a form of distortion. This essentially superimposes their own panic onto the patient's emotional appeals, a mechanism that aligns with the theory of emotional contagion within close relationships.

## 6. Recommendations

### 6.1. Building a Collaborative Online Consultation Platform

Online platforms should be redesigned to guide surrogates in transitioning from being an "interference source" to becoming a "collaborative partner," thereby bridging the gap between instrumental and emotional support.

First, a dual-role consultation model could be implemented. Within the surrogate-initiated consultation process, the system should mandatorily distinguish between the two types of support. This can be achieved by establishing two distinct sections: an "Objective Information Column" for the surrogate to fill in medical history, symptoms, and other instrumental details, and a "Patient Experience Column" that uses pre-set templates or voice input to guide the recording of the patient's own somatic sensations and worries, e.g., "Where is your greatest discomfort?" or "What is your biggest fear?". This design systematically captures the patient's implicit emotional appeals that might be filtered out by the surrogate, providing doctors with a more comprehensive basis for empathy.

Second, an "Emotional Appeal Recognition and Assistance System" should be developed. Leveraging Natural Language Processing (NLP) technology, this system would identify signals of indirect emotional appeals in consultation texts—such as repeated questioning, ambiguous emotional vocabulary, or concerns about sequelae. It could then push alerts to doctors, e.g., "Potential implicit anxiety detected; please consider addressing the emotional needs." This would significantly enhance doctors' sensitivity to complex emotional cues online and compensate for potential empathic lag caused by information overload.

## 6.2. Formulating Precision-Empathy Communication Strategies for Doctors

On one hand, training must reinforce the identification and response to indirect emotional appeals, equipping doctors with the skill to decode the "somatized language" of elderly patients. When a patient repeatedly describes symptoms, the doctor should proactively respond to the underlying emotional appeal. For instance, employing standardized empathic phrases like, "I hear you've been mentioning the 'gas in your stomach' frequently; it sounds really worrying. We'll investigate to give you peace of mind." This approach integrates the medical-safety logic of non-immediate empathy with the emotional-reassurance need of immediate empathy at the outset.

On the other hand, differentiated response strategies for surrogates and patients should be formulated. For example, when engaging with surrogates, after they have provided instrumental support, doctors should consciously engage in information calibration and emotional inquiry. A follow-up question such as, "Thank you for this clear information. Based on your observation, what is the discomfort or feeling the elderly person complains about or finds most distressing in their daily life?" can be used. This strategy aims to guide the surrogate to shift from their own anxious perspective and instead articulate the patient's lived experience, thereby correcting potential emotional distortion and obtaining clues closer to the patient's own emotional appeals. Conversely, when communicating directly with the elderly patient, prioritizing a concise, reassuring "meta-empathy" statement before delivering task-oriented medical advice—such as, "Let's not panic; we'll work through this step by step"—can compensate for the emotional response lag inherent in the "task-prioritization" logic and help establish initial trust.

## 7. Conclusion

This study, through a discourse analysis of 100 online consultation transcripts involving elderly patients, reveals a core dynamic of emotional interaction: surrogate-mediated emotional transmission coupled with doctor-driven task prioritization. Specifically, our findings indicate a distinct divergence in emotional appeals: surrogates primarily express anxiety directly, focusing on confirming disease risks (e.g., sequelae, life-threatening outcomes), whereas elderly patients predominantly communicate indirectly, centering their worries on the association of symptoms with pre-existing conditions (e.g., linking symptoms to cerebral thrombosis or liver cirrhosis). This creates a clear dichotomy of explicit versus implicit appeals. Correspondingly, doctors' responses are predominantly characterized by non-immediate

empathy (86%), adhering to a task-prioritizing and emotionally-deferred logic. They strategically adapt their approach, emphasizing information verification and risk clarification with surrogates, while favoring concise reassurance and step-by-step guidance with the patients themselves, thereby aligning with the distinct informational and emotional needs of the two groups.

The surrogate phenomenon, as a central intermediary in online consultations for the elderly, functions as a double-edged sword, manifesting both compensatory bridging and emotional distortion. On one hand, surrogates effectively bridge the expressive deficits and the digital divide faced by elderly patients, enabling doctors to grasp critical clinical information rapidly and mitigating consultation inefficiencies stemming from age-related declines in linguistic organization and technological proficiency. On the other hand, surrogates can introduce significant distortions into the emotional transmission, primarily through two mechanisms: (1) Anxiety Amplification: heightening and projecting their own intense anxieties (e.g., losing sleep over worry); and (2) Needs Omission: inadvertently filtering out or failing to convey the patient's authentic emotional concerns, potentially leading to a skewed perception of the patient's true emotional state by the doctor.

This study has several limitations. The sample was drawn solely from three major commercial platforms ('Haodf.com,' 'Dingxiang Doctor,' 'Chunyu Doctor') and did not include consultation data from local hospital-owned platforms, which may affect the generalizability of the findings. Furthermore, the exclusive use of discourse analysis, without incorporating quantitative metrics such as patient satisfaction or doctor empathy scores, limits our ability to quantify the impact of these emotional interactions on doctor-patient trust. Future research should expand the sample size to 200-300 transcripts and adopt a mixed-methods approach integrating discourse analysis, in-depth interviews, and questionnaires. This would allow for a deeper investigation into the psychological mechanisms underlying surrogate 'anxiety amplification' (e.g., how perceived responsibility intensity influences emotional transmission) and enable the quantification of the relationship between doctors' 'non-immediate empathy' and elderly patient satisfaction, thereby providing a more robust evidence base for refining precision-oriented emotional interaction strategies.

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