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## How Can Undifferentiated Diseases Achieve Synchronous Resonance with General Practice? Postprint Fang Lizheng<sup>1</sup>, Yang Hui<sup>2</sup>, Zhu Shanzhu<sup>3</sup> 1. Sir Run Run Shaw Hospital, Zhejiang University School of Medicine 2. The George Institute for Global Health, University of New South Wales 3. Zhongshan Hospit...

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**Date:** 2023-06-19T00:00:00+00:00

### Abstract

Medically Unspecified Disease (MUD) is a common clinical problem. As “gatekeepers of health,” correctly identifying and scientifically managing common unspecified diseases at first diagnosis is a fundamental skill that every general practitioner should master. However, current general practice workers and researchers have varying levels of understanding of MUD, standardized diagnostic and treatment protocols for MUD have not yet been formed, and scientific research related to MUD is relatively weak. The academic issue of “General Practice and Medically Unspecified Disease” has become a priority problem that urgently needs to be addressed in China’s general practice field. Therefore, this article focuses on this “fundamental question of general practice” and organizes relevant experts to conduct discussions to explore the “approach of general practice” for this issue. The discussion content includes six modules: “Demonstrating the Disciplinary Identity of General Practice: Current Status and Future of MUD Development in China,” covering the naming, current development status, and future of MUD; “How to Conduct Teaching and Training on MUD in General Practice,” covering training methods for students to correctly understand MUD, rapidly identify “red flags” and exclude “syndromes,” and improve doctor-patient shared decision-making ability and follow-up awareness; “How General Practice Departments in General Hospitals Conduct Scientific Research on MUD,” covering methods for conducting scientific research on MUD etiology and pathogenesis, diagnosis, intervention, prognosis, prevention, and

medical education; “How to Demonstrate the Characteristics of General Practice in Municipal and County-Level Hospitals Starting from MUD,” covering methods for establishing MUD outpatient and inpatient wards in municipal (county) hospitals and improving the professionalism of general practitioners in MUD diagnosis and treatment; “How Community General Practitioners Can Early Identify and Long-term Manage MUD,” covering management methods for pre-recognition intervention, during-recognition handling, post-recognition handling, and long-term follow-up; and “Listening for the Subtext: Doctor-Patient Communication Issues in MUD,” which considers communication as the core of MUD diagnosis and treatment, while analyzing patient needs for communication and physician reflection on communication. Each section suggests further research directions that scholars may consider, hoping to stimulate more in-depth and specific general practice research.

## Full Text

### Preamble

ChinaXiv Partner Journal • Asking General Practice • [Editor’s Note] China’s general practice development has achieved initial success, yet gaps remain compared to international standards—particularly in disciplinary construction and high-quality research output. Therefore, general practitioners must forge ahead through reflection. To this end, this journal launches the “Asking General Practice” column, organizing expert discussions on frontier research topics and hot/difficult issues facing China’s general practice development, aiming to advance the field.

Undifferentiated diseases are common clinical problems. As health “gatekeepers,” correctly identifying and scientifically managing common undifferentiated diseases during initial diagnosis is a fundamental skill every general practitioner should master. However, current understanding among general practice workers and researchers varies considerably, diagnostic and treatment standards remain unformed, and related scientific research is relatively weak. Therefore, this issue invites Professor Ren Jingjing as section editor to discuss “General Practice and Undifferentiated Disease Management”—a priority issue urgently needing resolution in China’s general practice field—hoping to stimulate more in-depth and concrete general practice research. [Forum Organizer] Ren Jingjing, Director and Doctoral Supervisor, Department of General Practice, First Affiliated Hospital, Zhejiang University School of Medicine.

Academic Appointments: Member of General Practice Branch, Chinese Medical Association; Incoming Chair of General Practice Branch, Zhejiang Medical Association; Standing Committee Member of General Practice Branch, Chinese Medical Doctor Association; Standing Committee Member of General Practice Branch, Cross-Strait Medical Exchange Association; Member of General Practitioner Education and Training Expert Committee, Chinese Medical Doctor Association; Vice Chair of General Practice Branch, China International Exchange

and Promotive Association for Medical and Health Care; Chair of Undifferentiated Diseases Committee, Zhejiang Mathematical Medicine Society.

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## How Can Undifferentiated Diseases Be Synchronized with General Practice?

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### Article Quick Read:

- Highlighting General Practice Disciplinary Identity: Current Status and Future of Undifferentiated Disease Development in China
  - How to Conduct Teaching and Training for General Practice Undifferentiated Diseases
  - How General Hospitals' General Practice Can Lead Undifferentiated Disease Scientific Research
  - How Municipal/County Hospitals Can Demonstrate General Practice Characteristics Through Undifferentiated Diseases
  - How Community General Practitioners Can Early Identify and Long-term Manage Undifferentiated Diseases
  - Listening Between the Lines: Doctor-Patient Communication Issues in Undifferentiated Diseases
- 

### Highlighting General Practice Disciplinary Identity: Current Status and Future of Undifferentiated Disease Development in China

Pan Qi, Ren Jingjing\*

#### Question 1: How are undifferentiated diseases named?

In 1985, physicians Slavney and Teitelbaum proposed the concept of medically unexplained symptoms (MUS). Currently, China names this category as Medically Unspecified Disease (MUD), referring to diseases or conditions at any stage where a definitive diagnosis cannot be made based on clinical manifestations and examination results, such as fatigue, weight loss, and edema. Characteristics include: repeated visits for one or multiple symptoms, signs, or abnormal test results; mostly normal or mildly abnormal physical examinations and auxiliary tests; temporary inability to attribute to definite organic disease; frequent coexisting psychological issues; and possible long-term coexistence with the individual. Clinically, this includes diseases not yet definitively diagnosed due to both subjective physician factors and limited objective examination methods. Treatment and management typically require long-term follow-up by general practitioners through comprehensive measures including symptomatic treatment, supportive care, cognitive therapy, narrative medicine, and traditional Chinese

medicine. This concept was introduced to China by the Department of General Practice at First Affiliated Hospital, Zhejiang University School of Medicine in 2014, and after nearly a decade of clinical practice and scientific research, has begun to take shape. Although this nomenclature may not be optimal and has not yet entered MeSH subject headings, this does not hinder general practitioners' exploration in this field.

**Question 2: What is the current development status of MUD in China?**

Currently, diagnostic criteria for MUD remain unstandardized, yet epidemiological data are increasingly available. Cui Lijun et al. [1] found through an epidemiological survey that approximately 6.92% of the general population meets MUD diagnostic criteria, with MUD patients accounting for about 18.2% of internal medicine and neurology outpatient visits in general hospitals, and 18.6%-21.3% of patients in general practice clinics [2]. Some MUD patients often accompany psychological issues like depression, indicating certain correlations between MUD and patients' psychological and mental states [3]. Therefore, general practitioners must follow the bio-psycho-social medical model for comprehensive diagnosis during MUD assessment, identify potential physical diseases, and conduct multidisciplinary, multi-angle comprehensive evaluations for complex cases. Treatment focuses primarily on non-pharmacological approaches like cognitive behavioral therapy, healthy lifestyle interventions, and traditional Chinese physiotherapy, supplemented by symptomatic pharmacotherapy.

Compared with specific acute and chronic diseases, general practitioners' awareness and management capabilities for MUD remain insufficient. Zhang Hanzi et al. [4] found that community health service centers' coverage of MUD diagnosis and treatment capability training, initial management protocols, and referral settings all fall below 50%. Zhou Yingda et al. [5] identified that current general practitioners perceive insufficient MUD management capabilities may relate to limited treatment and examination methods at community health centers, limited professional competence, inadequate medical consortium coordination, insufficient patient trust in primary care and general practitioners, and lack of available clinical pathways or clinical decision support systems. Other studies suggest domestic community general practitioners have blind spots in MUD management, and existing guidelines/expert consensus lack clear definitions for specific MUD management content [6]. According to incomplete statistics, over 50 general practice departments in general hospitals nationwide have established MUD-related clinics to provide multi-dimensional, comprehensive medical services while continuously exploring MUD diagnosis and treatment standards.

**Question 3: How should MUD develop in the future?**

- (1) **Draft MUD clinical guidelines/expert consensus to standardize diagnosis and treatment.** General practitioners occupy a central position in MUD management, yet current practice strategies lack system-

atic standardization [7]. The current stage requires developing general practice-oriented clinical pathways for undifferentiated diseases, standardizing community diagnostic coding, focusing on advantageous disease categories, researching MUD assessment tools and management frameworks suitable for China, exploring stepped management protocols, adhering to the bio-psycho-social medical model, emphasizing doctor-patient communication and humanistic care, exploring diversified treatment options, and improving Chinese MUD diagnosis and treatment guidelines/expert consensus to promote homogeneous MUD management capabilities among general practitioners.

- (2) **Strengthen MUD competency training to enhance general practitioners' initial diagnosis capabilities.** Professor Yu Xiaosong proposed incorporating continuous MUD patient management capability into residency competency evaluation standards [8]. Ren Jingjing's *Manual for Diagnosis and Treatment of Common Undifferentiated Diseases in General Practice* (3rd edition) has been included in the 14th Five-Year National Health Commission's general practice planning textbooks. Future efforts should strengthen general practitioners' MUD competency training to substantially improve initial diagnosis capabilities and facilitate tiered diagnosis and treatment.
- (3) **Create undifferentiated disease and multimorbidity centers with multidisciplinary linkage.** Zhou Yafu et al. [10] proposed that general practice departments in general hospitals should become diagnosis and treatment centers for undifferentiated diseases and multimorbidity, providing multidisciplinary comprehensive care. Municipal/county general hospitals should establish MUD clinics and centers, leveraging general practitioners' advantages in comprehensive MUD management to conduct specialized file establishment, health assessment, and follow-up management. Simultaneously, using the internet as a medium through county medical communities, cross-regional medical alliances, and telemedicine networks to achieve vertical linkage, becoming the hub and link for "community-general practice-specialist" tiered diagnosis and treatment and "hospital-community" two-way referrals, driving joint development with community health service centers to further standardize MUD clinical pathways.
- (4) **Focus on interdisciplinary integration and strengthen MUD scientific research.** Scientific research is a crucial endogenous force for general practice disciplinary development. General hospitals and community health service centers should enhance collaboration, encourage primary general practitioners to participate in large-scale, high-quality multicenter MUD studies, integrate research resources, focus on interdisciplinary integration, and enhance general practice disciplinary identity. Currently, the biological basis of MUD occurrence and development remains unclear, lacking quantifiable objective indicators. We call for establishing a "General Practice" discipline code in the National Natural Science Foundation

and other research programs through various channels, enabling general practitioners to achieve breakthroughs in MUD etiology research (physiological, psychosocial, and genetic factors), biomarker research, and related pathological mechanism studies, promoting clinical validation and application of MUD characterization systems.

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## How to Conduct Teaching and Training for Undifferentiated Diseases in General Practice

Zhang Meng<sup>1</sup>, Yin Zhaoxia<sup>2\*</sup>

The fundamental goal of current MUD teaching is to flexibly apply diversified teaching models to guide students in understanding MUD connotations and help them establish diagnostic reasoning from identifying “red flags” and screening “symptom clusters” to achieving optimal clinical decisions through doctor-patient communication and regular follow-up.

### Key Point 1: Correct Understanding of MUD

Regarding MUD definition, students should understand three connotations: (1) diagnosis cannot be made after all conceivable examinations, yet a definite disease cannot be completely excluded; (2) symptoms may persist for extended periods; and (3) quality of life may be affected to some extent [1].

### Key Point 2: Rapid Identification of “Red Flags” and Screening of “Symptom Clusters”

Diagnosing undifferentiated diseases emphasizes exclusion as much as definitive diagnosis. Both British and American general practitioner training models attach great importance to inquiring about and identifying warning symptoms [2]. Teaching should emphasize rapid identification of “red flags”—warning signals pointing to life-threatening or serious diseases. Second, combining Murtagh’s triad and diagnostic fundamentals can continuously reinforce students’ memorization of “symptom clusters” to rapidly associate and exclude definitively diagnosable diseases.

### Key Point 3: Emphasizing Shared Decision-Making and Follow-Up

MUD symptoms may represent early manifestations of certain diseases but more often are functional discomforts caused by psychosocial factors. Due to diagnostic uncertainty, traditional disease-centered diagnostic and therapeutic thinking faces challenges. Physicians must focus not only on the disease itself but also on patients’ lifestyles, social environmental factors, perspectives on their health problems, and expectations for medical care. Therefore, shared decision-making is crucial in each clinical encounter. Moreover, because MUD follows a chronic course and single visits rarely achieve diagnosis, patients desire convenient, accessible, and continuous care, making follow-up particularly important. Thus, we should: (1) cultivate students’ shared decision-making abilities, including

at least four dimensions—solid professional knowledge (diagnostic fundamentals, symptomatology fundamentals, memorizing Murtagh’s triad), proficient literature review skills (excluding rare diseases), establishing patient empathy and compassion, and developing good communication skills, with recommended teaching methods being scenario simulation and role-playing; (2) help students understand the importance of follow-up and guide them on how to conduct it properly.

**Key Point 4: Clinical Management Processes and Diversified Teaching Model Entry Points**

Specific processes and teaching designs can be accessed by scanning QR codes.

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## How General Practice in General Hospitals Can Lead Scientific Research on Undifferentiated Diseases

He Quan, Yao Chenjiao\*

Since the Healthy China Action Promotion Committee issued the *Healthy China Action (2019-2030)*, general practice in general hospitals faces new requirements for establishing equitable, accessible, systematic, and continuous high-quality medical services. China’s MUD research started late with limited achievements. General practice in general hospitals can lead scientific research in four directions:

**Approach 1: Exploring MUD Etiology and Pathogenesis**

MUD etiology and pathogenesis remain unclear. International research commonly explores causes from biological factors, environmental exposure, psychosocial burden, and psychological disorders, investigating mechanisms through which specific causes trigger MUD. For example, Berstad et al. [41] hypothesized that intestinal staphylococcal small colony variants might cause MUD; Herr et al. [2] found MUD occurrence related to environmental air exposure; Myint et al. [3] discovered that in children with recurrent abdominal pain, pro-inflammatory states and accompanying low brain-derived neurotrophic factor concentrations may play roles between psychological stress and MUD.

**Approach 2: Research on MUD Diagnosis, Intervention, and Prognosis**

Internationally, some somatization symptom content in ICD-11 is commonly used as MUD diagnostic criteria. Building on this, Den Boeft et al. [4] explored electronic medical record (EMR) screening method test characteristics for identifying MUD patients. Current international research hotspots include evaluating clinical application of MUD diagnostic tools, interview patterns or dialogue tools used in diagnosis, and information technology’s auxiliary role, making “medicine-engineering integration” and other interdisciplinary approaches potential future research directions.

MUD interventions are mainly divided into pharmacological interventions, non-pharmacological interventions, and mixed interventions combining both. Pharmacological intervention studies mostly focus on evaluating the efficacy of one or multiple drugs. Non-pharmacological intervention scientific research mainly focuses on behavioral therapy, cognitive-behavioral therapy, psychological intervention, and other aspects. Therefore, research on MUD intervention methods can be conducted. Many somatic symptoms can be attributed to psychological or mental issues, so corresponding research can be conducted on the efficacy of psychotropic drugs. Internationally, a series of studies have been conducted on the efficacy evaluation of herbal medicine for MUD, so further research can also be conducted in the field of integrated traditional Chinese and Western medicine.

Conducting prospective scientific research on what impacts MUD will ultimately have on different diseases [5] is of practical significance. The PROSPECTS study conducted by NIKKI et al. [6] evaluated the process and prognosis of MUD from the aspects of symptom severity and physical and social function, identified its risk factors, and developed a predictive model.

### **Approach 3: Research on MUD Prevention**

Research on MUD prevention is lacking. Epidemiological surveys and big data studies can be conducted to establish a foundation for prevention research. For example, BAITHA et al. [7] conducted a prevalence survey, finding that the prevalence rate is higher in females, MUD patients are significantly younger than patients with other diagnoses, and non-specific, general symptoms and various types of pain are common complaints. Compared with males, pain symptoms, urogenital system symptoms, palpitations, and nausea are more common in females, providing direction for future prevention research.

### **Approach 4: Research on MUD Medical Education**

Currently, general practice medical education in China lacks research related to MUD medical education. Internationally, medical education research in the MUD field has achieved some results. ANNE et al. [8] developed an evidence-based communication training program using cognitive behavioral therapy, enabling physicians to identify factors related to patients' symptoms or that may exacerbate them, guiding physicians on how to better explain MUD, effectively reassure patients, and avoid unnecessary diagnostic tests, thereby improving physicians' comprehensive capabilities in MUD consultations.

In the future, the direction of MUD medical education still requires further exploration and scientific research.

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## How Municipal/County Hospitals Can Demonstrate General Practice Characteristics Through Undifferentiated Diseases

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### Viewpoint 1: Establishing MUD Clinics and Inpatient Services in Municipal (County) Hospital General Practice

Currently, most municipal (county) hospitals in China have normalized general practice outpatient clinics [1], but only some hospitals have established MUD outpatient clinics. Research by Qiu Yan et al. [2] shows that 18.6%-21.3% of patients visit general practitioners due to MUD. Therefore, municipal (county)

hospitals need to actively establish MUD clinics as a bridge connecting patients with other specialty departments, making MUD clinics characteristic disease treatment clinics for general practice.

To further establish and improve general practice MUD clinics, it is recommended that general practitioners spend no less than 1 day/week in MUD clinics, in order to: (1) fix the follow-up department and dates for MUD patients, reducing the time cost for patients to find physicians; (2) establish a continuous management system for MUD patients, achieving “patient-centered” care during diagnosis and treatment, reflecting a whole-person, whole-process care model; (3) increase MUD physicians’ professional knowledge, reducing MUD patients’ number of visits, time to diagnosis, medical costs, and department referral frequency.

Currently, qualified municipal (county) hospitals are actively building general practice wards, but ward setting standards are not clear enough. How to create and plan more characteristic general practice wards is a key issue at present. Compared with admitting specialized chronic diseases such as diabetes and hypertension, admitting MUD is undoubtedly more characteristic of general practice. This also brings new challenges to general practice: on one hand, general practice departments in municipal (county) general hospitals need to establish a complete MUD admission process and conduct standardized inpatient management for MUD patients; on the other hand, it is recommended to have specialized MUD wards with dedicated general practitioners and nurses.

### **Viewpoint 2: Integrating MUD into General Practitioner Education and Continuing Education**

Currently, the standardized training system for general practitioners and assistant general practitioners is basically complete, but MUD diagnosis and treatment have not been included in the training scope, and MUD continuing education is relatively weak. In this regard, as training bases for general (assistant general) practitioners and main MUD diagnosis and treatment institutions, municipal (county) hospitals need to strengthen systematic MUD training to improve general practitioners’ ability to early identify and diagnose/treat MUD, meeting the needs of outpatient and inpatient diagnosis and treatment.

It is recommended to improve general practitioners’ MUD diagnosis and treatment professionalism through the following approaches: (1) conduct multi-form, multi-channel theoretical learning on MUD, such as offering MUD mini-lectures, teaching ward rounds, case discussions, medical record writing training, etc.; (2) conduct MUD clinical practice training, such as MUD clinic rotations, multidisciplinary discussions, etc.; (3) master the frontiers of MUD diagnosis and treatment, understand MUD hotspots and trends, such as reading domestic and international literature, participating in academic conferences and seminars, etc.

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## How Community General Practitioners Can Early Identify and Long-term Manage Undifferentiated Diseases

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### Step 1: Intervention Before Early Identification

This is based on the characteristic of community general practitioners being “rooted in the community and providing long-term contracted services.” Individual: Before early identification of MUD, community general practitioners, relying on family doctor contract services, have already intervened in the entire health management of each contracted resident. Once patients present with corresponding MUD concerns, they can respond and handle them promptly, thereby avoiding patients’ disorderly visits and excessive diagnosis and treatment. Group: In addition to individuals with clear complaints in the clinic, community general practitioners also need to identify MUD patients in different population settings, such as community health education, population health screening, etc., and identification of MUD patients in populations should be earlier than those in clinics.

### Step 2: Management During Early Identification

MUD presentations are diverse, and most require a process of exclusion to clarify the diagnostic direction [1]. General practitioners, based in the community, analyze the causes of MUD from the perspective of predisposing, precipitating, and perpetuating factors and the bio-psycho-social medical model. They better understand patients and the nature of symptoms through symptom exploration, further deepen understanding of patients’ symptoms by exploring potential psychosocial factors, and simultaneously identify whether patients have comorbid mental illnesses [2]. During the exploration process, general practitioners focus on judging the severity and urgency of symptoms, relying on family doctor contract two-way referral services and “medical consortium” construction resources to assist patients in obtaining necessary examination measures lacking in the community, keep track of patients’ various diagnosis and treatment processes

and results at all times, conduct differential diagnosis based on detailed medical history and various examinations, and dynamically adjust identification results when necessary.

Common identification methods include: (1) identifying patients based on SOAP cases and RICE interviews, specifically see *Manual for Diagnosis and Treatment of Common Undifferentiated Diseases in General Practice* [3]; (2) through thorough history taking, obtaining vital signs, biochemical and other routine examinations to assess patients, identify MUD patients, and search for possible factors contributing to persistent discomfort symptoms from four aspects: physiological, social, cognitive, and behavioral [4]; (3) using the International Classification of Primary Care (ICPC) to collect data, thereby identifying MUD patients. ICPC was specially developed by the World Organization of Family Doctors (WONCA) for primary care. Compared with the traditional International Classification of Diseases (ICD), ICPC is more conducive to collecting patients' family, social, and psychological information, and is more authentic, reliable, and time-saving [5]; (4) identifying patients through the PRESUME screening method [6]. MUD can be divided into three categories based on symptoms, severity, course, and prognosis: low-risk, medium-risk, and high-risk [7]. PRESUME can effectively identify MUD, especially patients with medium-risk or higher.

### **Step 3: Management After Early Identification**

Treatment: Community general practitioners should possess routine diagnosis, treatment, and management capabilities for MUD. Treatment is "patient-centered," aiming to improve symptoms, relieve emotions, reduce daily functional impairment, and decrease unreasonable consumption of medical resources. Many patients' symptoms can improve without special treatment, but when patients' specific symptoms persist for weeks, symptomatic treatment and medication can be provided, along with comprehensive lifestyle guidance. Internationally, MUD treatment mainly includes psychological intervention, pharmacological treatment, and comprehensive intervention [8].

Two-way referral: When changes occur during disease evolution in MUD patients requiring further diagnosis and treatment by higher-level medical institutions, general practitioners can refer patients to receiving departments in higher-level medical institutions. General practitioners should regularly communicate with patients to follow up on diagnosis and treatment. After patients' symptoms stabilize, they return to the community. The entire process implements community management of MUD.

### **Step 4: Long-term Follow-up Management**

The outcome of MUD is difficult to predict; it may eventually improve or recover, or may develop into chronic symptoms or differentiate into a specific disease under various factors [2]. General practitioners should conduct regular patient follow-ups, re-evaluate when patients experience symptom changes, and repeat physical examinations and laboratory tests when necessary. Meanwhile, general

practitioners should also pay attention to patients' physical and mental health at all times and respond promptly to various health needs. Long-term management is greatly helpful for improving patients' conditions and prognosis, and also beneficial for establishing good doctor-patient relationships.

- (1) **Management Methods.** Shared Decision-Making: General practitioners should reach consensus with patients on treatment through effective strategies (including carefully listening to symptom descriptions, believing in the authenticity of complaints, providing demonstrations for commitments, explaining medical reasons, etc.), and management strategies reached this way are most likely to be accepted by patients [9]. Stepped Therapy: Provide patients with corresponding graded treatment management according to symptom severity. For example, for medium-risk patients, use general practice symptomatic drug treatment combined with psychological intervention, establish personal health management files for patients, and schedule regular follow-ups [10].
- (2) **Management Scope.** Whole Family: In the process of managing MUD patients, family members can benefit through conducting family health assessment programs. Whole Person: Some MUD patients also have other chronic diseases, so integrated whole-life-cycle health management "centered on the person" should be implemented.
- (3) **Management Leverage Points.** Relying on information technology support and the construction of chronic disease health management support centers, establish and improve personal health files and family health files to provide information support for clinical decision-making.

Although MUD patient management is receiving increasing attention in domestic and international research, related practice and research are still in the initial stage. How to improve the overall service capacity of primary medical and health institutions, enhance general practitioners' cognitive level and diagnosis/treatment capabilities for MUD, fully exert the role and advantages of general practitioners in MUD diagnosis and treatment, and develop MUD identification and management standard guidelines suitable for China's disease spectrum characteristics and with clinical guidance are all directions requiring continuous thinking and practice.

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## Listening Between the Lines: Doctor-Patient Communication Issues in Undifferentiated Diseases

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Undifferentiated disease (MUD) is a common reason for visits in general practice. It not only causes patients to toss and turn, repeatedly seek medical care due to persistent symptoms that are difficult to cure, leading to excessive consumption of medical resources [1], but also patients are often dissatisfied with the diagnosis and treatment process, resulting in decreased mutual recognition between doctors and patients. This manifests as MUD patients having lower evaluations of the doctor-patient relationship, and doctors tending to categorize patients as “difficult patients” or “problem patients,” even being unwilling to accept such patients, ultimately leading to doctor-patient conflicts [2].

## 1 Communication Should Be the Core of MUD Diagnosis and Treatment

In the diagnosis and treatment process of MUD patients, doctor-patient communication and exchange at the core link determine the quality of MUD diagnosis and treatment. In fact, communication is not only the main medium for information transfer between doctors and patients, but may also bring patients extra value beyond medical treatment itself. For example, verbal encouragement can enhance patients' perception and expectation of treatment, help relieve pain [3], or promote disease recovery [4]. However, research has found that compared with patients suffering from "medically explained symptoms" (MES), general practitioners spend more time diagnosing and treating MUD patients, but this extra time is not used for positive, adequate communication. Doctors neglect to accept patients' own thoughts, hopes, and feelings while analyzing symptoms [5].

## 2 Patients' Communication Needs

In addition to expecting a clear diagnosis and effective treatment plan, MUD patients expect a more appropriate communication model [7]. They need an open and relaxed environment where doctors can "empathize" with their discomfort and truly understand the physical and mental stress that discomfort symptoms bring to them. Because they are unwilling to repeat their "story," they hope to be seen by the same doctor each time and expect doctors to be fully prepared for communication through previous medical history and background information. They expect doctors to regard them as equal partners in communication, understand and give them sufficient emotional support, allow them to complete their statements without interruption, and especially give them opportunities to participate in their own diagnosis and treatment decision-making. In addition, MUD patients pay great attention to doctors' non-verbal elements during communication, such as eye contact, calm facial expressions, and relaxed body posture [8].

## 3 Physicians' Reflections on Communication

General practitioners themselves also hope to form good doctor-patient relationships with MUD patients during consultations. However, contrary to the ideal situation, the harder general practitioners try to give MUD patients a clear biological explanation and provide somatic interventions, the more likely they are to feel pressure in communication [9]. Therefore, general practitioners have also reflected on the reasons for communication difficulties, including: failing to maintain open-ended dialogue in communication, especially for the purpose of saving time, or subjectively believing that patients will refuse to share family and psychological difficulties; on the other hand, general practitioners admit that chaotic and disordered communication structures increase communication barriers, such as rashly interpreting symptoms before conducting appropriate physical examinations; and the lack of "humanism" that is "patient-centered"

makes general practitioners seem independent of communication, becoming people who are “busy operating computers” [9].

#### 4 Good Communication Calls for Listening to Patients’ Voices

Clinical reasoning is the inevitable thinking process for doctors when facing patients seeking medical care. Since its birth in the Hippocratic era 2,500 years ago, clinical reasoning has become a hybrid product where science and art intertwine. Laboratory and imaging data under the biomedical model are far from sufficient to meet the diagnosis and treatment needs faced by general practice. As William Osler, the pioneer of modern medical education, said: “The good physician treats the disease; the great physician treats the patient who has the disease.” One of the core skills of general practice, the “RICE interview,” emphasizes listening to patients’ voices.

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(Received date: 2023-04-14; Revised date: 2023-06-02)

(Editor of this article: Wang Fengwei)

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