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Development and Current Status of General Practice Medical Education in Guangdong Province over the Past Three Decades: A Case Study of Guangzhou Medical University (Post-print)

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Abstract

Under robust support from national and local policies, the system construction and talent cultivation of general practice medical education in Guangdong Province have undergone nearly three decades of development. Since 1996, general practice medical education in Guangdong has sequentially traversed four distinct stages: exploratory initiation, vigorous growth, developmental refinement, and comprehensive advancement. Represented by Guangzhou Medical University, institutions of higher learning in Guangdong Province pioneered the exploration and establishment of a prevention-treatment integrated general practice medical education system characterized by multiple levels, pathways, forms, and objectives, encompassing interconnected institutional education, job-transfer (position) training, standardized residency training, graduate degree education, and continuing education, and have fundamentally constructed a standardized training model for general practitioners centered on the “5+3” academic system. The provincial training certificate examination pass rate for general practice trainees has exceeded 85%. In 2020, Guangdong Province attained 3.13 general practitioners per 10,000 residents, fulfilling the national 2020 requirement of 3 general practitioners per 10,000 residents. Through analysis of the current development status of general practice medical education in Guangdong Province, comprehensive summarization of experiences and lessons in general practice discipline construction and educational training, expansion of models and pathways for enhancing the quality of general practice talent cultivation, and exploratory proposition of relevant recommendations, this study provides policy insights and a reference basis for the future rapid development

of general practice medical education in Guangdong Province and throughout China.

Full Text

Preamble

The Development History and Cross-Sectional Study of General Practice Education in Guangdong Province Over the Past 30 Years: A Case Study of Guangzhou Medical University

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Abstract With strong support from national and local policies, the construction of general practice education systems and personnel training in Guangdong Province has developed over nearly 30 years. Since 1996, general practice education in Guangdong has successively experienced four stages: exploratory initiation, vigorous growth, developmental improvement, and comprehensive development. Represented by Guangzhou Medical University, institutions of higher learning in Guangdong were among the earliest in China to explore and establish a multi-level, multi-channel, multi-form, and multi-objective integrated prevention-treatment general practice education system that links college education, post (position) training, standardized training, postgraduate degree education, and continuing education. The province has basically constructed a “5+3” -based standardized training model for general practitioners. The provincial training certificate examination pass rate for general practice trainees has exceeded 85%. In 2020, Guangdong Province had 3.13 general practitioners per 10,000 residents, meeting the national requirement of 3 general practitioners per 10,000 residents for 2020. By analyzing the current development status of general practice education in Guangdong, comprehensively summarizing the experiences and lessons from discipline construction and education training, broadening the models and pathways for improving the quality of general practice personnel training, and exploratorily proposing relevant recommendations, this study provides policy insights and reference bases for the rapid develop-

ment of general practice education in Guangdong and throughout China in the future.

[Key Words] General Practice; Education; Development History; Cross-Sectional Study

General practice, also known as family medicine, is a comprehensive medical discipline oriented toward individuals, families, and communities that integrates preventive medicine, clinical medicine, rehabilitation medicine, and related humanities and social sciences. The concept of general practice was introduced to China in the late 1980s. With the deepening dissemination of general practice concepts and thinking, and the establishment of general practice disciplines and specialties, China has gradually established a general practitioner system with Chinese characteristics. The key to establishing this system lies in the education and training of general practitioners, with ordinary medical universities serving as the main force in cultivating qualified general practitioners. For many years, China has continuously standardized and enhanced general practitioner training from policy and management perspectives. As China's largest economic and demographic province, Guangdong has actively explored the construction of a general practice education system and creation of general practitioner training models for nearly 30 years.

This study employs online literature review, archived historical document retrieval, and social field surveys (including interviews with health administrative departments at all levels in Guangdong, comprehensive universities and medical colleges, general practice training institutions, comprehensive medical institutions, and community health service organizations, with input from dozens of peer leaders and experts). Using a timeline as the axis, we conduct a longitudinal analysis of the discipline development and personnel training trajectory of general practice in Guangdong over the past 30 years. Focusing primarily on Guangzhou Medical University's general practice education as a case study, we comprehensively summarize experiences and lessons from discipline construction and education training, broaden the main pathways for improving the quality standards of general practice personnel training, and provide policy insights and management references for the rapid development of general practice education in Guangdong, South China, and nationwide.

1. Background and Key Issues in General Practice Education

After the concept of general practice was introduced to various Chinese cities and regions in the late 1980s, the Chinese Medical Association formally established the General Practice Branch in November 1993, marking the birth of the general practice discipline in China. In January 1997, the Central Committee of the Communist Party of China and the State Council promulgated the "Decision on Health Reform and Development," formally proposing to "actively develop community health services, accelerate the development of general practice, and

vigorously cultivate general practitioners.” This milestone catalyzed rapid development of community health service construction and flourishing general practice education and training across China. Broadly speaking, general practice education should include training for general practitioners, community nurses, and community health service managers, not limited to general practitioner cultivation alone. According to teaching content and sequence, general practice education should encompass college education in clinical medical schools, postgraduate general practice education, and continuing medical education in general practice.

China has preliminarily constructed a general practice personnel training system, yet long-standing problems persist: inconsistent quality of general practice education faculty, disconnect between personnel training systems and practical work, low-quality continuing education, and imbalanced personnel training structures. Although most universities offer “Introduction to General Practice” as a medical undergraduate course, limited class hours and scarce high-quality courses result in vague understanding among medical students regarding the rich research connotations and development prospects of general practice, often leading them to exclude it from future career considerations. This indirectly creates a shortage of successor talent for general practitioners. Over the past 30 years, Guangdong has made significant progress and achieved remarkable results in general practitioner training, yet problems remain: insufficient numbers of high-quality general practitioners and unstable quality that fails to meet the urgent needs of community health service institutions. The overall shortage of general practice professionals and their uneven geographical distribution, coupled with low professional quality among community health service personnel, have become major bottlenecks constraining the sustainable development of community health services and pressing issues urgently requiring research and resolution in general practice education reform. The primary objective of general practice education is to address the core question of “what kind of general practitioners to cultivate and how to cultivate them,” which affects the sustainable development of China’s primary healthcare system and the stability of the general practice talent pool. Therefore, based on investigation of Guangdong’s general practice education development history and personnel training status, we must analyze problems and difficulties in such talent training systems and pathways, and propose targeted reference bases and policy recommendations.

2. The Development History of General Practice Education in Guangdong

Over the past 30 years, general practice education in Guangdong has grown from scratch through arduous pioneering efforts, yielding outstanding achievements. The main development history is summarized below [6-9], see Table 1 .

2.1 Exploratory Initiation Stage (1996-2003)

Beginning in 1996, Guangdong launched general practice training programs. In terms of university-based general practice education, Guangzhou Medical University (formerly Guangzhou Medical College) pioneered the cultivation of prevention-treatment integrated general practice talent through late-stage professional direction streaming in clinical medicine undergraduates starting in 1997 (with additional weekend classes for general practice knowledge and skills). In the same year, Guangzhou Medical University established the “Introduction to General Practice” course for clinical medicine undergraduates. In September 1999, it became the first institution to establish a general practice specialty direction for third-year clinical medicine undergraduates (later discontinued). In September 2000, it launched general practice specialty directions for adult education “top-up” programs (night school) and full-time “special-to-undergraduate” programs (later discontinued). In 2000, with approval from the Guangdong Provincial Department of Education, Guangzhou Medical University began directly recruiting five-year clinical medicine undergraduates (general practice direction) from high school graduates to cultivate prevention-treatment integrated general practice talent (later discontinued).

Regarding postgraduate general practice education, in September 1997, Guangzhou Medical University cooperated with the Guangzhou Municipal Health Bureau to conduct general practice position training courses. In 2000, Guangzhou pioneered the General Practice Backbone Training Program (full-time one-year program) nationwide. In 2002, the Guangdong Provincial Department of Health launched general practice training pilots in Guangzhou, Shenzhen, and Foshan. In November 2003, the Guangdong Provincial General Practice Education and Training Center was established (affiliated with Guangzhou Medical University), marking a landmark event of the exploratory initiation stage.

During this early period, general practice position and transfer training in Guangdong was primarily organized by Guangzhou Medical University (relying on the Guangdong Provincial General Practice Education and Training Center) and the First Affiliated Hospital of Jinan University, with faculty mainly drawn from nearly ten universities, medical institutions at all levels, and community health service organizations across Guangdong.

2.2 Vigorous Growth Stage (2004-2009)

In August 2004, the Guangdong Provincial Department of Health issued the “Guangdong Province 2004-2010 General Practice Education Development Plan” and “Interim Measures for the Management of General Practice Education and Training in Guangdong Province” (Yue Wei [2004] No. 193), opening the curtain for vigorous general practice training development. In July 2005, the Department issued the “Notice on Issuing Standards for General Practice Education Theory Teaching Training Bases and Community Training Bases in Guangdong

Province (Trial)” (Yue Wei [2005] No. 58). In April 2009, China promulgated the “Opinions of the CPC Central Committee and the State Council on Deepening the Reform of the Medical and Health System,” gradually improving the policy environment for general practice development, while Guangdong’ s general practice entered a new period full of vitality.

In 2006, the Guangzhou Municipal Health Bureau and the University of Birmingham signed a memorandum of understanding, sending 16-20 community health backbone personnel and general practitioners from standardized training bases to Birmingham annually for one-month general practice and community health training. In the same year, Guangzhou Medical University established the School of Public Health and General Practice, with a General Practice Department responsible for teaching general practice specialty direction students and delivering general practice courses for medical majors. Starting in 2008, Guangzhou Medical University pioneered standardized general practitioner training pilots in cooperation with Panyu District, Guangzhou. In September 2009, Guangzhou Medical University’ s project “Creating a Prevention-Treatment Integrated General Practice Personnel Training Model to Promote Sustainable Development of Community Health Services” won the second prize of the Sixth National Teaching Achievement Award, representing China’ s second national-level general practice teaching achievement award and significantly enhancing Guangdong’ s advantages and status in general practice education nationwide.

2.3 Developmental Improvement Stage (2010-2017)

In March 2010, the launch ceremony for Guangdong’ s community health personnel training project and the opening ceremony for the general practice backbone training class were held at Guangzhou Medical University, with then-Vice Governor Lei Yulan attending and delivering a speech. This event officially launched the ten-thousand community health personnel training project, opening the prelude to province-wide general practice education and training.

Beginning in September 2011, all affiliated hospitals of Guangzhou Medical University began enrolling general practice master’ s students. In 2012, Guangzhou Medical University relocated its General Practice Department to the Third Clinical College, responsible for general practice postgraduate education and discipline development. In 2013, Guangzhou Medical University grandly established the School of General Practice and Continuing Education to coordinate standardized general practitioner training, general practice continuing education, and general practitioner transfer training, while simultaneously establishing the General Practice Skills Training Center and General Practice Teaching Department, which includes the General Practice Fundamentals Teaching and Research Section, General Medical Care Teaching and Research Section, and Community Health Care and Health Management Teaching and Research Section. In March 2014, Guangdong Provincial Health and Family Planning Commission and other departments announced the “Notice on Issuing the Implementation Plan for

Order-Directed Cultivation of Rural Health Talents in Guangdong Province,” launching free cultivation of order-directed clinical medical students, focusing on training medical talents engaged in general practice and rural health for primary medical institutions such as township health centers and community health service organizations. In mid-2014, Guangzhou Medical University led the establishment of the “South China Regional General Practice Teacher Training Collaboration Center,” establishing its leading position in general practice education and training in South China. In June 2016, Guangzhou Medical University officially launched its Tibet aid project—the Nyingchi Region General Practitioner Transfer Training Program, which planned to train 24 qualified general practice backbone doctors for the Nyingchi region of Tibet [11]. After years of effort, by 2017, Guangdong had basically established its general practitioner education system, with clear training models and increased training intensity.

2.4 Comprehensive Development Stage (2018-Present)

Following the August 2018 issuance of the “Notice on Issuing the Guidance Standards for the Establishment of General Practice Departments in Standardized Resident Training Bases (General Hospitals) (Trial)” by the National Health Commission (National Health Office Science and Education [2018] No. 21), over 600 general practice clinical training bases nationwide independently established general practice departments. By the end of 2018, all three standardized general practitioner training bases of Guangzhou Medical University—the First, Second, and Third Affiliated Hospitals—had established general practice departments and teaching and research sections. In recent years, major general hospitals in Guangdong have generally established general practice departments and teaching and research sections, with the province having established 42 “5+3” general practice standardized training bases to date.

Regarding university discipline development and teaching, in addition to Guangzhou Medical University’s creation of the School of General Practice and Continuing Education, Shenzhen University Medical School established its General Practice Department in September 2020, marking the first university in the city to do so and signaling a new development stage for Shenzhen’s general practice. In 2022, both Sun Yat-sen University and Guangzhou Medical University’s clinical medicine programs were included in the second round of national “Double First-Class” construction universities and disciplines. As general practice serves as a key secondary discipline of clinical medicine, its discipline development and education will undoubtedly enter a higher-level development stage.

3. Current Situation Analysis of General Practice Education

3.1 Current Status of the General Practice Education System

Over the past 30 years, guided by community health needs, nearly ten universities in Guangdong—including Sun Yat-sen University, Jinan University, Shantou University, Shenzhen University, Southern Medical University, Guangdong Medical University, Guangzhou University of Chinese Medicine, and Guangzhou Medical University—have explored and practiced general practice education. To date, Guangdong has basically established a “5+3” -based general practitioner education model with “3+2” as a supplement, featuring a complete continuing education curriculum system that can be implemented in various forms to provide practical, effective, and convenient continuing education services for primary general practitioners, community nurses, and health managers.

Among these, Guangzhou Medical University was the earliest institution to launch general practice education in Guangdong. As the supporting unit of the Guangdong Provincial General Practice Education and Training Center, the university has accumulated rich experience in coordinating province-wide general practice training through long-term cooperation with the Guangdong Provincial Health Commission, Guangzhou Municipal Health Commission, and various prefecture-level cities. It has comprehensively implemented general practitioner transfer (position) training, standardized general practice training, general practice teacher training, general practice manager training, and community nurse position training, systematically constructing a three-level (province, city, county) general practice education and training network and establishing a systematic, standardized general practice education system. This has formed an integrated “government-university-affiliated hospital-community” talent training model.

Since 1997, through deepening reforms in clinical medicine disciplines and specialties, Guangzhou Medical University has organically combined broadening the five-year clinical medicine program with “flexible” general practice discipline direction education, adult education for in-service primary community personnel, and non-degree education (including teacher training, transfer training, backbone training, standardized training, and continuing education). For clinical medicine undergraduates volunteering to work in communities and primary settings, the university has adopted broad talent cultivation pathways including regular university enrollment, late-stage specialty streaming, special-to-undergraduate, and top-up degree education. It has explored and created a prevention-treatment integrated general practice education system linking multi-level, multi-form, multi-channel, and multi-objective university education, transfer (position) and standardized training, and continuing education, generating positive social impact. After nearly 30 years of exploration and practice, Guangzhou Medical University has basically constructed a systematic general practice education system, as shown in Figure 1 [Figure 1: see original paper].

3.2 Training Statistics and Outcomes

3.2.1 Overall Training Situation Since its establishment in November 2003, the Guangdong Provincial General Practice Education and Training Center has systematically conducted seven types of training: general practitioner transfer (previously position) training, general practitioner backbone training (generally one-year program), standardized general practitioner training, general practice teacher training, community nurse position training, community health service manager training, and general practice continuing medical education projects. Strict and standardized teaching management has ensured training quality, with all examination pass rates reaching over 85%, as shown in Table 2 .

3.2.2 Standardized Training Implementation Beginning in 2008, Guangzhou Medical University pioneered standardized general practitioner training pilots in cooperation with Guangzhou' s Panyu District Health Administrative Department, training three cohorts totaling 128 trainees. Since 2014, under the coordination of the School of General Practice and Continuing Education, the First, Second, and Third Affiliated Hospitals have successively conducted standardized general practitioner training (resident physician cultivation), training a cumulative total of 327 trainees. Taking the First Affiliated Hospital of Guangzhou Medical University (hereinafter “Guangyi”) as an example, it currently recruits the most general practice standardized training residents among all bases in Guangzhou, having trained 165 trainees between 2014-2021, as shown in Table 3 .

According to the 2017 “Opinions of the General Office of the State Council on Deepening Medical Education Collaboration to Further Promote Medical Education Reform and Development” and related documents, China has basically established a “5+3” (five-year clinical medicine undergraduate education + three-year standardized general practice training or three-year general practice professional master' s degree education) based general practice personnel training system and model, with “3+2” (three-year clinical medicine junior college education + two-year assistant general practitioner training) as a supplementary addition.

3.2.3 General Practitioner Allocation in Guangdong The latest statistics show that in 2020, Guangdong Province had 39,417 registered general practitioners serving a permanent population of 120.1 million, achieving 3.13 general practitioners per 10,000 residents and meeting both national and provincial requirements of 3 general practitioners per 10,000 residents by 2020.

3.2.4 Characteristics and Innovations in Guangdong' s General Practice Education and Training Through over 20 years of unremitting exploration and practice, leveraging national first-class clinical medicine discipline construction and outstanding clinical doctor training programs, multiple medical universities in Guangdong (including comprehensive universities) have

created a prevention-treatment integrated general practice personnel training model with South China characteristics adapted to local primary community health service needs, generating certain influence both domestically and internationally.

First, for many years, Guangdong universities represented by Guangzhou Medical University have implemented the “medical-prevention integration” talent cultivation concept throughout standardized general practitioner training, using this integration as the starting point to cultivate new-type general practitioners. Since 2006, Guangzhou Medical University has deepened “government-university-hospital-community” collaboration with medical-prevention integration as its characteristic, continuously conducting the teaching reform series “Creating a Prevention-Treatment Integrated General Practice Personnel Training Model to Promote Sustainable Development of Community Health Services.” Relying on the Guangdong Provincial General Practice Education and Training Center, the university has deepened cooperation with provincial and municipal health departments, employed community health service center general practice backbone doctors as university faculty, coordinated teaching resources between affiliated hospitals and community health centers, and deepened hospital-community integrated management. The university has won one second prize of the National Teaching Achievement Award, two first prizes and one second prize of Guangdong Provincial Teaching Achievement Awards.

In recent years, the Third Affiliated Hospital of Guangzhou Medical University, the School of Public Health, and the Guangzhou Center for Disease Control and Prevention have signed tripartite cooperation agreements. Building upon the “Standardized Resident Training Content and Standards” (General Practitioner Training Guidelines) and the National Health Commission’s general practitioner training planning textbooks, they have introduced and integrated public health courses, epidemiology courses, and community chronic disease courses to strengthen medical-prevention integration practice, jointly cultivating new-type prevention-treatment integrated general practice standardized trainees and exploring a suitable curriculum integration path for standardized general practice training in Guangzhou, Guangdong, and nationwide.

Second, to cultivate outstanding clinical medical students in the new era and elevate the level of standardized general practice personnel training, Sun Yat-sen University and Guangzhou Medical University have used high-quality advancement of national “Double First-Class” discipline construction (clinical medicine) as the starting point to explore and practice a talent training model that organically connects standardized general practitioner training with clinical medicine professional master’s degree education. They have gradually unified the content and methods of standardized resident training and medical master’s degree training, broadening channels for standardized training participants to obtain master’s degrees. For example, Guangzhou Medical University conducts course teaching and arranges graduate supervisors for thesis guidance according to its “Implementation Rules for Granting Clinical Medicine and Stomatology Master’

s Professional Degrees to Graduate Students with Equivalent Academic Qualifications (Trial)”and “Training Program for Clinical Medicine Professional Master’s Degree Graduate Students.” Currently, multiple general practice standardized training participants have obtained equivalent academic qualification master’s degrees after passing training assessments.

Third, optimizing curriculum design and deepening teaching reforms to improve general practitioners’ comprehensive quality and capabilities. Centered on improving general practitioners’ position competency, the curriculum has been optimized to strengthen general practice fundamental theory training and clinical thinking exercises, with a people-centered humanistic quality concept running throughout the entire process. The university comprehensively trains standardized trainees’ clinical diagnosis and treatment capabilities from aspects including professional quality, skill training, and research ability, while establishing rotation department exit theory and skill assessments and annual assessments to strengthen various assessment management during standardized training. In recent years, Guangzhou Medical University has used Academician Zhong Nanshan, recipient of the “Medal of the Republic,” as a role model in standardized general practitioner training, vigorously promoting the great anti-epidemic spirit of “life first, nationwide solidarity, self-sacrifice, respect for science, and a shared destiny,” as well as the “Nanshan Spirit” centered on “a sense of responsibility for family and country, a scientific spirit of seeking truth from facts, and a life attitude of pursuing excellence.” This cultivates general practitioners’ socialist core values including patriotism, professionalism, and teamwork. By integrating anti-epidemic spirit into training courses, general practitioners recognize the importance and mission of their work, stimulating professional and disciplinary confidence. The Third Affiliated Hospital of Sun Yat-sen University adopts a “trinity (professional cultivation, daily management, full-process service), layered progression” teaching curriculum system, a “general hospital-community (H-C) integrated teaching model,” and a “full-process, full-discipline mentor tracking management model,”integrating narrative medicine, humanistic medicine, and medical ethics throughout the entire training process. This provides general practitioners with platforms for reading, sharing, and humanistic teaching activities, improving doctor-patient communication skills and cultivating warm, passionate general practitioners from multiple dimensions. To further improve general practitioners’ comprehensive abilities, the university organizes trainee-led, faculty-guided learning presentations to share clinical cases, literature reading, research ideas, and examination experiences, providing a stage for general practitioners to showcase themselves. This promotes learning through teaching, continuously improving comprehensive abilities including diagnostic thinking, research level, and oral expression, while fostering lifelong learning habits, creating a platform for teacher-student collaborative learning and exchange, mobilizing trainee enthusiasm, and strengthening base cohesion.

4. Discussion and Recommendations

4.1 General Practice Personnel Training Objectives and Models

On the afternoon of February 14, 2020, General Secretary Xi Jinping presided over the 12th meeting of the Central Committee for Comprehensively Deepening Reform and delivered an important speech, clearly stating the need to continuously strengthen general practitioner training and hierarchical diagnosis and treatment system construction. Focusing on the long-term goal of cultivating prevention-treatment integrated general practice talent and applying general practice disciplinary concepts, systematically carrying out prevention-treatment integration work and implementing education and training oriented by basic medical service needs and national basic public health services constitute the core content of talent cultivation. This requires China's general practitioners to strengthen public health and preventive medicine knowledge training in addition to clinical diagnosis and treatment capabilities for common, frequent, and chronic diseases.

The vast majority of current general practitioners in Guangdong come from position and transfer training, generally lacking position competency. We recommend comprehensively strengthening general practitioner continuing education to effectively improve service capabilities and change the current situation where continuing medical education becomes formalistic with difficult-to-guarantee quality. Regarding Guangdong's standardized general practice training participants, they mainly comprise junior college and undergraduate clinical medicine graduates, with master's degree holders being scarce. Employment directions include community hospitals and general hospitals, including rural order-directed clinical medical student cultivation. Compared to the diversity of student sources and employment directions, the existing general practitioner training system and teaching models are relatively singular. Next, we will fully utilize the "Guangdong Provincial General Practice Continuing Education Demonstration Base" platform to collaborate with health administrative departments, medical universities, and professional associations to formulate standards, content, and implementation methods for general practitioner continuing education. Through multiple measures, we will build multi-level, multi-category general practitioner continuing education platforms while strengthening inspection and supervision of general practice continuing education project implementation to ensure practical implementation.

4.2 General Practice Professional Degree Construction

Guangzhou Medical University is currently planning to rationalize the management system among the School of General Practice and Continuing Education, general practice departments, and general practice teaching and research sections in affiliated hospitals. The School of General Practice and Continuing Education will coordinate standardized training and discipline development across affiliated hospitals, concentrating superior resources to create Guangzhou

Medical University's general practice characteristics and brand. It will also leverage the functions and roles of the "Guangdong Provincial General Practice Education and Training Center" to be responsible for provincial general practice training planning guidance and quality control. Given the difficulties in recruiting general practice professional master's students and standardized training participants with uneven quality, we recommend that local universities explore "integrated undergraduate-master's" cultivation of general practice talent. Currently, Guangzhou Medical University is actively exploring an "integrated undergraduate-master's" training model for general practice talent, aiming to identify candidates for general practice professional master's degrees in the third undergraduate year. The subsequent two undergraduate years and following three graduate years will be 统筹规划 with coordinated planning of basic clinical medicine theory study, internships, and clerkships, preventive medicine and public health, as well as general practice professional theory, general hospital and community rotations, while strengthening research capability cultivation and thesis writing training. Regarding standardized training participants who fail to obtain master's degrees after "5+3" standardized training, we recommend further improving and promoting organic connection between clinical medicine professional master's degree education and standardized resident training. In recent years, Guangzhou Medical University has intensified efforts for standardized training participants to apply for master's degrees with equivalent academic qualifications. Starting in 2021, Guangzhou Medical University launched a general practice professional master's degree program for equivalent academic qualification personnel (annual enrollment: 30 students), who complete graduate coursework and thesis requirements while fulfilling standardized training obligations according to general practice professional master's degree training requirements.

4.3 General Practice Faculty and Discipline Leader Cultivation

After nearly 30 years of development, some general practice educators are undergoing generational transition, with senior discipline leaders having retired or approaching retirement, necessitating strengthened cultivation of next-generation discipline leaders. Current general practice education faculty—including theoretical, clinical, and community teaching faculty—have various shortcomings that cannot meet education and training needs, with discipline leaders being particularly scarce. We recommend formulating different training standards and targeted teaching materials for different faculty types to ensure training quality. All faculty types should be selected and cultivated from personnel who have completed standardized general practice training, guiding them toward professionalization, specialization, and elite development. Simultaneously, we should standardize various teaching activities to continuously improve teaching levels and training quality, strictly and standardizedly cultivating general practitioners according to general practice training guidelines, highlighting general practice diagnostic thinking, and further strengthening all faculty's general practice teaching awareness.

4.4 General Practice Teaching Base Construction

Currently, Guangdong has numerous general practice standardized training bases, but their quality varies significantly. Some bases' management and teaching remain attached to other clinical departments (such as geriatrics, general internal medicine, comprehensive internal medicine, and emergency medicine), with inadequate institutional construction and management and lack of a good re-certification evaluation mechanism. This results in insufficient guarantee of practical training resources for general practice teaching and training, such as disease types and quantities required by general practice training guidelines, operational skill training, teaching faculty resources, teaching equipment resources, and logistical support resources. Therefore, we must strengthen general practice standardized training base (including assistant general practice) and primary practice base construction, improve vertical linkage mechanisms and integrated management, perfect dynamic management of general practice standardized training bases, and establish and improve exit mechanisms for training bases and trainees.

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