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"Embedding" and "Integration": A Study on the Synergistic Mechanism and Clinical Efficacy of Medical Education Resources in Psychological Crisis Intervention for International Students

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Abstract: This study aimed to deeply analyze the specific synergistic mechanisms through which clinical medical resources are systematically "embedded" into the mental health work system within the context of medical universities, and to evaluate their impact on the clinical efficacy of crisis intervention, thereby clarifying the unique value and operational boundaries of medical education resources in psychological work. A mixed-methods research design was adopted, focusing on the "Medical-Educational Collaboration" psychological crisis intervention closed-loop at Wenzhou Medical University. First, through policy text analysis and process tracing, the operational processes and role interactions of three core mechanisms—"Green Channel," "Dual-File Management," and "Three-Level Follow-up"—were deeply analyzed. Second, via a retrospective cohort analysis, differences in key indicators such as Mean Intervention Response Time (MIRT), clinical compliance, and crisis recurrence rate were compared between 87 cases of international students with moderate-to-severe psychological crises handled after the establishment of the collaborative mechanism (intervention group, January 2023-December 2025) and 45 cases handled via previous routine procedures (historical control group). Finally, semi-structured interviews were conducted with participating medical staff, counselors, and recovered students to explore the collaborative experience and key success factors. Mechanism analysis showed that "Medical-Educational Collaboration" achieved deep "integration" of personnel, information, and responsibility through institutional "embedding." Efficacy evaluation indicated that the MIRT of the intervention group was significantly shortened from 7.5 days to 2.3 days; due to smoother referral and faster establishment of doctor-patient trust, their clinical treatment compliance reached 91.8%, significantly higher than the control group's 73.3%; within six months post-discharge, the crisis recurrence rate of the intervention group was only 5.7%, far lower than the control group's 22.2%. Qualitative interviews revealed the synergistic logic of mutual enhancement between "pre-positioned trust in the educational system" and "professional authority of the medical system." The conclusion indicates that deeply and structurally integrating top-tier clinical psychiatric resources into the educational management system can greatly enhance the timeliness, professionalism, and continuity of psychological crisis intervention, significantly improving clinical prognosis. This constitutes the core feature and professional barrier of mental health work in medical universities. Its "institutional integration" model provides a key exemplar for constructing an efficient and scientific campus psychological safety network.

Keywords: Medical-Educational Collaboration; Psychological Crisis Intervention; International Students in China; Clinical Efficacy; Green Channel; Mental Health; Medical Education

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1. Introduction

Psychological crisis intervention is the “baseline project” and “professional touchstone” of university mental health work. For the group of international medical students in China, who face immense academic pressure and prominent cultural adaptation challenges, timely, professional, and effective crisis intervention is even more crucial, concerning life safety and educational success[1]. Comprehensive universities typically rely on off-campus mental health institutions for referrals, often encountering problems such as cumbersome referral processes, information gaps, and disjointed follow-up, leading to delayed intervention, high dropout rates, and significant recurrence risks.

Medical universities, by virtue of their inherent affiliated hospital systems, theoretically possess the unique advantage of directly introducing high-quality psychiatric resources into campus psychological work. However, realizing this advantage is not a simple addition of resources but a complex collaborative process that requires breaking through administrative, professional, and cultural barriers[2]. Existing research mostly emphasizes the importance of “medical-educational collaboration,” but lacks in-depth mechanism analysis and empirical evidence on how exactly “collaboration” is achieved through institutional design and what measurable “clinical-level” effects result post-collaboration. Particularly for the special group of international students, how cultural factors affect the acceptance and efficacy of this collaboration remains a research gap[3].

Therefore, this study focuses on a core question: In the specific organizational and professional context of medical universities, how do the educational system and the medical system construct and operate an efficient collaborative closed-loop for psychological crisis intervention? Does it demonstrate significant advantages over traditional models in key clinical efficacy indicators? This study aims to provide a rigorous mechanistic explanation and empirical basis for medical universities to maximize the value of their professional resources and construct an irreplaceable mental health work system, through a “white-box” analysis and efficacy verification of Wenzhou Medical University’s “Medical-Educational Collaboration” crisis intervention model.

2. Methods

This study employed an explanatory sequential mixed-methods design, divided into two stages: mechanism exploration and efficacy verification.

2.1. Research design

Stage One (Mechanism Exploration): A qualitative case study method was used to conduct process tracing and mechanism deconstruction of the “Medical-Educational Collaboration” intervention closed-loop.

Stage Two (Efficacy Verification): A retrospective cohort study design was used to compare intervention effects before and after the establishment of the collaborative mechanism.

2.2. Participants and setting

The research was conducted at Wenzhou Medical University and its affiliated psychiatric specialty hospital (Wenzhou Seventh People’s Hospital). Participants included: (1) Institutional texts: collaboration agreements, workflows, file templates; (2) Personnel: university-side administrators, counselors, psychological consultants, and hospital-side psychiatrists and nurses involved in the collaboration; (3) Student cases: International medical students for whom the crisis intervention process was initiated due to moderate-to-severe depression, anxiety, or clear suicide risk between January 2023 and December 2025.

2.3. Data collection and analysis

Mechanism Data:

Document Analysis: Relevant institutional documents, meeting minutes, and case records were collected and analyzed.

In-depth Interviews: Interviews were conducted with university-side personnel (n = 6), hospital-side personnel (n = 4), and 2 international students who successfully recovered through this mechanism, focusing on key nodes, challenges, and success factors in the collaboration process.

Analysis: Thematic analysis was used to extract the core components and operational logic of the collaborative mechanism.

Efficacy Data:

Grouping: Students handled after the full operation of the collaborative mechanism starting January 2024 were set as the intervention group (n = 87). Students handled in 2023 via the original routine procedure (referral suggestion for self-seeking medical care after assessment by the university counseling center) were set as the historical control group (n = 45). There were no statistically significant differences between the two groups in terms of gender, age, and primary diagnosis.

Evaluation Indicators:

(1) Mean Intervention Response Time: The time from on-campus identification and decision for referral to the student's completion of the first specialist doctor consultation (in hours/days).

(2) Clinical Compliance: Defined as completing at least 80% of the recommended treatment (including regular follow-ups, medication, or psychotherapy) as prescribed and continuing until the end of the acute phase (typically 8 weeks).

(3) Crisis Recurrence Rate: Defined as the proportion of cases where the crisis intervention procedure was reactivated for similar psychological problems within six months after discharge or case closure.

Analysis: SPSS software was used for descriptive statistics, chi-square tests, and t-tests to compare differences between the two groups.

3. Results

3.1. Three core mechanisms of the "medical-educational collaboration" closed-loop

The study identified a highly structured collaborative closed-loop, with three interlocking mechanisms:

Mechanism A: Green Channel — Rapid Response System. Institutionalized appointment and priority consultation rights ensure students can receive assessment from a chief psychiatrist within 48 hours. A dedicated hotline between the resident campus consultant and the hospital enables "24-hour on-campus warning → immediate phone communication → rapid appointment scheduling."

Mechanism B: Dual-File Management — Information Assurance System. Encrypted and interconnected "Educational Psychological File" and "Psychiatric Medical File" are established. Counselors, under confidentiality premises, provide doctors with key information such as the student's cultural background and campus performance; doctors, with consent, provide feedback to the university on the treatment framework and precautions, ensuring continuity and consistency of intervention.

Mechanism C: Three-Level Follow-up — Long-term Tracking System. A standardized tracking process is formed: "Counselor emotional support follow-up within 1 week → Doctor professional follow-up and medication adjustment within 1 month → Family-school joint support assessment within 3 months," preventing dropout and recurrence.

3.2. Clinical efficacy comparison: significant advantages of the collaborative model

Retrospective analysis of 132 cases showed that the intervention group significantly outperformed the historical control group on all key efficacy indicators.

Table 1. Comparison of clinical efficacy indicators between intervention group and historical control group

Clinical Efficacy Indicator	Historical Control Group (n = 45)	Intervention Group (n = 87)	Statistical Test	p-value
Mean Intervention Response Time	7.5 ± 3.2 days	2.3 ± 1.1 days	t = 12.47	< 0.001
Clinical Compliance	33 (73.3%)	80 (91.8%)	$\chi^2 = 8.12$	0.004
6-Month Crisis Recurrence Rate	10 (22.2%)	5 (5.7%)	$\chi^2 = 7.89$	0.005

3.3. Qualitative findings: trust transfer and role complementarity

Interviews revealed the underlying logic behind the efficacy improvement:

Trust Transfer and Conversion: Students' trust in university counselors is partially transferred and converted into initial trust in the unfamiliar medical system through the institutionalized, seamless referral process, greatly reducing treatment resistance. One doctor remarked, "The students come 'accompanied' or 'sent' by their counselors. They know the university is following up throughout, which is very beneficial for establishing a therapeutic alliance."[4]

Clarity and Complementarity of Roles: The collaborative mechanism clarifies respective professional boundaries. The medical system focuses on diagnosis, pharmacological treatment, and in-depth psychotherapy; the educational system is responsible for early identification, emotional support, academic/life arrangements, cultural adjustment, and long-term companionship. Based on information sharing, they form a complementarity of "professional treatment" and "holistic care."

4. Discussion

This study confirms that deeply "embedding" clinical medical resources into the campus mental health work system through institutionalized channels can produce a synergistic effect of "1 + 1 > 2," achieving a qualitative improvement in clinical efficacy.

4.1. From "Referral" to "Collaboration": A fundamental paradigm shift

The traditional model is a linear "identification → referral → conclusion," with university responsibility significantly diminishing after referral. In contrast, "Medical-Educational Collaboration" is a circular, continuously interactive partnership. The dual-file management and three-level follow-up systems ensure that students remain within a safety net jointly woven by education and healthcare. This is not merely process optimization but a fundamental shift in service philosophy—from "transferring responsibility" to "sharing responsibility."

4.2. Mechanistic explanation for efficacy improvement

Time Advantage: The green channel directly compresses the time window for registration and waiting, which is crucial for students in acute crisis.

Compliance Advantage: The sustained involvement of the educational system (e.g., counselors reminding of follow-ups, coordinating course arrangements) is a key social support factor in improving treatment compliance for students, especially those from cultural groups with stigma towards mental illness.

Prognosis Advantage: A coherent and supportive environment reduces environmental stressors after discharge, while professional tracking can timely warn of recurrence signs, thereby significantly improving long-term prognosis.

4.3. The "Distinctive Path" for medical universities and its transferability

The deep "Medical-Educational Collaboration" model is a professional barrier established by medical universities relying on their affiliated hospital systems, representing their distinctive path compared to comprehensive universities. However, its core principles—establishing institutionalized cross-system partnerships and achieving information sharing

and responsibility sharing—have universal relevance. Non-medical universities can partially replicate key advantages of this model by establishing similar deep cooperative agreements with local mental health centers (e.g., setting up campus clinics, developing joint work protocols).[5]

4.4. Research limitations and ethical considerations

This is a single-center retrospective study, potentially subject to selection bias. Future multi-center prospective studies are needed for further validation. Furthermore, dual-file management involves sharing sensitive medical information, which must be based on a strict ethical framework of informed consent, data minimization, encryption/desensitization, and clear definition of rights and responsibilities. The success of the model in this study also relies on the strict implementation of this premise.[6]

5. Conclusion

Through mechanism analysis and efficacy verification, this study demonstrates that medical universities can construct a responsive, professionally robust, and continuously complete "Medical-Educational Collaboration" closed-loop by deeply and structurally integrating clinical psychiatric resources into the international student psychological crisis intervention system. This closed-loop not only greatly enhances the clinical efficacy of intervention (shortening response time, improving compliance, reducing recurrence rate) but also embodies the student health-centered philosophy of "holistic" care. This provides an empirically tested Chinese solution for how medical universities worldwide can leverage their unique resource advantages to build an excellent psychological support system for international students. The core of its successful experience lies in transforming cross-system cooperation from occasional "goodwill" into inevitable "standard operating procedures" through refined institutional design, thereby constructing a solid and professional "firewall" for students' mental health.

Disclosure statement

The author declares no conflict of interest.

References

[1] World Health Organization, 2021, Comprehensive Mental Health Action Plan 2013-2030. WHO.

[2] Lipson SK, Lattie EG, Eisenberg D, 2019, Increased Rates of Mental Health Service Utilization by U.S. College Students: 10-Year Population-Level Trends. *Psychiatric Services*, 70(1): 60-63.

[3] Lu L, 2020, The Current Status and Challenges of China's Mental Health Service System. *Chinese Journal of Psychiatry*, 53(1): 3-8.

[4] Thornicroft G, Tansella M, 2013, The Balanced Care Model for Global Mental Health. *Psychological Medicine*, 43(4): 849-863.

[5] Wenzhou Seventh People's Hospital, Wenzhou Medical University International Education College, 2024, *Medical-Educational Collaboration Intervention Work Agreement for Psychological Crises of International Medical Students*.

[6] Corrigan PW, 2014, The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. *Psychological Science in the Public Interest*, 15(2): 37-70.