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# Preventing tragedy: addressing suicides among China's standardized residency trainees

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## Introduction

In 2024, a series of suicides among China's standardized residency trainees has caused a significant stir within the medical community (Liang and Wen, 2024; Sun, 2024; Wang and Lu, 2024). Multiple standardized residency trainees in China have unfortunately taken their own lives in succession. These untimely deaths are not merely personal tragedies; they also serve as a powerful wake-up call for the entire medical system.

Currently, there is a notable lack of epidemiological data specifically addressing the incidence of suicide among China's standardized residency trainees. However, a 2023 report on physician suicides in the United States revealed that 1 in 10 doctors experienced suicidal thoughts, highlighting depression as a significant and widespread concern within the medical profession (McKenna, 2023). Additionally, a survey in Shenzhen, China, reported a 25.7% depression rate among medical workers (He, 2011).

Despite the unavailability of specific data for this particular trainee group, certain cases vividly highlight the substantial pressure endured by these trainees. For instance, on 2 February 2024, a standardized residency trainee from the Yueyang Hospital of Integrated Traditional Chinese and Western Medicine Affiliated to Shanghai University of Traditional Chinese Medicine was discovered to have committed suicide by burning charcoal in his rented apartment (Sun, 2024). His mother disclosed that on the afternoon prior to the incident, he was summoned for a conversation by the hospital's teaching department after being caught "selling shifts." As evidenced by the hospital's surveillance footage and the purchase record on Meituan (a leading Chinese online food delivery and retail platform, similar to Amazon), the trainee had purchased the charcoal for suicide while still within the hospital premises in the afternoon.

Another poignant case involves Dr. Cao, a standardized residency trainee at Hunan Provincial People's Hospital (Wang and Lu, 2024). On 23 February 2024, she ended her life by cutting her throat in the bathroom of the doctors' on-duty lounge within the hospital. In the week leading up to her death, Dr. Cao had been suffering from palpitations, with her heart rate consistently exceeding 150 beats per minute. However, her repeated requests for leave were unfortunately denied.

These tragic incidents are not isolated occurrences but rather manifestations of deeper systemic problems that urgently require attention and resolution at the national, hospital, family, and individual levels. In light of this, we propose suicide prevention strategies from these respective levels.

## National level

At the national level, regulatory and policy-making play a crucial role in safeguarding the wellbeing of these trainees.

### Strengthening labor law enforcement in medical training

The current situation where trainees often work far beyond the 40-h workweek limit set by China's labor law is unacceptable (Anonymous, 2024). The national government should ensure strict enforcement of work-hour regulations in the context of residency training. This means conducting regular inspections of training programs across the country to ensure compliance. For example, a system could be established where training institutions are required to submit detailed work-hour logs for trainees on a monthly basis. Any institution found in violation should face significant penalties, such as financial fines or restrictions on future trainee intakes.

### Standardizing remuneration and financial support

The financial burden on trainees, with state subsidies and training base allowances sometimes barely covering a basic standard of living, needs to be alleviated. The national government should conduct a comprehensive study to determine a fair and adequate remuneration package for trainees. This package should be standardized across different regions, taking into account the cost of living differences. Additionally, financial support mechanisms such as low-interest loans or grants for trainees facing economic hardships could be established. For instance, a trainee from a low-income family could apply for a special grant to cover additional living expenses during the training period (Narahari et al., 2018; Weinhouse et al., 2023).

### Creating career flexibility and supportive frameworks

Given the significant investment in medical education and the limited alternative career options for trainees, it is imperative that the national level introduces greater flexibility in training and career pathways. For instance, if a trainee realizes they are not well-suited for a particular specialization during their training, there should be mechanisms in place to facilitate a smooth transition to another medical field without incurring excessive penalties. Additionally, for trainees facing personal or health-related challenges, such as pregnancy, there should be clear national guidelines to support rather than penalize them. This support could include extended training periods with appropriate accommodations, ensuring that such circumstances do not negatively impact their future career prospects. Furthermore, there should be established channels for direct feedback, allowing trainees to voice their opinions or suggestions and to seek relief in cases of unfair treatment.

## National mental health initiatives for trainees

A national mental health support system specifically tailored for residency trainees is essential. This could involve setting up a hotline dedicated to medical trainees, staffed by mental health professionals who understand the unique pressures of medical training. Additionally, the government could subsidize mental health counseling services for trainees, either in-person or through tele-counseling platforms. Online resources such as stress-management courses and peer-support forums could also be developed and promoted at the national level.

## Hospital level

Hospitals, as the direct training grounds for these trainees, also have a significant role to play in preventing suicides.

### Improving the work environment and mentorship

Hospitals should prioritize creating a more humane work environment (Mathisen et al., 2021). This can be achieved by implementing mentorship programs that pair experienced physicians with trainees. These mentors can provide not only clinical guidance but also emotional support and advice on managing the stresses of training. By sharing their own experiences of handling heavy workloads and offering practical tips on time management and self-care, mentors can significantly ease the burden on trainees. Additionally, students should be guided to acquire essential practical clinical skills, ensuring they are well-prepared for the demands of their profession.

### Fair treatment and transparent administrative decisions

Administrative decisions in hospitals should be made in a fair and transparent manner. Trainees should not be unjustly penalized for circumstances beyond their control. For example, in cases of pregnancy or other health issues, hospitals should have clear policies in place that support the trainee rather than causing additional stress. Hospital administrators should also be more receptive to the concerns of trainees and ensure that there are proper channels for trainees to voice their grievances without fear of retaliation.

## Promoting a culture of wellbeing

Hospitals should actively promote a culture of wellbeing among trainees. This could include organizing regular stress—reduction workshops, Tai Chi classes, and team-building activities (Wang et al., 2014; Yang et al., 2023). By creating an environment that values the mental and physical health of trainees, hospitals can

help reduce the overall stress levels. Additionally, hospitals could recognize and reward trainees who actively participate in self-care and stress-management activities, thereby encouraging a positive attitude toward wellbeing.

## Family level

### Creating a supportive home environment

Families play a critical role in providing emotional and psychological support to residency trainees (Lim, 2022). It is essential for family members to foster an environment where the trainee feels understood, supported, and valued. This involves maintaining open lines of communication, offering a non-judgmental ear, and being empathetic to the challenges faced by the trainee. For example, families could establish regular family meetings or check-ins to discuss the trainee's experiences and feelings. These sessions should be structured to provide a safe space for the trainee to express any concerns, stresses, or triumphs they encounter during their training.

### Encouraging work-life balance

Families should actively encourage trainees to maintain a healthy work-life balance (Picton, 2021). This includes promoting activities that provide relaxation, mental relief, and physical wellbeing. Encouraging hobbies, recreational activities, and social interactions outside of the medical field can help trainees decompress and recharge. Families can organize regular activities that the trainee enjoys, such as weekend outings, game nights, or hobby-related projects. These activities can serve as a mental break and help reduce the overall stress levels associated with rigorous medical training.

### Providing financial and logistical support

Economic pressures can significantly add to the stress experienced by trainees. Families can help ease these burdens by offering financial support or assisting with daily responsibilities, thereby allowing the trainee to focus more on their training and less on financial worries. Parents or siblings could help with household chores, meal preparation, or provide financial assistance for basic living expenses. This support can be particularly valuable in the post-COVID-19 economic downturn, where financial stress is more pronounced (Abdel-Razig et al., 2021).

### Monitoring mental health

Families should be vigilant about the mental health of the trainee (Aaronson et al., 2018). Recognizing signs of stress, burnout, or depression early can be crucial in preventing more severe mental health issues. Families can encourage the trainee to seek professional help if needed and support them throughout the process. Family members can educate themselves on the

signs of mental health issues and gently encourage the trainee to seek counseling or therapy if they notice concerning behaviors or symptoms (Galema et al., 2025). Providing a supportive and understanding attitude toward mental health can make it easier for the trainee to seek help.

## Individual level

### Self-care and stress management

Trainees should be encouraged to prioritize self-care and develop effective stress management techniques (Michael et al., 2024). This includes regular physical exercise, adequate sleep, healthy eating habits, and engaging in activities that they find relaxing and enjoyable (Manning-Geist et al., 2020). Trainees can establish a daily routine that includes time for physical activities such as jogging, Tai Chi, or going to the gym (Wang et al., 2014; Manning-Geist et al., 2020). Additionally, setting aside time each day for hobbies, meditation, or relaxation exercises can help manage stress levels.

### Seeking professional mental health support

It is important for trainees to recognize when they need professional help and to seek it without hesitation (Hasan et al., 2022). Mental health professionals can provide valuable support through counseling, therapy, or medication if necessary. Trainees can schedule regular sessions with a counselor or therapist to discuss their stresses and challenges. Many institutions offer mental health services specifically for medical trainees, which can be a valuable resource.

### Building a support network

Developing a strong support network of peers, mentors, and friends can provide emotional and psychological support. Peers who are going through similar experiences can offer empathy and understanding, while mentors can provide guidance and advice. Trainees can join support groups or peer networks within their institution or online. Regularly connecting with these groups can provide a sense of community and shared understanding, which can be incredibly comforting.

### Setting realistic goals and expectations

Trainees should set realistic goals and expectations for themselves (Manzone et al., 2019). Understanding that it is okay not to be perfect and that making mistakes is part of the learning process can reduce self-imposed pressure and stress. Trainees can work with mentors to set achievable milestones and celebrate small successes along the way.

This approach helps in maintaining motivation and a positive outlook.

## Time management and prioritization

Effective time management and prioritization of tasks can help trainees handle their workload more efficiently, reducing stress and preventing burnout (Pitre et al., 2018). Trainees can use tools like planners, to-do lists, and time-blocking techniques to organize their tasks and ensure they allocate time for both work and relaxation.

## Summary

In conclusion, addressing the issue of suicides among China's standardized residency trainees requires a multi-faceted approach that includes interventions at the national, hospital, family, and individual levels. By fostering a supportive environment, promoting mental health awareness, and encouraging self-care and stress management, we can create a more sustainable and nurturing training experience for future medical professionals.

## Author contributions

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