

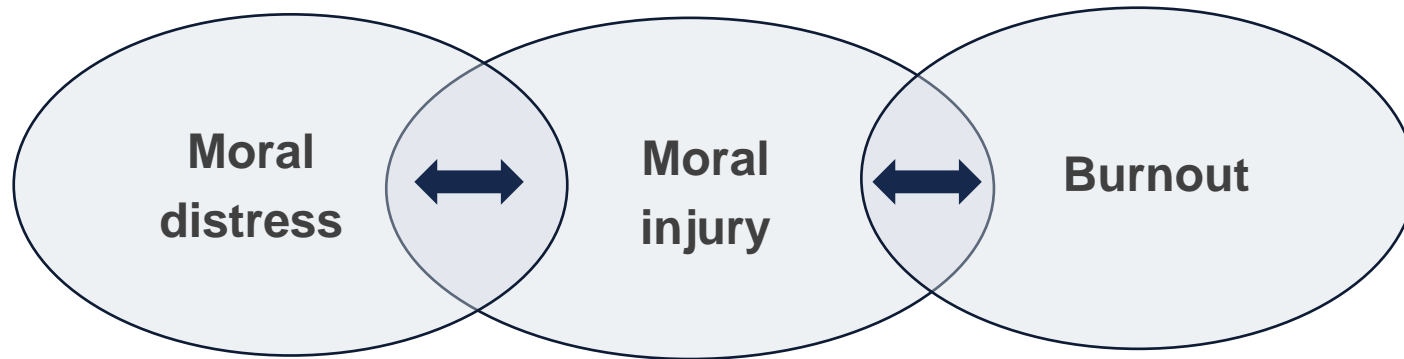


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Understanding Moral Injury and Its Associated Factors among Chinese Healthcare Professionals

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Introduction



You might be more familiar with other related terms like moral distress and burnout.

In fact, these concepts are closely connected.

01 Research Background

1.1 Moral Injury

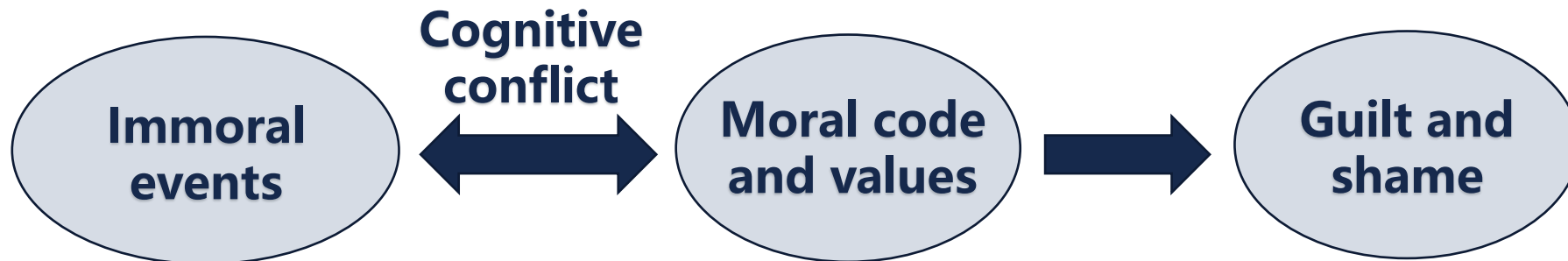


01 The military context

Moral injury is a concept that originated from the Survivor's Guilt in the military context. It initially described the emotional wounds of soldiers whose duties forced them to relinquish their values.

02 Social contexts such as the medical area

Moral injury occurs when we commit, witness, or fail to prevent an act that violates our deeply held moral beliefs.



01 Military context: violence and killing

02 Social life: betrayal, imbalance of justice, collapse of integrity

Conscientious individuals

Negative moral emotions

01 Research Background

1.2 Moral Injury of Healthcare Professionals

Healthcare workers were compelled to make moral compromises to consider the needs of other stakeholders (the insurers, the hospital, the health care system, even our own financial security).



Systemic factors:

Excessive workload;
Administrative burden;
Lack of organisational support;
Shortage of medical resources;
Institutional betrayal

Its application to healthcare workers distress highlights the sense of moral injury they may experience when the system prevents them from meeting patients needs. Every time they are forced to make a decision that goes against the best interests of patients(our deeply held moral beliefs), they feel a pain of moral injustice.

01 Research Background

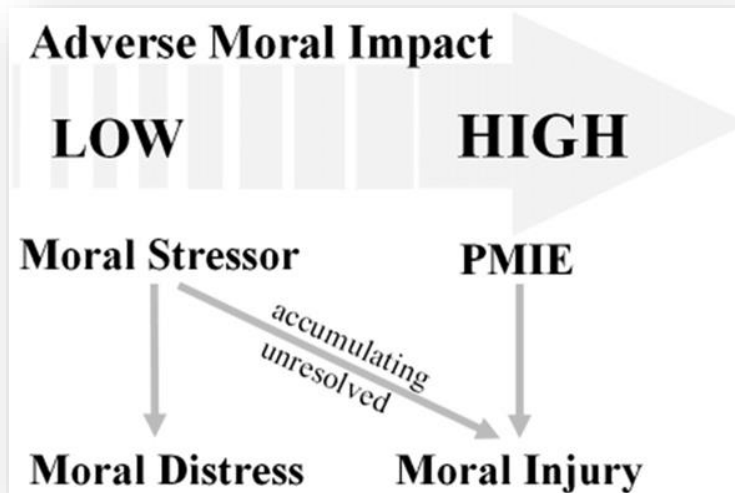
Ideal care service

This is the conflict between the ideal care service and the reality of objective constraints. These constraints prevent our healthcare workers from providing the optimal treatment and care to patients.



Reality of objective constraints

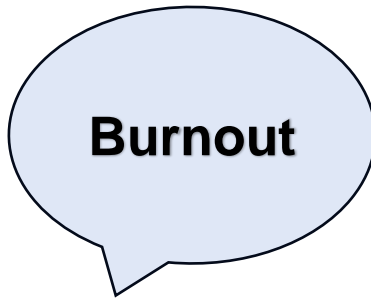
Repeatedly over time, the accumulation of this persistent moral distress will result in moral injury.



Reference: Examining moral injury in clinical practice: A narrative literature review

Potentially morally injurious events (PMIEs) that occur in high-stakes situations, such as committing “morally wrong” actions and inactions or witnessing others’ acts of omission and commission may violate long-standing, deeply ingrained moral values, behaviors, and expectations.

01 Research Background



Burnout mostly indicates that the problem lies in less resilient individuals. Therefore, the solutions to burnout often target individuals, such as yoga, mindfulness therapy, and so on.



Moral injury locates the source of distress in a broken system, not a broken individual, and allows us to direct solutions at the causes of distress.



Moral injury describes the challenge of knowing what care patients need but being unable to provide it due to constraints beyond our control.

02 Main Content

Objective



Our study aims to investigate the prevalence of moral injury and associated factors among Chinese healthcare professionals.

Taking into account the relevant factors, we hope to propose some strategies to improve the moral injury of medical staff in order to better safeguard their well-being.



02 Main Content

⦿ Methods

Quantitative research

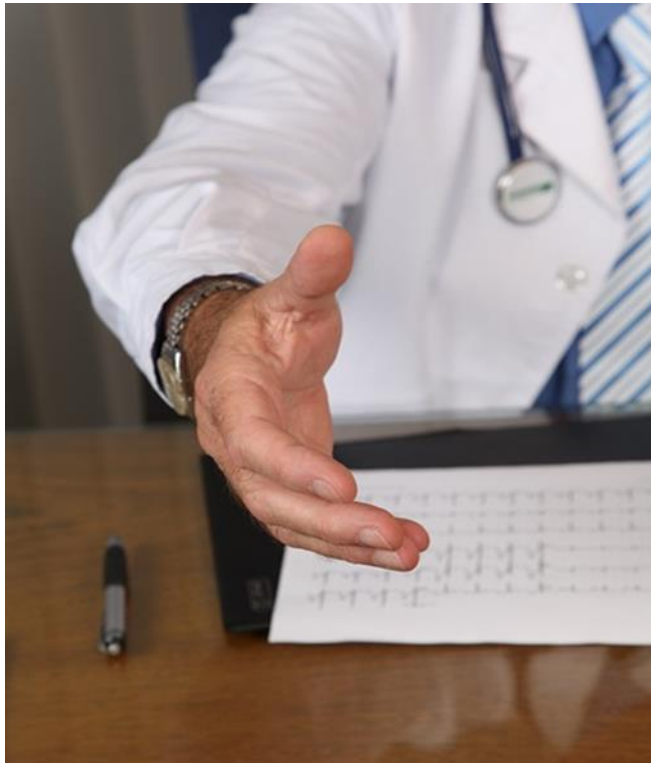
Our research team collected and analyzed both quantitative and qualitative survey data for a better understanding of the research problem than each type of data can offer alone.



Qualitative research

Convergent mixed-methods approach

⦿ Methods



Study Design

The questionnaire was made up of open- and closed-ended items (including qualitative and quantitative data). Chinese healthcare workers were invited to participate in an anonymous online questionnaire on WeChat, China's most popular social media platform. Eligible participants resided in China, were at least 18 years of age, had at least 3 months of practical experience, and voluntarily signed the electronic informed consent form. The survey was conducted between 14 September and 30 October 2023, with the approval of the Harbin Medical University Health System Hospital Ethics Committee.

02 Main Content

Results

A total of 584 (N = 584) healthcare workers from different provinces (including Heilongjiang, Xinjiang, Guangdong, and Beijing) of China completed our questionnaire survey, including 430 doctors and 154 nurses. Their average age is about 35, and their average length of work practice is about 11 years.

The questionnaire included several closed-ended questions, including survey measures demographic characteristics, job-related information, job satisfaction, individual clinical practice(including workplace violence, medical errors or disputes, witnessing patient suffering or death, and media pressure and public opinion), mental health needs and organizational support.

Participant characteristics and bivariate analysis (N= 584)

Characteristics	n	%	MISS-HP score		
			Mean	SD	P
Total	584	100	41.47	14.00	
Age (in years)			34.95	10.14	
Years in practice setting			11.59	10.35	
Moral injury severity level					
Clinically insignificant distress	432	74.0	39.23	13.43	
Clinically significant distress	152	26.0	47.84	13.69	
Profession					
Doctor	430	73.6	42.04	13.96	0.099
Nurse	154	26.4	39.87	14.05	
Gender					
Male	199	34.1	44.47	13.95	< 0.001
Female	385	65.9	39.92	13.80	
Marital status					
Unmarried	224	38.4	41.78	13.42	0.671
Married	360	61.6	41.28	14.37	
Educational attainment					
Technical secondary school	75	12.8	40.21	13.90	0.530
Undergraduate	317	54.3	41.22	14.12	
Master's degree	155	26.5	41.94	13.82	
PhD	37	6.3	44.14	14.13	
Whether expected revenues are being met					
No	468	80.1	42.7115	13.15	< 0.001
Yes	116	19.9	36.4569	16.13	

02 Main Content



Results

Participant characteristics and bivariate analysis (N= 584)

Job-related information

Characteristics	n	%	MISS-HP score		
			Mean	SD	P
Hospital level					
Primary medical institutions	70	12.0	42.67	13.25	0.081
Regional level 2 medical institutions	39	6.7	45.85	13.48	
Provincial and municipal level 3 medical institutions	475	81.3	40.93	14.11	
Job title					
Internship and training	147	25.2	40.88	12.62	0.673
Primary	175	30.0	41.35	14.19	
Intermediate	137	23.5	41.20	14.21	
Deputy senior	67	11.5	41.33	16.09	
Advanced	58	9.9	44.09	13.92	
Department					
Internal Medicine	230	39.4	42.46	13.19	0.081
Surgical	98	16.8	39.99	14.94	
Obstetrics and Gynecology	49	8.4	37.29	13.89	
Pediatrics	46	7.9	45.39	13.10	
ICU	43	7.4	42.79	13.56	
Emergency Department	19	3.3	39.79	15.52	
Other Departments	99	17.0	40.64	14.85	
Whether in a managerial position					
No	507	86.8	41.17	14.05	0.185
Yes	77	13.2	43.44	13.62	
Frequent overtime work					
No	241	41.3	38.39	13.95	< 0.001
Yes	343	58.7	43.63	13.65	
Feeling overworked					
No	220	37.7	37.55	14.02	< 0.001
Yes	364	62.3	43.84	13.47	
Receiving any support from family or friends					
No	100	17.1	45.09	13.95	0.004
Yes	484	82.9	40.72	13.91	

Individual clinical practice

Characteristics	n	%	MISS-HP score		
			Mean	SD	P
Job satisfaction					
Dissatisfied	104	17.8	50.18	12.50	< 0.001
Satisfied	397	68.0	41.10	12.66	
Extremely satisfied	83	14.2	32.33	15.57	
Workplace violence					
No	145	24.8	37.62	13.31	< 0.001
Yes	439	75.2	42.74	14.01	
Medical error or dispute					
No	325	55.7	39.23	13.28	< 0.001
Yes	259	44.3	44.28	14.40	
Witnessing patient suffering or death					
No	110	18.8	34.84	14.90	< 0.001
Yes	474	81.2	43.01	13.34	
Self-perception of whether public opinion is pressurized					
No	67	11.5	34.43	16.33	< 0.001
Yes	517	88.5	42.38	13.42	
Mental health needs					
No	381	65.2	39.73	13.70	< 0.001
Yes	203	34.8	44.73	14.01	
Lack of organizational support					
No	165	28.3	34.64	13.85	< 0.001
Yes	419	71.7	44.16	13.14	

These variables are independent variables. Based on previous studies, these factors may be related to moral injury.

02 Main Content

Results

Participants' answers to the Moral Injury Events Scale (MIES) assessing PMIEs (N = 584).

MIES Items	M	SD
1. I saw things that were morally wrong.	3.70	1.59
2. I am troubled by having witnessed others' immoral acts.	3.93	1.53
3. I acted in ways that violated my own moral code or values.	1.86	1.16
4. I am troubled by having acted in ways that violated my own morals or values.	2.49	1.65
5. I violated my own morals by failing to do something that I felt I should have done.	2.58	1.55
6. I am troubled because I violated my morals by failing to do something I felt I should have done.	2.89	1.65
7. I feel betrayed by superiors who I once trusted.	2.63	1.52
8. I feel betrayed by fellow colleagues who I once trusted.	2.57	1.44
9. I feel betrayed by others outside the healthcare system who I once trusted.	2.92	1.58
Total	25.59	9.05

We used two scales to measure moral injury. The MIES has been used to assess the prevalence and perceived intensity of PMIEs in healthcare settings.

Participants' answers to the Moral Injury Symptom Scale: Healthcare Professionals Version (MISS-HF) (N = 584).

MISS-HP Items	M	SD
1. I feel betrayed by other health professionals whom I once trusted.	3.58	2.61
2. I feel guilt over failing to save someone from being seriously injured or dying.	5.71	3.02
3. I feel ashamed about what I've done or not done when providing care to my patients.	5.03	3.00
4. I am troubled by having acted in ways that violated my own morals or values.	4.89	3.01
5. Most people with whom I work as a health professional are trustworthy.	3.56	2.25
6. I have a good sense of what makes my life meaningful as a health professional.	3.25	2.32
7. I have forgiven myself for what's happened to me or to others whom I have cared for.	5.97	2.82
8. All in all, I am inclined to feel that I'm a failure in my work as a health professional.	2.76	2.21
9. I sometimes feel God is punishing me for what I've done or not done while caring for patients.	2.80	2.31
10. Compared to before I went through these experiences, my religious/spiritual faith has strengthened.	3.91	2.61
Total	41.47	14.00

The MISS-HP has been used to assess the severity of moral injury symptoms. (This scale has been translated into different languages and is used by medical workers in many countries.)

Results

Results of the stepwise multiple linear regression model

	Unstandardized Coefficients	Std. Error	Standardized Coefficients	Sig.	95.0% Confidence Interval for B	
	B		Beta		Lower Bound	Upper Bound
Constant	23.418	2.554		0.000	18.403	28.434
MIES score	0.830	0.052	0.536	0.000	0.728	0.932
Job satisfaction	-3.980	0.817	-0.161	0.000	-5.584	-2.376
Lack of organizational support	2.769	1.041	0.089	0.008	0.723	4.814
Mental health needs	1.939	0.919	0.066	0.035	0.133	3.744
Witnessing patient suffering or death	2.419	1.156	0.068	0.037	0.149	4.690

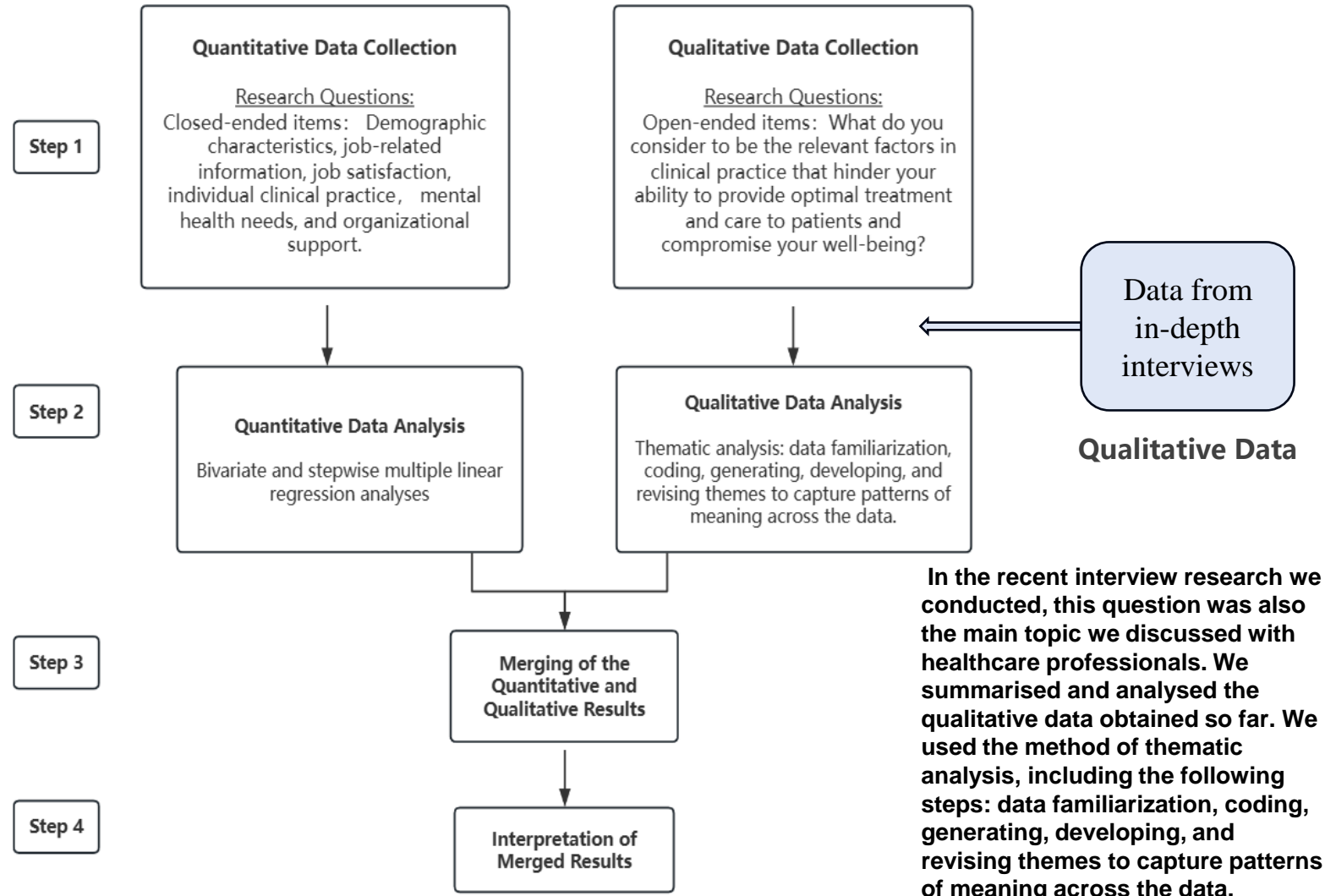
This table reports the results of our main statistical analysis (N= 584). Unstandardized coefficients explain how much the MISS-HP value increases for one step on the scale of the variable that is shown in the first row. (F= 95.059; p < 0.001; R=67.2%; R²=45.1%; adjusted R² = 44.6%)

Using the SPSS, the score of the MISS-HP was taken as the dependent variable, and other variables as the independent variables. Through the stepwise multiple linear regression analyses, the results indicated that exposure to PMIEs, job satisfaction, lack of organizational support, mental health needs, and witnessing patient suffering or death were associated with moral injury.

Methods

Our research initially started last year, but recently we have carried out in-depth interviews with medical workers. We have included some qualitative data we collected recently, combined with the data we collected before, which can help us better understand the moral injury of healthcare workers.

Research Process



Mixed-methods approach

Qualitative Results

The most frequently mentioned theme is "organizational and systemic," which encompasses five sub-themes.

**Lack of knowledge/competent;
Lower income level;
Poor resilience**



**Workload;
Inadequate support;
Lack of leadership;
Lack of healthcare resources;
Administrative burden**

**Witnessing patient suffering or death;
Workplace violence;
Medical errors or disputes**

**Patients' non-understanding and distrust;
Disharmonious colleague relationship;
Public pressure**

Four themes and fourteen subthemes resulted from the thematic qualitative analysis.

⊙ Organizational and Systemic



Workload

Many participants described how the healthcare organization and system have put them in moral dilemmas and undermined their well-being. Workload was the most referenced by respondents. One participant wrote: **“My daily workload is already very heavy, but I always need to deal with non-professional matters. The excessive workload always makes me exhausted, causing me to handle some matters in a very irritable state all the time.”** Some respondents mentioned that they hoped the healthcare organization could provide them with more care, reduce their workload, make their efforts proportionate to their rewards, and improve the medical environment.

🌀 Organizational and Systemic



Lack of Leadership

The lack of leadership is also a frequently mentioned sub-theme. For example, one participant shared:

"When doctors encounter medical disputes, the leaders, just to calm things down, would only spend money to settle the matter and punish the doctors, regardless of whether we are right or wrong. This has scared and disheartened many medical workers. Because doctors have a kind heart, but sometimes good intentions are not rewarded. In the face of interests, no one will remember the kindness of doctors."

⊙ Interpersonal



✓ Patients' non-understanding and distrust

In the theme of interpersonal, patient distrust is a frequently mentioned sub-theme. One participant wrote: “People always deify doctors. Sometimes, just when we ‘ve finished our work and are getting ready to have lunch, patients come to us with their needs and they question us, ‘ Do you still need to have lunch? You are a doctor! ‘ But we are also ordinary people. We also need to rest and get tired! Hopefully, they can give us more understanding.”

The attitude of patients towards doctors, their distrust and lack of understanding, can become an important factor that harms the well-being of medical staff and reduces their professional happiness.

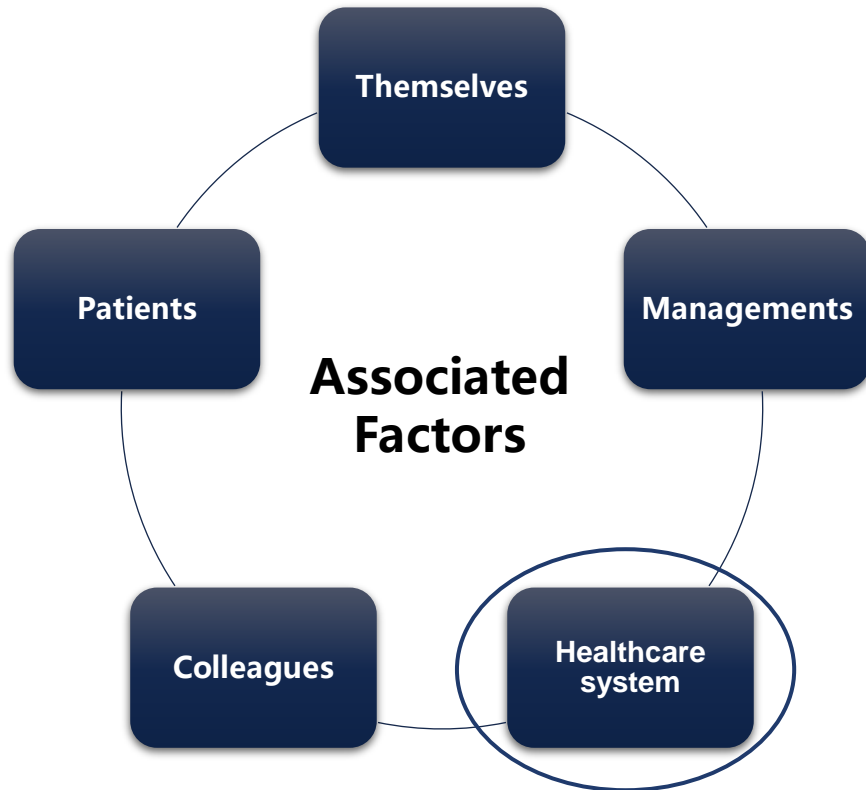
🌀 Interpersonal



✓ Disharmonious Colleague Relationship

In interpersonal interactions, the relationship between medical staff and their colleagues is also a very important factor. One participant talked about an experience of being betrayed by colleagues whom she once trusted: **“Once I was an assistant to a doctor I liked very much. But due to some of her mistakes, the treatment time was prolonged. Our leader asked me why it took so long, and she directly pushed the responsibility onto me. At that moment, I felt a deep sense of betrayal.”**

Discussion



Merging of the qualitative and quantitative results

We combined the quantitative and qualitative results and summarized the associated factors of moral injury among healthcare workers. These factors exist in the relationships of medical staff with various objects, including themselves, patients, managements, colleagues, and the entire medical system.



Organizational support

Whether in quantitative or qualitative data, organizational support is a very important factor related to moral injury. So when we are working out strategies to ensure the well-being of medical staff, we can approach from different levels and perspectives. We cannot rely solely on the medical staff individuals but also requires more extensive systematic changes.

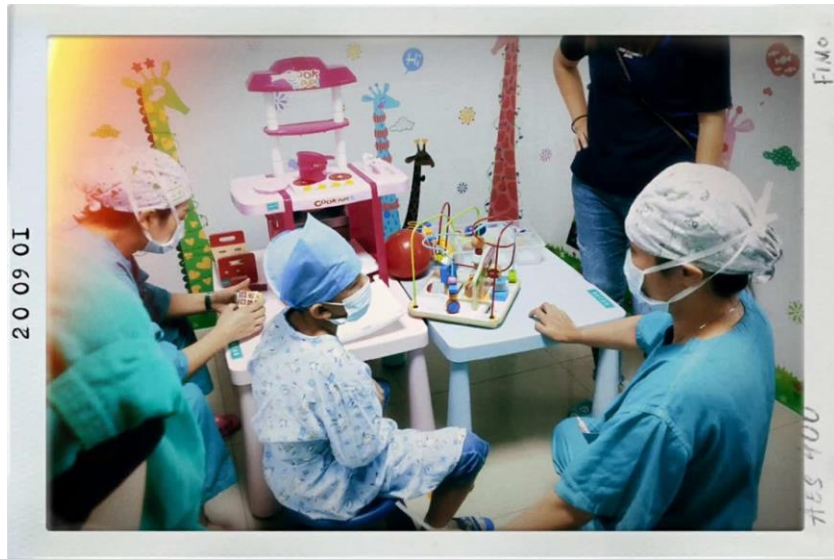
04 Enlightenment



Research Significance

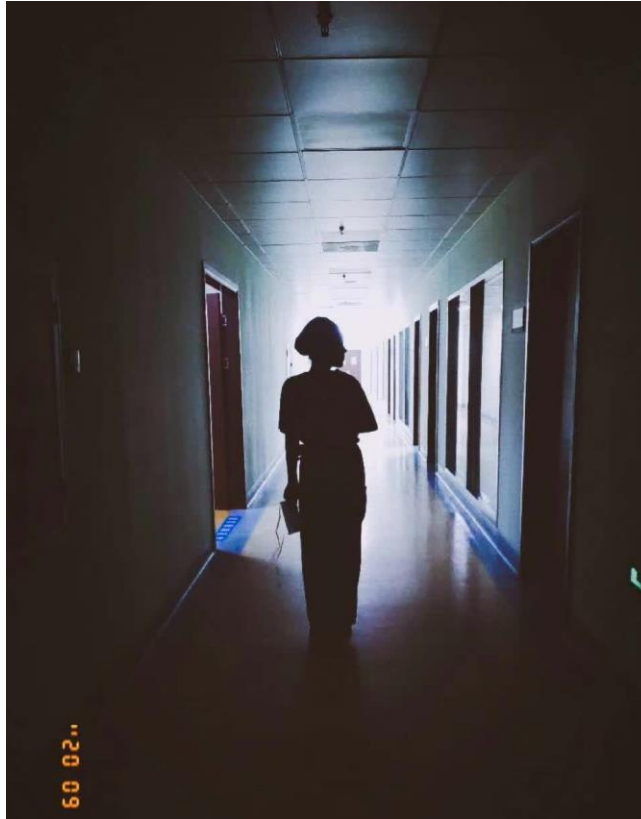
Our survey results show that about 30% of medical staff in China have significant symptoms of moral injury, and there are more that we haven't discovered because moral injury symptoms are hidden. What I'm sharing today is the story of Chinese healthcare workers, and I believe it's also the story of health workers around the world.

04 Enlightenment



Research Significance

When I have interviews with these responsible and kind medical staff, I am always deeply moved by them. Because they were willing to trust me, tell me their stories, and disclose their pain to me. They told me how they loved the medical work and how they got hurt in practice. They are nurses, doctors and my friends.



Research Significance

One interview impressed me very deeply. A doctor told me that she felt very lucky because there was someone like me who was willing to listen to her story and understand her, because the pain of being a doctor can never be understood by outsiders.

Listening to their stories and writing them down so that more people know about their stories, and try to get the greater power to solve these problems, perhaps this is the meaning of my research, because medical workers deserve more care and concern.

04 Enlightenment

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Apr 19, 2024



RESEARCH ARTICLE

Understanding Moral Injury and Its Predictors among Chinese Physicians Preprint v2

Background: Moral injury - the betrayal of one's moral and professional values - is a negative factor affecting physicians' wellbeing, however, few studies have examined moral injury and its predictors in healthcare professionals. This study aimed to determine the prevalence and predictors of moral injury in Chinese physicians. Methods: This study was a cross-sectional survey conducted from September 14 to October 27, 2023, in [see more](#)

The manuscript of our first quantitative data has been uploaded to the Qeios platform.

Email: qing093011@163.com

The website link: <https://www.qeios.com/profile/83313>

Welcome everyone to offer valuable review comments!

Thanks!

THANK YOU VERY MUCH FOR YOUR SUGGESTIONS

Presenter: Rongqing Shao Time: 2024.12.2