

Supplementary Table 1 The coding details of representative quotes, subcategories, and categories

Categories	Subcategories	Representative Quote
Enrich connotation of sense of job security	To ensure patient safety	"I think the nurses' sense of job security is the safety of the nursing process, the patients' safety and medicine safety." (P3) "I am worried that the patient's condition would suddenly deteriorate." (P6)
	Nurses' physical and psychological safety	"The most frightening thing is being infected by blood-borne diseases, such as HIV, syphilis...once it happened, it is very terrible." (P14)
	Work environment safety	"Work environment safety includes the relationships between colleagues, especially doctor-nurse relationships and doctors' attitudes toward nurses and patients." (P13)
	Realizing professional values	"The work should provide us with enough chances to realize professional value and obtain professional identity from leaders, co-workers and patients." (P16)
Challenges to sense of job security	Challenge of nurses' clinical competence	"If the communication skills were poor, it might lead to some nurse-patient relationship problems ... Sense of job security is directly related to our own communication ability." (P1)
	Challenge of psychological resilience	"When I made medicine for patients, I usually doubted myself and checked the doctor's order several times." (P5) "I worked very hard to help a patient find ways to prevent falls and pressure injuries. However, when the delicate skin on him hands was broken accidentally, he blamed me because of mistakenly thinking I caused it. It made me sad and felt like I was not understood and recognized, then depression emotion coming." (P1)
	Lack of organizational support	"When an accident happens, supervisors should care for us in time but not push us to the peak of dispute to face the questions alone." (P16)
	Lack of social support	"I usually don't expose myself as a health worker outside the home because I always feel that people are unfriendly to us." (P16) "The social status of nurses was still low in our city. Even patients or their relations used to call us "Miss" ("Miss" is often used as a derogatory and impolite term in informal situations) and waitresses, and think they were our god." (P17)

Consequences of sense of job insecurity	Changing their work attitudes	"Accident, made me more mentally stressed and insecure. I was more cautious and increased the frequency of overseeing the ward around to find potential problems when I was on duty alone." (P18)
	Unhealthy psychological conditions	"My female colleagues were usually in poor moods after suffering violent injuries. They even complained about work and doubted about their own abilities: Why didn't I do it well? ... Was it because I did not communicate well with patients or others?" (P18)
The needs to improve a sense of job security	Improvement in communication ability	"The communication skills with patients were often appeared in book.....You had to constantly practice in work for many years to enhance them.....Communication skills were poor among new nurses. It would be better if the hospital had training courses on communication skills for us." (P8)
	Needs for supervisor and organizational support	"After female nurses suffer from violence, they need more supervisors' humanistic care, while males might not care so much... Male nurses might be stronger than female nurses in self-regulation, especially for the ability to bear grievances." (P18)
	Needs for policy support	" As a nurse leader, When there is a need to make some changes, I would ask for the nurses' opinions and combine their views with clinical practice...Only when the policies and procedures are in the line with the clinical practice, would it decrease unnecessary workflows and improve the quality and efficiency of work. " (P15) "I hoped the hospital could strengthen the security team... And nurses could wear an alarm. If an accident occurred, nurses could connect to the alarm in a timely manner." (P16)