

## Supplementary File: Questionnaire Instrument

### Multidisciplinary Medical Students' Emotional Intelligence and Rational Prescribing Competence Self-Efficacy Survey

**[Survey Introduction and Informed Consent]** Welcome to this academic survey. This research aims to explore the underlying relationship between emotional intelligence, occupational anxiety, and clinical prescribing self-efficacy within the context of the *Clinical Pharmacology and Pharmacotherapeutics (CPPT)* curriculum. **Informed Consent:** Your participation in this study is entirely voluntary. All data collected will be strictly anonymized, aggregated, and utilized exclusively for medical education research and teaching reform. We explicitly guarantee that your responses (including your psychological assessments) are strictly decoupled from your academic evaluations and will **NOT** influence your formal grading in the CPPT course. You maintain the right to withdraw from this survey at any time without any academic repercussions. By proceeding to the next page, you indicate your informed consent to participate in this study.

#### Module 1: Demographics and Core Covariates

1. **Gender:**  Male  Female

2. **Academic Year:**  Sophomore (Year 2)  Junior (Year 3)  Senior (Year 4)  Year 5  Other

3. **Academic Major:**  Clinical Medicine  Nursing  Pharmacy / Clinical Pharmacy  Anesthesiology  Pediatrics  Pharmaceuticals  Other

4. **Was your current major your first choice during university admission?**  Yes  No

5. **What is your approximate academic performance ranking in your undergraduate studies?**  Top 20%  21%-50%  51%-80%  Bottom 20%

6. **Have you had any clinical clerkship/internship or early clinical exposure experience?**  None  Less than 1 month  1-3 months  More than 3 months

7. **Your willingness to engage in clinical/pharmacy/nursing-related professional work in the future:** (Rate from 1 to 5, where 1 = Very low, 5 = Very high)

**Module 2: Emotional Intelligence Scale (Adapted from WLEIS)** (*Please rate the following statements based on your actual situation: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*)

#### Self-Emotion Appraisal (SEA)

1. I usually know clearly how I feel.
2. I can usually perceive changes in my emotions.
3. I deeply understand my own emotions.
4. I have a clear understanding of my emotions.

#### Others' Emotion Appraisal (OEA)

5. I can usually understand the emotions of my classmates/patients well through their behaviors.
6. I am a good observer of others' emotions.
7. I am very sensitive to others' emotions and feelings.

8. I can easily understand others' feelings.

### **Use of Emotion (UOE)**

9. I always set goals for myself and then try my best to achieve them.

10. I can always self-motivate to do my best.

11. I can always encourage myself to try my best.

12. I can guide my positive emotions to work towards my goals.

### **Regulation of Emotion (ROE)**

13. I can quickly recover from anger or frustration.

14. I can control my emotions well when facing difficulties (e.g., academic stress, exam failure).

15. I can quickly calm myself down when I am angry.

16. I can control my temper well.

**Module 3: Clinical Pharmacology and Rational Prescribing Competence Self-Efficacy (NARS Framework)** *(How confident are you in performing the following tasks? 1 = Not at all confident, 2 = Slightly confident, 3 = Moderately confident, 4 = Very confident, 5 = Extremely confident)*

#### **Dimension 1: The Graduate as a Medical Provider**

1. Evaluate pharmacokinetic changes in special populations (e.g., pregnant women, children, patients with hepatic/renal impairment) and adjust dosages accordingly.

2. Accurately identify potential drug interactions and contraindications from complex polypharmacy prescriptions.

3. Select the most appropriate route of administration and dosage form based on the patient's individual pathophysiological status.

4. Interpret therapeutic drug monitoring (TDM) results and optimize individualized dosing regimens.

#### **Dimension 2: The Graduate as a Health Promoter**

5. Explain the correct use of complex medications (e.g., targeted therapies, inhalers, insulin pens) to patients and their families using plain, non-professional language.

6. Warn patients about common adverse reactions of high-risk medications and guide them on self-monitoring and initial management.

7. Astutely assess patients' barriers to medication adherence (e.g., financial constraints, fear of side effects) and adopt targeted communication strategies to improve adherence.

8. Provide comprehensive lifestyle intervention advice (e.g., dietary restrictions, routine adjustments) in conjunction with the patient's medication regimen.

#### **Dimension 3: The Graduate as a Team Member**

9. Professionally question and communicate with the prescribing physician/pharmacist when identifying suspected irrational prescribing or medication errors, without damaging interpersonal relationships.

10. Confidently provide treatment recommendations based on clinical pharmacology evidence during future multidisciplinary team (MDT) discussions or joint ward rounds.

11. Properly manage and resolve communication frictions with the nursing team or other medical team members arising from disagreements over medication regimens.

12. Accurately and standardly document medication interventions and collaboration processes in medical records (e.g., patient charts, prescription reviews, pharmaceutical care

records).

**Module 4: Occupational Anxiety Scale in Clinical Environments** (*How strongly do you experience the following concerns? 1 = Not at all, 2 = Slightly, 3 = Moderately, 4 = Very strongly, 5 = Extremely strongly*)

**Dimension 1: Medical Error & Safety Anxiety**

1. I feel extremely anxious thinking that my negligence in the future could lead to prescribing the wrong medication, dispensing the wrong drug, or calculating the wrong dose.
2. I often feel insecure about the management and use of high-risk medications (e.g., chemotherapy drugs, toxic/narcotic/psychotropic substances).
3. I frequently worry that my clinical pharmacology knowledge reserve is insufficient to handle sudden severe adverse drug events in clinical practice.

**Dimension 2: Doctor-Patient Conflict Anxiety**

4. I feel afraid thinking about facing patients or families who might lose control of their emotions and demand compensation due to adverse drug reactions in the future.
5. I worry that I will be unable to effectively soothe patients who are dissatisfied with treatment outcomes or have serious doubts about their medication regimens.
6. Thinking about the current complex doctor-patient relationships and potential medical disputes, I feel immense pressure regarding future clinical communication and explanation tasks.

**Dimension 3: High-Pressure Environment Anxiety**

7. Thinking about the high-intensity consecutive shifts, night shifts, and heavy paperwork on the clinical frontline, I worry that my physical and mental health will not be able to endure it.
8. I worry that in a fast-paced, high-pressure resuscitation or emergency environment, my mind will go blank and I will be unable to make rapid, correct medication decisions.
9. I am afraid of experiencing a sense of defeat from frequent criticism by senior physicians/pharmacists in future strict teaching and departmental evaluation environments.

**Module 5: Subjective Reflection Essay Scenario Reflection (Suggested length: 200-300 words):** "Based on the questionnaire you just completed, imagine that in your future clinical work (assuming your current professional role: doctor/nurse/pharmacist, etc.), a patient experiences a severe allergic reaction after using a medication regimen you helped develop. The patient's family angrily questions you in the ward. Please briefly describe, from a 'Clinical Pharmacology' professional perspective, how you would apply 'Emotional Intelligence (e.g., self-regulation and empathy)' and 'Professional Knowledge' to defuse the current conflict and communicate effectively with the family."

**[Closing Statement] End of Survey.** Thank you very much for your time, dedication, and valuable professional insights! Your feedback is profoundly instrumental in helping us optimize the medical curriculum, improve the psychological well-being of healthcare trainees, and ultimately safeguard the quality of future patient care. We wish you great success in your future medical and clinical endeavors!