**Survey of the Awareness and Implementation Status of Early Pulmonary Rehabilitation for Critical Illness**

In recent years, more and more evidence has shown that early pulmonary rehabilitation for patients with critical illness in ICU can bring many benefits to patients, such as reduced duration of mechanical ventilation and length of stay, improved physical function and health-related quality of life. In order to better understand the current awareness and implementation status of early pulmonary rehabilitation for critical illness and to promote the development of pulmonary rehabilitation in China, we have designed and developed this questionnaire. All the data are anonymous and will be used for statistical analysis only. Please fill in the questionnaire according to your actual situation, and thank you for your help!

 1. General items.

(1) Province, city, hospital name, hospital level (drop-down menu)

(2) gender: male, female

(3) Age: ≤25, 26~35, 36~45, 46~55, >55

(4) Highest education: technical secondary school, associate degree, bachelor's degree, master's degree and above

(5) Profession: doctor, nurse, respiratory therapist, rehabilitation therapist

(6) Title: junior, intermediate, associate professor and above

(7) Department: RICU/MICU, Pulmonary and Critical Care Medicine Department, Rehabilitation Department

(8) Working seniority: ≤5 years, 6~10 years, 11~15 years, 16~20 years, >20 years

Questions: Awareness and attitude

1) Have you ever heard of pulmonary rehabilitation?

a. Yes

b. No

2) What do you know about pulmonary rehabilitation?

a. Know what pulmonary rehabilitation is and its specific content

b. Only know the basic concept of pulmonary rehabilitation

c. Have only heard of the proper noun of pulmonary rehabilitation

3) Have you ever heard early pulmonary rehabilitation for critical illness?

a.Yes

b.No

4). What do you know about early pulmonary rehabilitation for critical illness?

a. Know what early rehabilitation for critical illness is and its specific content

b. Only know the basic concept of early pulmonary rehabilitation for critical illness

c. Have only heard of the proper noun of early pulmonary rehabilitation for critical illness

5). Is early pulmonary rehabilitation necessary for all patients in ICU?

a.Yes

b.No

6) Which of the following is a contraindication of early pulmonary rehabilitation for critical illness?

a. Consciousness not recovered

b. Tracheal intubation

c. Prone position ventilation

d. Extracorporeal membrane oxygenation (ECMO) therapy

7) What do you think is the principle of early pulmonary rehabilitation for critical illness?

a. Patients should be evaluated as soon as they enter the ICU, start as soon as possible, assess at any time, and adjust the rehabilitation program timely.

b. If the patient's condition is unstable in ICU, it is not appropriate to carry out rehabilitation.

Assess as early as possible after the patient is transferred from ICU, start as soon as possible, assess at any time, and adjust the rehabilitation program timely.

c. When the patient's vital signs are stable and the tracheal intubation and ECMO lines are removed, early assessment should be conducted and started as soon as possible. Assess at any time and adjust the rehabilitation program in a timely manner.

d. Evaluate patients as soon as possible after consciousness recovered, start as soon as possible, evaluate at any time, and adjust the rehabilitation plan timely.

8) Who do you think will be involved in the early pulmonary rehabilitation for critical illness? (Multiple choice)

Physicians, nurses, respiratory therapists, cardiopulmonary physiotherapists, dietitians, clinical pharmacists, family members/caregivers, medical engineers, medical statisticians

9) Do you think it is necessary to carry out early pulmonary rehabilitation for critical illness in your institution? Very necessary, necessary, not necessary

Current status and needs.

10) Has early pulmonary rehabilitation for critical illness been carried out in your hospital? Routinely started, carried out but not perfect, not carried out, not sure

11) Who assesses the patient before conducting early pulmonary rehabilitation for critical illness in your hospital? (Multiple choice)

Physician, nurse, respiratory therapist, cardiopulmonary physiotherapists

12) Who are involved in early pulmonary rehabilitation for critical illness in your hospital?

Physicians, nurses, respiratory therapists, cardiopulmonary physiotherapists, dietitians, clinical pharmacists, family members/caregivers, medical engineers, medical statisticians

13) Have you ever conducted early rehabilitation for critical illness ? Yes, No

14) How long is your daily treatment or involvement with patients?

a. 10~20 min, b. 21~30 min, c. 31~60 min, d.>60 min

15) By what means did you acquire knowledge related to early rehabilitation for critical illness? (Multiple choice)

 a. department training, b. attending conferences, c. short courses, d. internet learning. e. learning while in school

16) Have you attended any rehabilitation courses or conferences in the past 1 year? Yes, No

17) How many times have you attended? a. 1 time, b. 2 times, c. more than 2 times

Questions for directors of ICUs.

1) Province, city, hospital name, hospital level (drop-down menu style)

2) Type of ICU you are in? Comprehensive ICU, RICU, MICU, SICU, Emergency Room

3) What is the number of beds in your ICU?

4) Does your ICU have a respiratory therapist? Yes, No

5) Does your hospital have a Rehabilitation Department? Yes, No

6) Does your hospital carry out pulmonary rehabilitation? Yes, No, Ready to start

7) Does your hospital carry out early rehabilitation for critically ill patients? Yes, no, ready to start

If yes.

8). Who are involved in early pulmonary rehabilitation for critical illness in your hospital? (Multiple choices)

Physician, nurse, respiratory therapist, cardiopulmonary physiotherapists, dietitian, clinical pharmacist, caregivers/family member

9) What are the methods of assessment for early rehabilitation in ICU in your hospital? (Multiple choice)

Assessment scales, bedside swallowing assessment (FEES), diaphragmatic ultrasound, quadriceps ultrasound, grip strength

If not performed.

10) Reasons for not performing? (Multiple choice)

1. Hospital leadership did not support

2. Lack of Rehabilitation Department or incapacity

3. Under-awareness of doctors

4. Understaffed (including doctors, nurses, therapists)

5. Therapists lack of professional pulmonary rehabilitation skills (orthopedics, neurological rehabilitation)

6. Lack of training

7. Lack of operation guidelines and standards

8. Patients and their family members have low acceptance

9. High risk for critical illness

10. Lack of necessary rehabilitation equipment

11. Lack of uniform charging standards

1. Your contact information.