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Questionnaire for Health Care Workers With NCP (Third Edition)

[Please note that this English version of the questionnaire is the translation of the original Chinese version of questionnaire that we actually used in our survey.]

The purpose of this survey is to understand the exposure and protection situations of health care workers during the epidemic of new coronavirus pneumonia (NCP) in Wuhan.

1. Filling in carefully requires 10–15 minutes. It is very important that you provide accurate information, please fill it out carefully to avoid errors or omissions
2. For question 16, click "Yes" to pop up the relevant contents, for questions 17–26, click "No" to skip
3. Question 36, click "Direct Contact" to pop up the relevant content. For questions 37–50, after clicking "non-direct contact", the related content questions 51–56 will pop up, click "no contact" to skip
4. If you click "Yes" on question 62, the related contents will pop up. For questions 63–67, click on "None" to skip
5. Please fill in each question, you can only submit after filling in all of them
6. The questionnaire will be automatically saved when there is a temporary interruption. The next time you open the questionnaire on the same device, you can continue to answer the question.

I. Basic information

01. Basic information [Matrix text questions]

Name	_____
Phone	
Hospital	_____
Ward	

02. Age (years of age) [Fill in the blank]

03. Gender [Single choice question]

☐ Male

☐ Female

04. Professional title [Single Choice Question]

☐ Advanced

☐ Intermediate (attending doctor)

☐ Junior (resident doctor)

☐ Assistant / Intern

05. Work experience [Single choice question] *

☐ Less than 3 years

☐ 3-10 years

☐ 11-20 years

☐ 21 years or more

06. Occupation [Single Choice Question] *

☐ Surgeon

☐ Nurse

☐ Fellow

☐ Resident

☐ Postgraduate

07. Workplace [Multiple choices questions] *

☐ Wards

☐ Outpatient

08. Physical condition (basic diseases and/or treatments) in the past six months [Multiple choices questions]

☐ Diabetes

☐ Autoimmune disease

☐ Use of steroids

☐ Chemotherapy

☐ Tumor

☐ Healthy

09. Degree of fatigue from December 2019 to January 2020 [Single choice question]

☐ Very tired

☐ Moderate tired

☐ Not tired

10. Average worktime per week from December 2019 to January 2020 (including self-learning and scientific research) [Single choice question]

☐ More than 60 hours

☐ 40 to 60 hours

☐ Less than 40 hours

11. Duty from December 2019 to January 2020 [Single choice question]

☐ Once every 3 days

☐ Once every 4 days

☐ Once every 5 days

☐ Once every 6 days or more

☐ Off duty

12. Average daily sleeping time from December 2019 to January 2020
[Single choice question]

☐ 8 hours or more

☐ 7 to 8 hours

☐ 6 to 7 hours

☐ Less than 6 hours

13. Sleeping quality from December 2019 to January 2020 [Single choice question]

☐ Good

☐ Moderate

☐ Poor

II. Infection of NCP

14. The number of doctors infected with NCP in your department (including clinically confirmed cases with negative nucleic acid) [Fill in the blank]

15. The number of nurses infected with NCP in your department (including clinically confirmed cases with negative nucleic acid) [Fill in the blank]

16. Are you infected with NCP ?[Single-choice question] *

☐ Yes

☐ No

17. Date of onset of symptoms (if not clear, please select February 29, 2020) [Fill in the blank]

18. Date of diagnosis [Fill in the blank]

19. Symptoms [Multiple choices Question]

- ☐ Fever
- ☐ Cough
- ☐ Fatigue
- ☐ Diarrhea
- ☐ Headache
- ☐ Others
- ☐ Asymptomatic

20. Hematological examination [Multiple choices question]

- ☐ Hypoleucaemia
- ☐ Lymphopenia
- ☐ Increased C-reactive protein
- ☐ Normal

21. CT scan [Multiple choices questions] *

- ☐ Typical manifestation
- ☐ No typical manifestation

22. Etiological examination [Multiple choices questions]

- ☐ Nucleic acid negative
- ☐ Nucleic acid positive
- ☐ Antibody positive
- ☐ Antibody negative

☐ Not tested

23. What do you think is the possible route of transmission of your infection? [Multiple choices questions]

☐ Droplet

☐ Contact

☐ Aerosol

☐ Fecal-oral

24. Where do you think is the possible place of your infection? [Multiple choices question]

☐ General Ward

☐ Fever Clinic

☐ Public places in hospital

☐ Outside of hospital

☐ ICU

☐ Operating room

25. Treatment [Single choice question]

☐ Hospitalized

☐ Self isolation

26. Outcome [Single choice question]

☐ Cured

☐ Improve

☐ Progress

27. Date of cure (if not clear, please select February 29, 2020) [Fill in the blank]

III. Knowledge of the spread of NCP in Wuhan before January 19, 2020

Description: The National Health Commission announced that NCP was a Class B infectious disease, and it is protected according to Class A on January 20, 2020.

28. Knowledge of COVID-2019 in Wuhan before January 19, 2020 [Multiple choices questions]

☐ I heard that there was new coronavirus pneumonia in Wuhan, but it can not be transmitted from person to person.

☐ I heard that there was new coronavirus pneumonia in Wuhan, and it can be transmitted from person to person.

☐ I heard that there was new coronavirus pneumonia in my hospital, but

can not be transmitted from person to person.

☐ I heard that there was new coronavirus pneumonia in my hospital, and it can be transmitted from person to person.

☐ I heard that there were medical staffs infected with new coronavirus pneumonia in my hospital.

☐ I did not get any knowledge concerning that.

29. The time when you heard of the above news [single choice question]

☐ Before January 10, 2020

☐ From January 10 to January 19, 2020

☐ Did not hear before January 19, 2020

30. Specific date when you heard of the above news [Fill in the blank]

31. How do you know about the news [Multiple choices questions]

☐ Released by hospital

☐ By knowledge of confirmed patients

☐ Heard from colleagues in my hospital

☐ Heard from peer professionals in other hospitals

☐ Heard from friends and relatives outside of hospital

☐ Network Information

32. How did you realize the degree of seriousness of the infectious disease?[Single choice question]

- ☐ Serious
- ☐ Moderately serious
- ☐ Possible serious
- ☐ Not serious

33. Was the following protective measures taken immediately? [Multiple choices question]

- ☐ Respirators
- ☐ Gloves
- ☐ Hand disinfection
- ☐ Protective clothing
- ☐ Goggles
- ☐ No protection

34. Do you have good knowledge of the Level-2 protection before January 20, 2020? [Single-choice question]

- ☐ Yes
- ☐ No

IV. Contact and protection

35. The earliest possible time for your hospital to receive NCP patients
[Single choice question]

- ☐ December 31, 2019 and before
- ☐ From January 1 to January 10, 2020
- ☐ From January 11 to January 20, 2020
- ☐ After January 20, 2020

36. How have you been exposed to NCP in hospital [Single choice question]

- ☐ Direct contact (Had been to wards or outpatient with NCP patients)
- ☐ Indirect contact (There were NCP patients in my hospital)
- ☐ Not aware of contact in the hospital

(1) Had direct contact

37. Time of first contact with NCP patients (if not clear, please select February 29, 2020) [Fill in the blank]

38. Your protective equipment when you first contacted the NCP patients
[Multiple choices question]

- ☐ Masks
- ☐ Gloves

- ☐ Hand disinfection
- ☐ Protective clothing
- ☐ No protection

39. Places where you contacted with NCP patients [Multiple choices questions]

- ☐ Specialist clinic
- ☐ Fever clinic
- ☐ General Ward
- ☐ Isolation ward
- ☐ ICU
- ☐ Operating room
- ☐ Other places

40. How have you contacted NCP patients in the wards [Multiple choices questions]

- ☐ Made the rounds
- ☐ Medical examination
- ☐ Nursing
- ☐ Consultation
- ☐ Surgery

41. How long had you been exposed to NCP patients? [Matrix text question]

Hours / days	_____
Total days	

42. Time when patients had symptoms (if not clear, please choose February 29, 2020) [Fill in the blank]

43. Date when patients were diagnosed with NCP (if not clear, please select September 9, 1999) [Fill in the blank]

44. Were the NCP patients isolated? [Single choice question]

☐ Strict - isolation (single ward, unaccompanied, patients wear masks, level-2 protection for medical stuffs walking into and out of the wards)

☐ Non- strict isolation (single ward, but not meeting the above criteria)

☐ Initially not isolated, but with strict - isolation later

☐ Initially not isolated, but with non - strict isolation later

☐ Never isolated

45. Did the NCP patients wear masks? [Single choice question]

☐ Yes

☐ No

46. What was the disease that the patients were addmitted for? [Fill in the blank]

47. Have the patients undergone surgery? [Single choice question]

- ☐ Yes
- ☐ No
- ☐ Unaware

48. Date of the patient's operation (If not clear, please select February 29, 2020) [Fill in the blank]

49. Your protection when you knew the patients had symptoms such as fever and cough

- ☐ Surgical mask
- ☐ N95 respirator
- ☐ Hand disinfection
- ☐ Protective clothing
- ☐ Shoe cover
- ☐ No protection

50. Degree of protection [Single choice question]

- ☐ All the time
- ☐ Most of the time
- ☐ Occasionally

(2) Indirect contact with NCP patients in hospital

51. How did you get indirect contact with NCP patients? [Multiple choices question]

- ☐ There were NCP patients in the wards
- ☐ Had been to the wards with NCP patients
- ☐ Had direct contact with doctors who were treating NCP patients
- ☐ There were NCP patients in hospital
- ☐ Others

52. Others [Fill in the blanks]

53. Were the patients isolated?

- ☐ Yes
- ☐ No

54. Did the patients wear masks?

- ☐ Yes
- ☐ No

55. Your protection in possible contact places [Multiple choices question]

- ☐ Surgical masks
- ☐ N95 respirators

- ☐ Hand disinfection
- ☐ Protective clothing
- ☐ Shoe covers
- ☐ No protection

56. Degree of protection [Single choice question]

- ☐ All the time
- ☐ Most of the time
- ☐ Occasionally

(3) Other circumstances

57. Exposure to NCP patients in outpatients clinics [Multiple choices questions]

- ☐ Contacted with the NCP patients who was diagnosed later
- ☐ Contacted with patients with symptoms of fever and cough in outpatient
- ☐ No explicit contact

58. Your protection in outpatients clinics [Multiple choices questions]

- ☐ Surgical masks
- ☐ N95 respirators
- ☐ Hand disinfection
- ☐ Protective clothing

☐ Shoe covers

☐ No protection

59. Degree of protection in outpatients clinics [Single choice question]

☐ All the time

☐ Most of the time

☐ Occasionally

60. Time that you began to use protection [Single choice question]

☐ From January 1 to January 10, 2020

☐ From January 11 to January 20, 2020

☐ After January 20, 2020

61. Exposure to NCP patients outside hospital [Single choice question]

☐ Family members who were NCP patients

☐ Other social contacts

☐ No explicit contact

V. Protection training and measures

62. Protection training [Single choice question]

☐ Hospital have organized the training, and I participated

☐ Hospital have organized the training, but I did not participate

☐ Not organized by hospital

63. Time of protection training [Single choice question]

- ☐ Before January 10, 2020
- ☐ From January 10 to January 19, 2020
- ☐ After January 20, 2020

64. Protection training methods [Multiple choices questions]

- ☐ Lecture
- ☐ Hands-on learning
- ☐ Learning documents
- ☐ Learning videos
- ☐ None

65. Training contents [Multiple choices questions]

- ☐ Diagnosis and treatment of NCP
- ☐ Level-2 protection
- ☐ Others

66. Training quality [Single-choice question]

- ☐ Excellent
- ☐ Good
- ☐ So so
- ☐ Poor

67. Suggestions for training? [Fill in the blanks]

68. Start time of protective measures [Single choice question]

- ☐ Before January 10, 2020
- ☐ From January 10 to January 19, 2020
- ☐ After January 20, 2020
- ☐ None

69. Time when the hospital provided protective equipment [Single choice question]

- ☐ Before January 10, 2020
- ☐ From January 10 to January 19, 2020
- ☐ After January 20, 2020
- ☐ Not provided

70. Was the protective equipment sufficient? [Multiple choice questions]

- ☐ Sufficient
- ☐ Insufficient of surgical masks
- ☐ Insufficient of N95 respirators
- ☐ Insufficient of protective clothing
- ☐ Insufficient of goggles or masks
- ☐ Insufficient of shoe covers

☐ Insufficient of disinfectant

71. Was the protective equipment reused? [Multiple choices question]

☐ Reuse of masks

☐ Reuse of protective clothing

☐ Reuse of goggles

72. Frequency of masks replacement [Single choice question]

☐ Every 4 hours

☐ Every day

☐ Every 2 days

☐ Every 3 days

☐ Not replaced

73. Air condition in the wards and clinic? [Multiple choices question]

☐ Good

☐ Fair

☐ Poor

☐ Using central air-conditioning

☐ Air filtration and disinfection

VI. Prophylactic medication

74. What kind of medication was used for antiviral and improving immunity? [Multiple choices question]

- ☐ Abidol
- ☐ Odive
- ☐ Interferon
- ☐ Thymosin
- ☐ Globulin
- ☐ Chinese medicine
- ☐ No

75. Time that started to use antiviral and/or immune-enhancing drugs
[Fill in the blank]

VII. Transmission

76. Have you spread virus to others? [Multiple choices questions]

- ☐ Colleges
- ☐ Family members
- ☐ Patients
- ☐ Others
- ☐ None

I agree that the contents of this questionnaire will be used for the analysis and research of this new coronary pneumonia survey! [Single choice question]

☐ I agree