

Supplementary Materials

PATIENT QUESTIONNAIRE.

I. Socio-economic status/demographics

1. Sex: 1. Male ☐ 2. Female ☐
2. Date of birth (dd/mm/yyyy):
3. Education: What is your highest degree?
 - 3.1. Illiteracy ☐
 - 3.2. Primary education (5-10 years old) ☐
 - 3.3. Secondary education (11-18 years old) ☐
 - 3.4. Post-secondary education ☐
4. Major/Occupation:
 - 4.1. What is the main major/occupation in your life?
 - 4.2. Please indicate the longest period you worked in this major/occupation (years):
 - 4.3. Did you exposed to dust/fuels/chemicals when working on this major/occupation?
Yes ☐ No ☐

If you haven't any other major/occupation, please continue with question number 7.

If you have changed in other major/occupation, please continue with question number 6.

5. Current -major/occupation:
 - 5.1. What is your current/occupation?
 - 5.2. Please indicate the longest period you worked in this /occupation (years):.....
 - 5.3. Did you exposed to dust/fumes/chemicals when working for this/occupation?
Yes ☐ No ☐
6. How much is your average income per month?
 - 6.1. < 5 millions of VND
 - 6.2. 5 – 10 millions of VND
 - 6.3. > 10 millions of VND
7. Geographic origin: place of birth
 - A. Rural area ☐ B. City ☐
 - 7.1. Please indicate the name of your place of birth:
 - 7.2. Do you still live there? Yes ☐ No ☐
Yes, how long do you live there?.....years.
No, where do you live now? Rural area ☐ City ☐; from (year):.....
8. General knowledge of chronic respiratory diseases (CRD):
 - 8.1. Do you know the respiratory disease you have? Yes ☐ No ☐
 - 8.2. In your opinion, can CRD cause death? Yes ☐ No ☐

- 8.3. In your opinion, CRD is as dangerous as cancer? Yes ☐ No ☐
- 8.4. In your opinion, CRD can improve with treatment? Yes ☐ No ☐

II. Smoking habits

1. Do you currently smoke?
 1. No, never ☐
 2. Yes, I do ☐
 3. No, I stopped smoking ☐ From (year):.....
 4. No, but I'm often exposed to second hand smoke ☐
2. What type of tobacco do/did you smoke?

	Number of unit/day	Number of year(s)
1. Cigarette <input type="checkbox"/>
2. Cigar <input type="checkbox"/>
3. Pipe <input type="checkbox"/>

III. Indoor and outdoor pollution

1. Which of the following types of accommodation do you live in most of your life? (pictures in annexe)
 1. Non-tube house ☐ inyear(s)
 2. Tube house ☐ inyear(s)
 3. Rent house ☐ inyear(s)
 4. Old apartment (built ≥ 20 years) ☐ inyear(s)
 5. New apartment (built < 20 years) ☐ inyear(s)
 6. Rural house ☐ inyear(s)
2. A. How many people do you live with? person(s)
- B. What is your housing area?m²
- C. Does the house have windows that are open for ventilation? Yes ☐ No ☐
3. Indoor biological pollutants:
 - 3.1. Mouldy ambiance Yes ☐ No ☐
 - 3.2. Unpleasant smell Yes ☐ No ☐
 - 3.3. Lots of dust Yes ☐ No ☐
 - 3.4. Plants, flowers Yes ☐ No ☐
 - 3.5. Pets Yes ☐ No ☐
 - Yes, please indicate the species:
 - 3.6. Birds Yes ☐ No ☐
 - 3.7. Rats Yes ☐ No ☐
 - 3.8. Cockroaches Yes ☐ No ☐
4. Indoor ventilation and chemical pollutants:
 - 4.1. Use of air extractor Yes ☐ No ☐

4.2. Use of air conditioner Yes ☐ No ☐

4.3. Use of biomass stove Yes ☐ No ☐

Yes, for how many years:

4.4. Use of incense Yes ☐ No ☐

Yes, for how many years:.....

4.5. Use of room spray products Yes ☐ No ☐

4.6. Use of volatile compounds (cleanse, wash) Yes ☐ No ☐

5. Distance from your accommodation to the public traffic:

1. In front of the house (<10 meters) ☐

2. Far from the house ☐meters

6. What floor do you live on?

1. Basement ☐

2. 0 - 2 ☐

3. 3 - 6 ☐

4. ≥ 7 ☐

7. Within the distance of <100 meters around where you live:

1. Industrial park Yes ☐ No ☐

2. Public entertainment center Yes ☐ No ☐

3. Bus/coaches station Yes ☐ No ☐

4. Landfill Yes ☐ No ☐

IV. Characteristics of chronic respiratory disease

1. Childhood and teenage period (0 - 17 years old) :

1.1. Gestational age at birth	<input type="checkbox"/> Full-term	<input type="checkbox"/> Premature	<input type="checkbox"/> Unclear
1.2. Weight at birth	<input type="checkbox"/> ≥ 2.5kg	<input type="checkbox"/> <2.5kg	<input type="checkbox"/> Unclear
1.3. Living environment	<input type="checkbox"/> Unpolluted	<input type="checkbox"/> Polluted	<input type="checkbox"/> Unclear
1.4. Severe pulmonary infection	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Unclear
1.5. Smoke exposure from parents	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Unclear
1.6. Fumes exposure from fuel stove	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Unclear
1.7. Diagnosis of asthma	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Unclear

2. Have you had frequently the following symptoms within 3 last months?

1. Dry cough Yes ☐ No ☐

2. Cough with phlegm Yes ☐ No ☐

3. Oppression Yes ☐ No ☐

4. Wheezing Yes ☐ No ☐

5. Shortness of breath Yes ☐ No ☐

2bis. If you frequently feel shortness of breath, please indicate the level of this symptom:

1. I only get breathless with heavy exercise ☐
2. I get shortness of breath when brisk walking on the flat road or walking up a slight hill ☐
3. I walk slower than people of same age on the level because of breathlessness or has to stop to catch breath when walking at their own pace on the level ☐
4. I have to stop for breath after walking about 100 meters or after few minutes on the level ☐
5. I'm too breathless to leave the house, or breathless when dressing or undressing ☐

3. Have you had any of the following situations within 12 last months?

1. Respiratory infections Yes ☐time(s)/year; No ☐
2. Worsening of baseline symptoms Yes ☐time(s)/year; No ☐

For each of above answers: if « Yes », continue question 4; if « No », continue question 5.

4. Which of the following treatments made you feel better?

1. Bronchodilators ☐
2. Antibiotics ☐
3. Corticosteroids ☐
4. Hospitalization/ICU ☐

5. When was the onset of your respiratory symptoms?

1. < age of 20 ☐
2. within 20 and 40 ☐
3. > age of 40 ☐

6. How were your respiratory symptoms?

1. Fluctuant ☐
2. Persistent ☐

7. Do you frequently have any of the following symptoms of allergies?

1. Runny nose Yes ☐ No ☐
2. Sinusitis Yes ☐ No ☐
3. Itchy red eyes Yes ☐ No ☐
4. Skin vesicles Yes ☐ No ☐
5. Rash Yes ☐ No ☐
6. Eyes/lip edema Yes ☐ No ☐

8. Do you frequently have any of the following symptoms of chronic rhinitis?

- | | | |
|-----------------|------------------------------|-----------------------------|
| 1. Runny nose | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Blocked nose | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Itchy nose | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4. Sneeze | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

9. Does anyone in your family have the following problems?

- | | | |
|--|------------------------------|-----------------------------|
| 1. Asthma | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Chronic obstructive pulmonary disease | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

10. In your adulthood, have you ever been diagnosed with the following problems?

- | | | |
|--|------------------------------|-----------------------------|
| 1. Asthma | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Chronic obstructive pulmonary disease | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Chronic bronchitis | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4. Pulmonary disease persist > 3 months | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 5. Emphysema | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 6. Pulmonary tuberculosis | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

11. Do you have any of the following comorbidities?

- | | | |
|-------------------------------|------------------------------|-----------------------------|
| 1. Hypertension | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Diabetes | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Cardiopathies | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4. Gastro-intestinal diseases | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 5. Other(s) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

Yes, please indicate the disease:

Figure S1. Type of dwelling.



a) Non-tube house



b) Tube house



c) Rent house



d) Old apartment



e) New apartment



f) Rural house