

## Questionnaire of Parents' Knowledge, Attitudes and Practice of Children Antibiotic Use in China

### Part 1: The General Information

*If you have more than one child, the child in this questionnaire refers to the one who is currently taking the vaccine at the vaccination site or the one who is attending the sample kindergarten or primary school.*

1. Gender of your child:  Male  Female
2. The child's date of birth: \_\_\_\_\_
3. Number of children:
  - 3.1 How many children do you have? \_\_\_\_\_;
  - 3.2 Which one is the child involved in this survey? \_\_\_\_\_
4. You are the child's:  Father  Mother
5. Who is the main child caregiver at home?  
 Father  Mother  Grandfather  Grandmother  Others
6. Your education level:  
 Primary school or below  Middle school  High school/Technical secondary school  
 College/Junior college  Postgraduate or above
7. Your spouse's education level:  
 Primary school or below  Middle school  High school/Technical secondary school  
 College/Junior college  Postgraduate or above
8. Your location of residence?  Rural  Urban
9. Do you have any medical education background?  Yes  No
10. Does your spouse have any medical education background?  Yes  No
11. Are grandparents at home involved in treatment decisions when your child is ill?  
 Never  Sometimes  Often  Always
12. Your average household income per month (RMB)?  
 <3,000  3,001-5,000  5,001-10,000  10,001-20,000  >20,000

### Part 2: Antibiotics Related Knowledge

13. Antibiotics are effective for viral infections.  
 Yes  No  Don't know

14. Antibiotics are anti-inflammatory drugs.  
 Yes  No  Don't know
15. The more frequently people use antibiotics, the harder it is to cure the bacterial infections.  
 Yes  No  Don't know
16. Excessive use of antibiotics can lead to bacterial antibiotic resistance.  
 Yes  No  Don't know
17. Expensive antibiotics are more effective than cheap ones.  
 Yes  No  Don't know
18. Excessive use of antibiotics is a serious problem in China.  
 Yes  No  Don't know
19. Bacterial antibiotic resistance in China will become a serious problem.  
 Yes  No  Don't know
20. New antibiotics are more effective than old ones.  
 Yes  No  Don't know
21. Excessive use of antibiotics can produce superbugs.  
 Yes  No  Don't know
22. Do you think the following drugs are antibiotics (or not)?
- Penicillin (amoxicillin, etc.)  Yes  No  Don't know
  - Cephalosporin (cefaclor, ceftriaxone sodium, etc.)  Yes  No  Don't know
  - Non-steroidal anti-inflammatory drugs (ibuprofen, aspirin, etc.)  Yes  No  Don't know
  - Steroids (dexamethasone, prednisone, etc.)  Yes  No  Don't know
  - Quinolones (norfloxacin, ofloxacin, etc.)  Yes  No  Don't know
  - Macrolides (azithromycin, roxithromycin, etc.)  Yes  No  Don't know
23. Do you think antibiotics are appropriate when your child has the following conditions (diseases)?
- Sore throat  Yes  No  Don't know
  - Common cold (cough, runny nose)  Yes  No  Don't know
  - Diarrhea  Yes  No  Don't know
  - Fever  Yes  No  Don't know
  - Otitis media  Yes  No  Don't know

24. Using antibiotics can speed up your child's cold recovery.  
 Yes  No  Don't know
25. Using antibiotics can alleviate your child's cold symptoms.  
 Yes  No  Don't know
26. If your child needs antibiotics, it is better to be administered by infusion.  
 Yes  No  Don't know
27. Once your child's symptoms are relieved, antibiotic use should be stopped immediately.  
 Yes  No  Don't know
28. There will be fewer and fewer effective antibiotics in the future if we don't use antibiotics properly.  
 Yes  no  Don't know
29. Antibiotics are effective for child's viral infections.  
 Yes  No  Don't know

**Part 3: Antibiotic Use Behaviors** (can't go back to Part 1 or Part 2)

**Dear parent, before you start answering the following questions, please read the following messages about antibiotic knowledge:**

1. Antibiotics are different from anti-inflammatory drugs; antibiotics can kill bacteria but are not effective for viral infections.
2. Common-used antibiotics include:
  - Penicillin (amoxicillin, etc.)
  - Cephalosporin (cefaclor, ceftriaxone sodium, etc.)
  - Quinolones (norfloxacin, ofloxacin, etc.)
  - Macrolides (azithromycin and roxithromycin etc.)
  - Sulfa

You may find that some of your answers to the questions in the second part of this survey are wrong, but it doesn't matter because what we need is to know your genuine antibiotic knowledge level. Please don't be uneasy about the answers.

30. Did your child get sick in the last month?  
 Yes  No (skip to No.42)
31. If yes, which condition or disease did your child get?
- 31.1 Common cold (cough, runny nose):  Yes  No
- 31.1.1 If yes, the cold lasted for \_\_\_ days.
- 31.2 Fever:  Yes  No
- 31.2.1 If yes, the fever was up to \_\_\_\_ °C;
- 31.2.2 If yes, the fever lasted for \_\_\_\_ days.
- 31.3 Sore throat:  Yes  No
- 31.3.1 If yes, the sore throat lasted for \_\_\_\_\_ days.
- 31.4 Diarrhea:  Yes  No
- 31.4.1 If yes, the diarrhea lasted for \_\_\_\_\_ days.
- 31.5 Otitis media:  Yes  No
- 31.5.1 If yes, the otitis media lasted for \_\_\_\_\_ days.
- 31.6 Others:  Yes  No
32. Did your child get treated?  Yes  No (skip to No. 42)
33. If yes, what treatment did your child get?
- Pure self-treatment (skip to No. 33.1)
- Self-treated first, then sought formal health care if not getting better (skip to No. 33.2)

- Sought formal health care (skip to No. 36)
- 33.1 Did you use antibiotics for your child during self-treatment?  
 Yes (skip to No. 34)  No (skip to No. 42)
- 33.2 Did you use antibiotics for your child during self-treatment?  
 Yes (skip to No. 34)  No (skip to No. 42)
34. If yes, please tell us the name of the antibiotic(s): \_\_\_\_\_.
35. Where did you get the antibiotic(s)?  
 Household storage  
 Purchased over the counter at the pharmacies  
 Brought by others  
 Others
36. Which health facility did you go to?  
  - Private clinic/Village clinics  No  Yes
  - Community health centers/Township hospital  No  Yes
  - Secondary/County hospital  No  Yes
  - Tertiary hospital  No  Yes
37. When visiting the doctor at the health facility, did he/she prescribe any antibiotics for your child?  
 Yes  No (skip to No. 42)
- 37.1 If yes, please tell us the name of the antibiotic(s): \_\_\_\_\_.
38. If the doctor prescribed antibiotics, were they used by oral administration or infusion?  
 Oral administration  Infusion  Both
39. Did you immediately stop using antibiotics (either oral administration or infusion) when your child's symptoms were relieved?  
 Yes  No
40. When visiting the doctor, did you request antibiotics from the doctor (either oral administration or infusion)?  
 Yes, I requested for infusion.  
 Yes, I requested for oral antibiotic prescriptions.  
 No (skip to No. 42)
41. Did the doctor agree to your request for antibiotic prescription (either oral administration or infusion)?

- Yes  No
42. Do you keep antibiotics at home for your child (not for current use) at the time of the survey?  
 Yes  No
43. If yes, where did you get the antibiotics?
- Leftover prescriptions
  - Purchased over the counter at the pharmacies before
  - Brought by others
  - Others
44. In the past year, did you give your child antibiotics to prevent diseases (e.g. when your child's classmates got a cold or flu)?  
 Yes  No
45. As a parent, what are the main information sources for you to get knowledge about dealing with child's common cold, fever, diarrhea and other diseases?
- Medical advice  No  Yes
  - Family advice/experience  No  Yes
  - TV  No  Yes
  - Internet  No  Yes
  - Radio  No  Yes
  - Newspapers/magazines/books  No  Yes
  - Weibo, Wechat or QQ  No  Yes
  - Others  No  Yes