

# Local Survey on Use of Antibiotics and Antimicrobial Awareness

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### **Antibiotic Resistance**

- Antibiotic resistance is an increasingly serious public health problem worldwide, including Hong Kong.
- It threatens the effectiveness of antibiotics now and in the future.





### **Antibiotic Exposure**

- Antibiotic exposure leads to emergence of antibiotic resistance.
- Overall uptake of antibiotics in a population, as well as how the antibiotics are consumed, has an impact on antibiotic resistance.



### **Proper Use of Antibiotics**

- In 2007/08, the DH launched a community-wide promotion campaign to enhance public knowledge and awareness of when antibiotics work and the importance of proper use of antibiotics.
- The messages are:-
  - ◆ Antibiotics are not panacea. Do not take antibiotics without medical advice. All antibiotics carry some side effects.
  - Unnecessary or improper use of antibiotics can make bacteria stronger and harder to kill.



### **Proper Use of Antibiotics**



- In 2009, the public is advised to enhance their personal hygiene while they are taking antibiotics.
- The personal protection measures are:-
  - Practise frequent hand hygiene
  - Eat or drink only thoroughly cooked or boiled items
  - Disinfect and cover all wounds
  - Wear mask if you have respiratory infection symptoms
  - Young children with symptoms of infection should minimise contact with other children

### **Local Survey**

- ICB has commissioned a territory-wide telephone survey to Social Science Research Centre of The University of Hong Kong.
- Baseline survey was conduced in November 2010 with 1,569 respondents successfully interviewed and a response rate of 69.2%.
- A follow-up survey will be conducted in May 2011 to evaluate the community-wide publicity campaign held during March and April 2011.

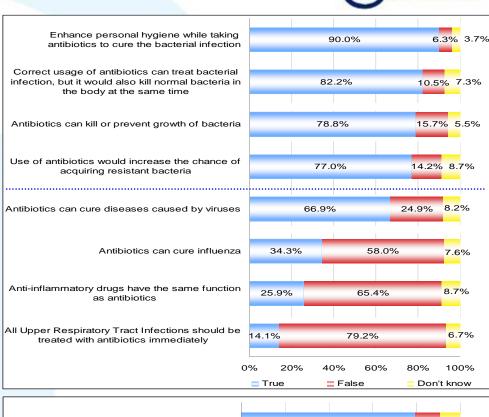


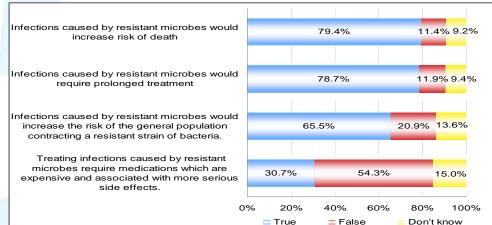
### Results of Baseline Survey



### Knowledge on antibiotics

 Significant proportion of respondents had incorrect faith in antibiotics and underestimated the risk of resistant microbes, believing that antibiotics could cure flu (34.3%) and viral infections (66.9%) and that resistant microbes did not require expensive or risky drugs to cure (54.3%).





### **Knowledge on antibiotics**

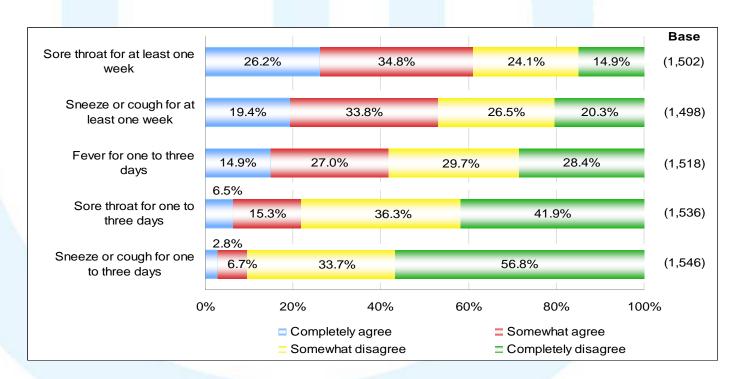
- Mean and median of knowledge score were both equal to eight, i.e. the respondents answered correctly 8 out of 12 knowledge questions.
- This misunderstanding was especially noted in respondents who were female, older, married, of lower education level or with lower household income.





### **Attitude towards antibiotics**

- 61.0% and 53.2% of respondents considered antibiotics necessary if sore throat or sneeze/cough ≥ one week.
- 41.9% of respondents considered antibiotics necessary if having fever for one to three days.

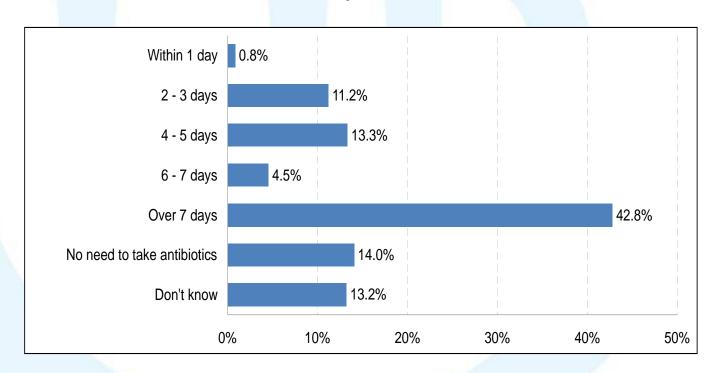






### **Attitude towards antibiotics**

29.8% of respondents expected antibiotics within 7 days of illness, while over two-fifths (42.8%) expected antibiotics after > 7 days of illness.

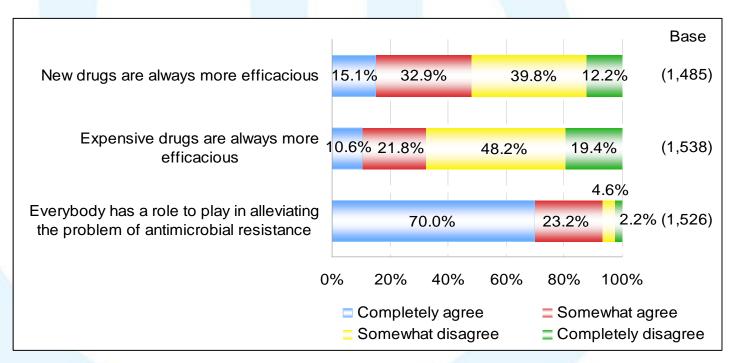






### **Attitude towards antibiotics**

About half (48.0%) and a third (32.4%) of respondents believed that new drugs and expensive drugs are always more efficacious.

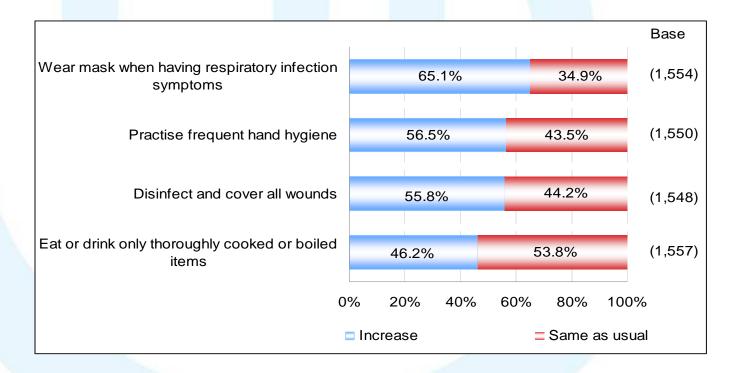




### **Practice**



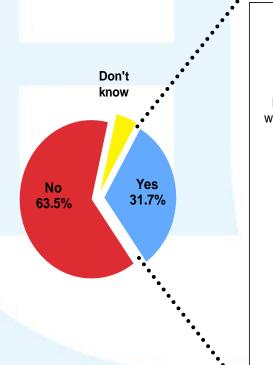
 When taking antibiotics, more than two-fifths of respondents claimed that they would increase their personal hygiene practices.

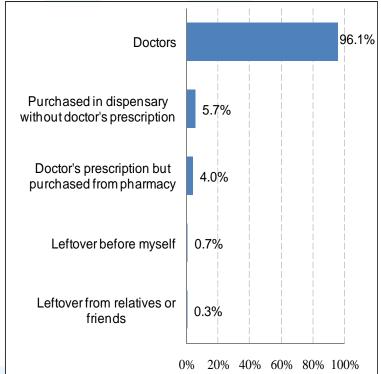




### **Practice**

Among those respondents (31.7%) who had taken antibiotics in past 12 months, a minority purchased the antibiotics in a dispensary without doctor's prescription (5.7%), used leftovers from previous consultation (0.7%) or used leftovers from relatives or friends (0.3%).

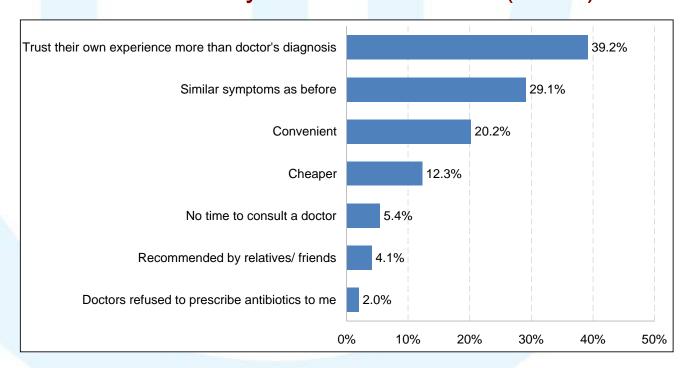






### **Practice**

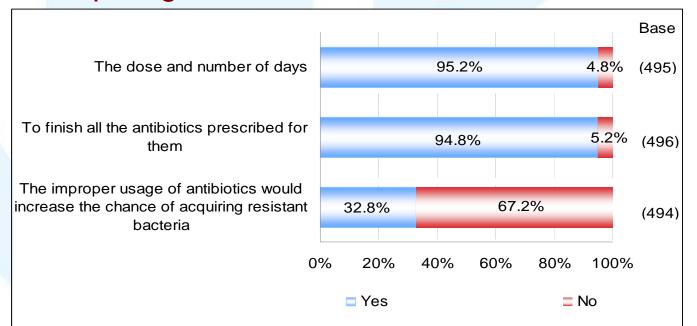
Common reasons cited for purchasing/taking the antibiotics without doctor's prescription: trusted their own experience more than a doctor's diagnosis (39.2%), similar symptoms before (29.1%), convenient (20.2%), cheaper (12.3%), no time to consult a doctor (5.4%) and recommended by relatives/friends (4.1%).





### **Practice**

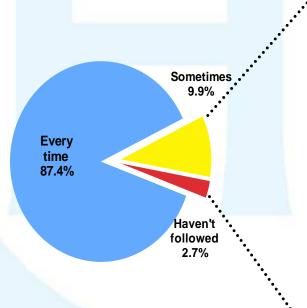
- Majority of respondents stated that their doctors had reminded them about the dose and number of days (95.2%) and to finish all the antibiotics prescribed (94.8%) during their latest consultation.
- However, only about a third of them (32.8%) remembered that their doctors had told them that improper usage of antibiotics would increase the chance of acquiring resistant bacteria.

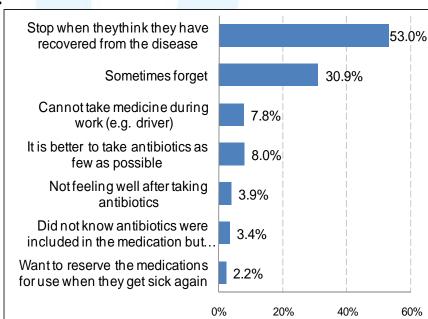




### **Practice**

Only 9.9% sometimes and 2.7% never followed their doctors' instructions. Among them, over half (53.0%) stopped taking antibiotics when they thought they had recovered and around one-third (30.9%) sometimes forgot to take the antibiotics.

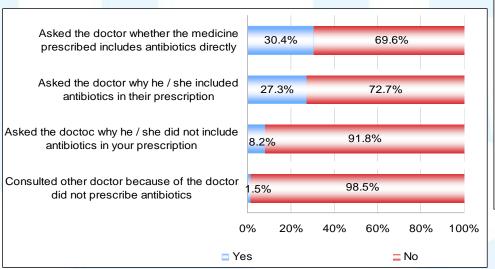


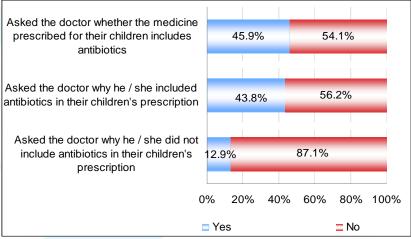




### **Practice**

- Very few respondents had asked their doctor whether there were antibiotics in the medicine prescribed.
   However, a relatively higher proportion of respondents had asked the doctor about it for their children.
- Majority of respondents (98.5%) stated that they would not consult another doctor because their previous doctor had not prescribed antibiotics



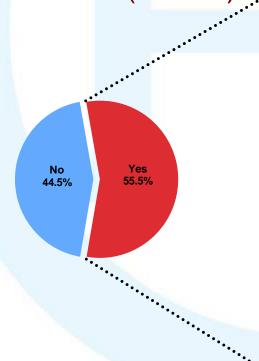


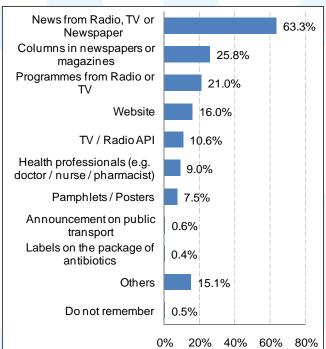


### **Promotion**

 Just more than half of respondents (55.5%) had heard of resistant microbes or antimicrobial resistance.

Among them, nearly two-thirds obtained the information through news at radio, TV or newspaper (63.3%), columns in newspapers or magazines (25.8%), radio or TV programmes (21.0%), websites (16.0%) and TV/radio API (10.6%).





Respondents
 generally gave a
 higher rating for
 information
 obtained from
 health
 professionals
 compared to other
 channels.

Department of Health



## World Health Day 7 April 2011

### Save Use of Antibiotics Save Lives

善用抗生素 保護生命





### **Banner**

At entrance of DH and HA venues

世界衛生日 World Health Day 7.4.2011









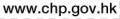
### **Banner**

Department of Health



At Markets and Roadside







### Sticker







### **Poster**

Communication



### **Pamphlet**



#### 善用抗生素 Smart Use of Antibiotics

病菌 Germs		病例 Disease example(s)
細菌 Bacteria	大腸桿菌 Escherichia coli (E.coli)	尿道炎、腸胃炎 Urinary tract infection, diarrhoeal diseases
	肺炎球菌 Streptococcus pneumoniae	肺炎、中耳炎 Chest infection, middle ear infection
	金黃葡萄球菌 Staphylococcus aureus	皮膚及軟組織感染 Skin and soft tissue infection
病毒 Viruses	鼻病毒 Rhinovirus	傷風 Cold
	流行性感冒病毒,如H1N1, H3N2 Influenza virus, e.g. H1N1, H3N2	流行性感冒 Influenza
	水痘帶狀疱疹病毒 Varicella-zoster virus	水痘 Chickenpox
	腸病毒 Enterovirus	手足口病 Hand, foot and mouth disease

#### 2) 如果發燒,是否需要抗生素?

- 發燒是常見的病徵,不一定 由細菌引致;如果出現發 燒,請先諮詢你的醫生。
- 3) 如鼻涕呈現黃色或綠色,是否需要抗生素?
  - 傷風或流感時,鼻涕轉濃及 呈現黃色或綠色是常見的, 不一定表示你已患上細菌感 染。如有疑問,請諮詢你的 醫生。

#### 2) If I have fever, do I need antibiotics?

- Fever is a common symptom which may or may not be caused by bacteria. If you have fever, please consult your doctor first.
- 3) Do I need antibiotics when my nasal discharge changes to yellow or green?
  - It is quite normal for the discharge to become thick and change colour during a cold or flu. There may or may not be an associated bacterial infection. If you have queries, please consult your doctor.

#### 睇醫生 問清楚 抗生素 咪食錯

Ask the right questions Use antibiotics smartly

#### 衞生防護中心網站

Centre for Health Protection Website WWW.chp.gov.hk

#### 衞生署24小時健康教育熱線

24-Hour Health Education Hotline of the Department of Health 2833 0111

二零一一年三月印象 Printed in March 201





Centre for Health Protection

### **Pamphlet**

#### 善用抗生素 Smart Use of Antibiotics



#### 抗生素不是萬能藥

Antibiotics are not panacea

- 抗生素只適用於治療細菌性感染,但不能治療所有感染;對由病毒引致的疾病,如傷風和流行性感冒(流感)是沒有療效的。
- 患上一般傷風和流感時,使用 抗生素不會:
- 治癒感染
- ■加速痊癒

#### 傷風和流感 不需抗生素

#### 抗生素可以是有害的

Antibiotics can be harmful

抗生素可引致不良後果,例如:

- 副作用,包括噁心、嘔吐、便 秘或腹瀉、和頭痛
- 過敏反應,如紅疹、皮膚痕 癢、呼吸困難
- 抗藥性: 抗生素雖然可以治療細菌感染,但亦可同時殺死身體內的正常細菌,增加感染抗藥性細菌的風險,抗藥性細菌感感染是很難醫治的。近年數據顯示抗藥性細菌日漸增多,並對大眾健康造成嚴重威脅。

- Antibiotics are effective for treating bacterial infections but they cannot treat all types of infections. They do not work for viral infections like cold and influenza (flu).
- Taking antibiotics for cold and flu will
   NOT:
- cure the infections
- make you recover faster

Cold and flu No antibiotics please



Antibiotics may cause adverse outcomes such as

- side effects, which include nausea, vomiting, constipation or diarrhoea and headache
- allergic reactions such as rash, itchiness, breathlessness
- drug resistance: while antibiotics will kill the germs, they will also kill the normal bacteria in our bodies and increase the risk of acquiring more resistant bacteria. Infections due to resistant bacteria are difficult to treat. As shown by data in recent years, antibiotic resistance in bacteria has been increasing and posing a significant threat to population health.

#### 善用抗生素 Smart Use of Antibiotics

#### 如何護理傷風和流感

What to do for cold and flu?



- 遵從醫生的建議使用藥物
- 切勿要求醫生處方抗生素
- 不要自行使用抗生素

必須權衡利弊,才使用抗生素。



- Have adequate rest and drink plenty of water. If symptoms persist, consult your doctor
- Follow your doctor's advice on the use of drugs
- Do not push your doctor to prescribe antibiotics
- Do not self-medicate antibiotics

Use antibiotics only when they are likely to be beneficial.



#### 常見問題

Frequently asked questions

#### 1) 細菌和病毒有什麼分別?

- 細菌和病毒各有不同特性,可引致不同的疾病,治療的藥物亦不同。其實大部份的上呼吸道感染屬病毒感染,故無須使用抗生素。以下表列一些細菌和病毒,與其引致疾病的例子:
- What is the difference between bacteria and viruses?
  - Bacteria and viruses have different properties and may cause different illnesses which respond to different types of drugs. Indeed, most cases of upper respiratory tract infections are caused by viruses which do not need prescription of antibiotics. The following table shows some examples of bacteria and viruses as well as the diseases they cause:



### **Cue Card - English**



While taking antibiotic which is necessary to cure your infection, the antibiotic also kills the normal bacteria in your body and predisposes you to acquire more resistant bacteria.

### Therefore, you should enhance personal hygiene by:

- 1. Practise frequent hand hygiene
- 2. Eat or drink only thoroughly cooked or boiled items
- 3. Disinfect and cover all wounds
- 4. Wear mask if you have respiratory infection symptoms
- 5. Young children with symptoms of infection should minimize contact with other children







### **Cue Card - Chinese**



使用抗生素可治療細菌感染,但同時亦會殺死身體內之正常 細菌,及增加感染抗藥性細菌的風險。

### 為了保障使用抗生素者的健康·請注意:

- 1. 時刻保持手部衛生
- 2. 食水和食物必須徹底煮沸及煮熟
- 3. 消毒及覆蓋傷口
- 4. 當有呼吸道感染徵狀時,請戴上口罩
- 5. 有傳染病徵狀的幼童,應盡可能 減少接觸其他兒童







### **Antibiotics Bag / Bottle Label**

#### **ENGLISH**

- This contains antibiotics. Please follow your doctor's or pharmacist's instructions in taking it.
- If suspected of allergic reaction (for example, skin rash or shortness of breath) after taking antibiotics, please consult a doctor immediately.

#### **CHINESE**

內含抗生素,請根據醫生或藥劑師的指示服用。

服用抗生素後,如果懷疑過敏反應(例如出疹或呼吸困難),請即時求醫。





### **A4 Folder**



Folder Design\_03













加入根液、揉搓雙手最少20秒



### 

When to Wash Our Hands







### **Radio Announcement of Public Interest**

- When it comes to using medicine, it's best to seek your doctor's advice.
- Did you know that antibiotics work against bacteria but not against viruses that cause a cold or the flu?
- So if you or your child has a cold or flu, consult your doctor to learn more about the condition and whether there is any need for medicine or drugs.
- There's no need to insist on antibiotics.



### **Sharing Session Promoting Proper Use of Antibiotics for Primary Care Doctors** on 22 March 2011







### Thank you

