



Local Survey on Use of Antibiotics and Antimicrobial Awareness

Dr Janet HO

Infection Control Branch
Centre for Health Protection



衛生署
Department of Health

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



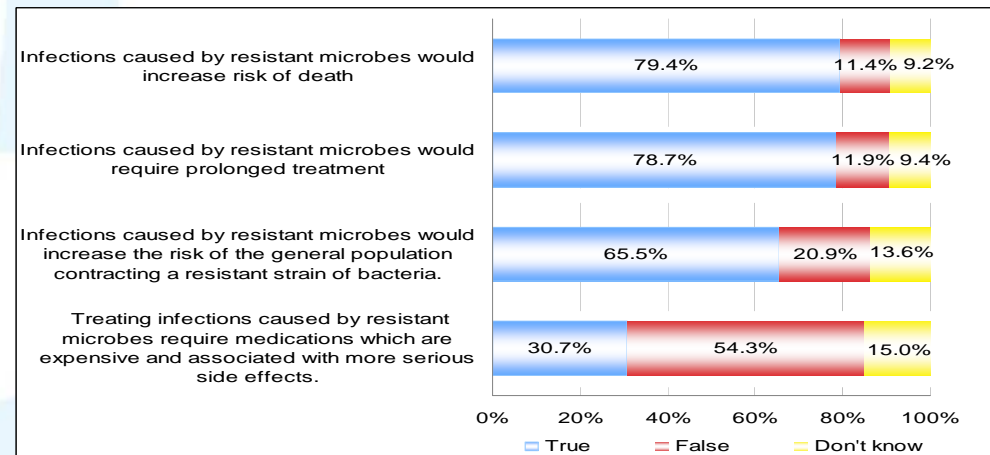
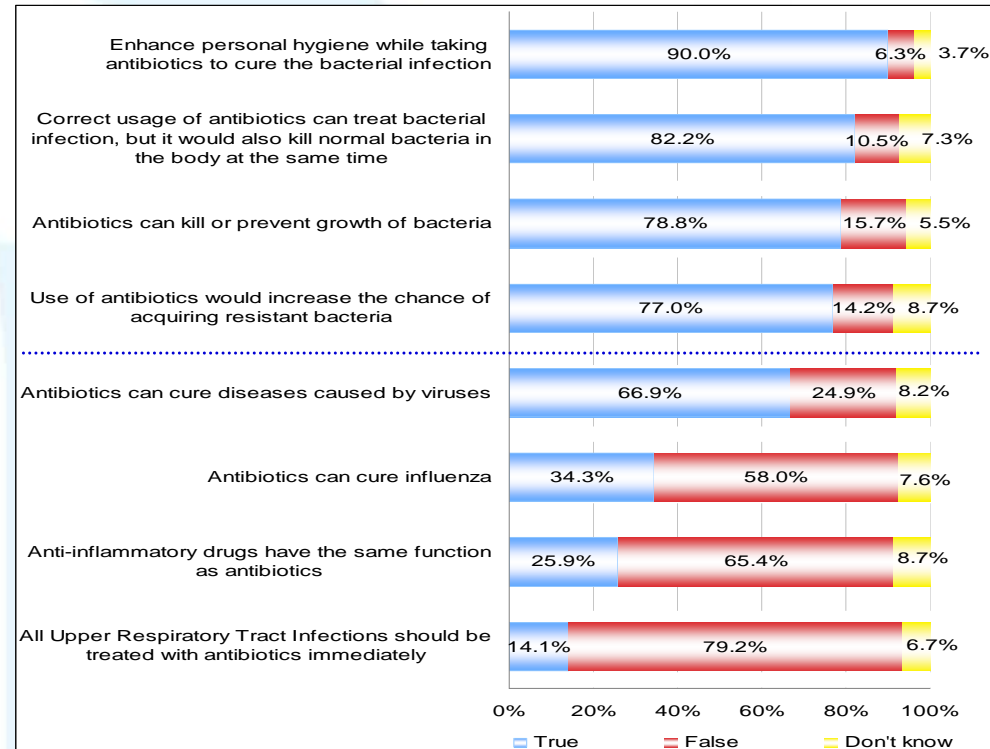
Local Survey

- ICB has commissioned a territory-wide telephone survey to Social Science Research Centre of The University of Hong Kong.
- Baseline survey was conducted 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%).



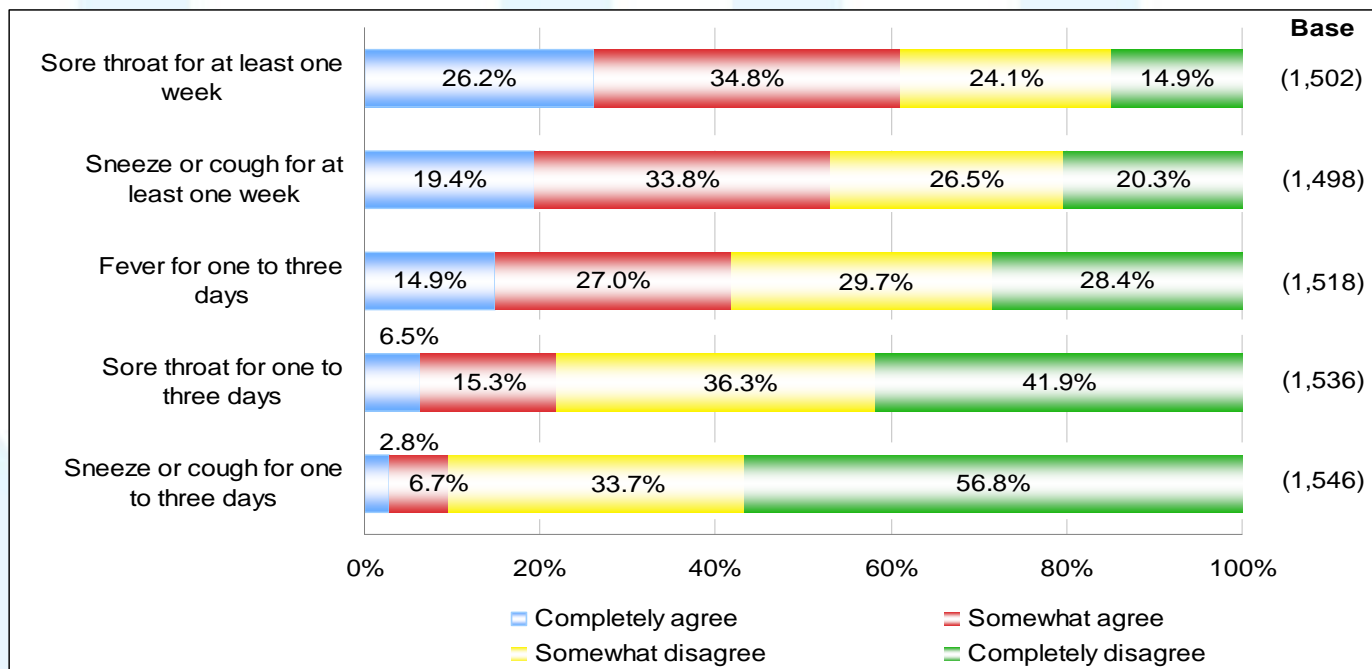
Knowledge on antibiotics

- 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.



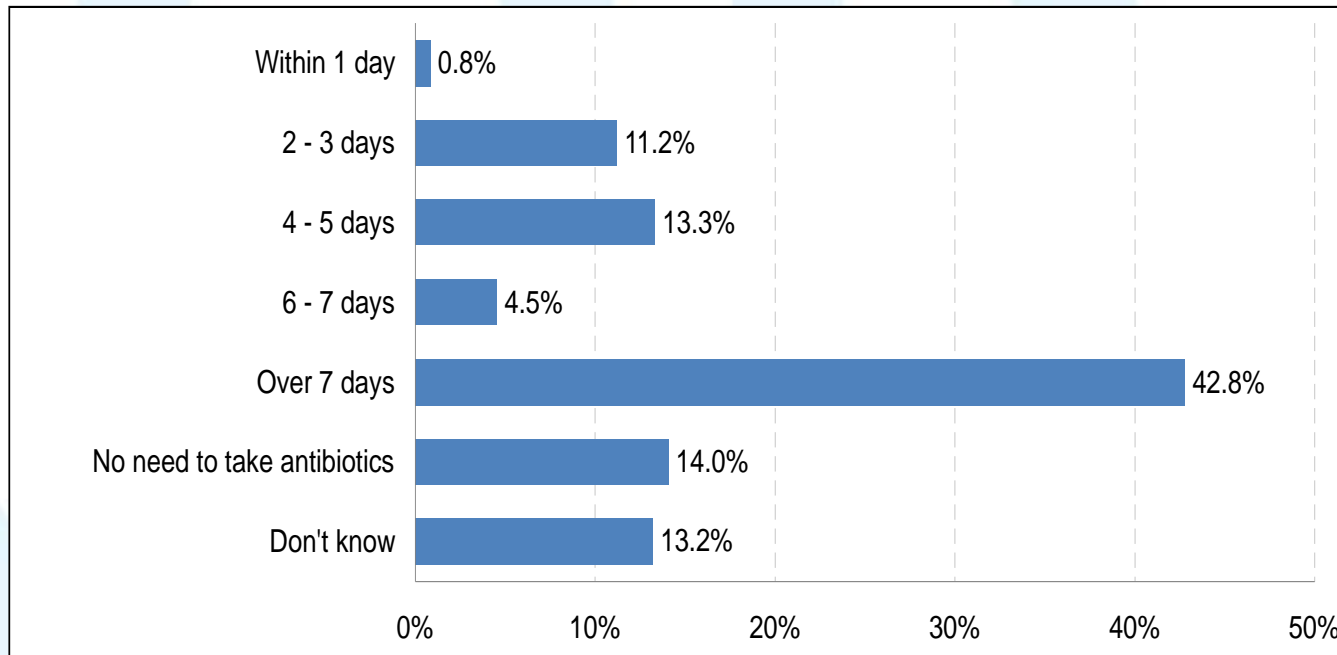
Attitude towards antibiotics

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



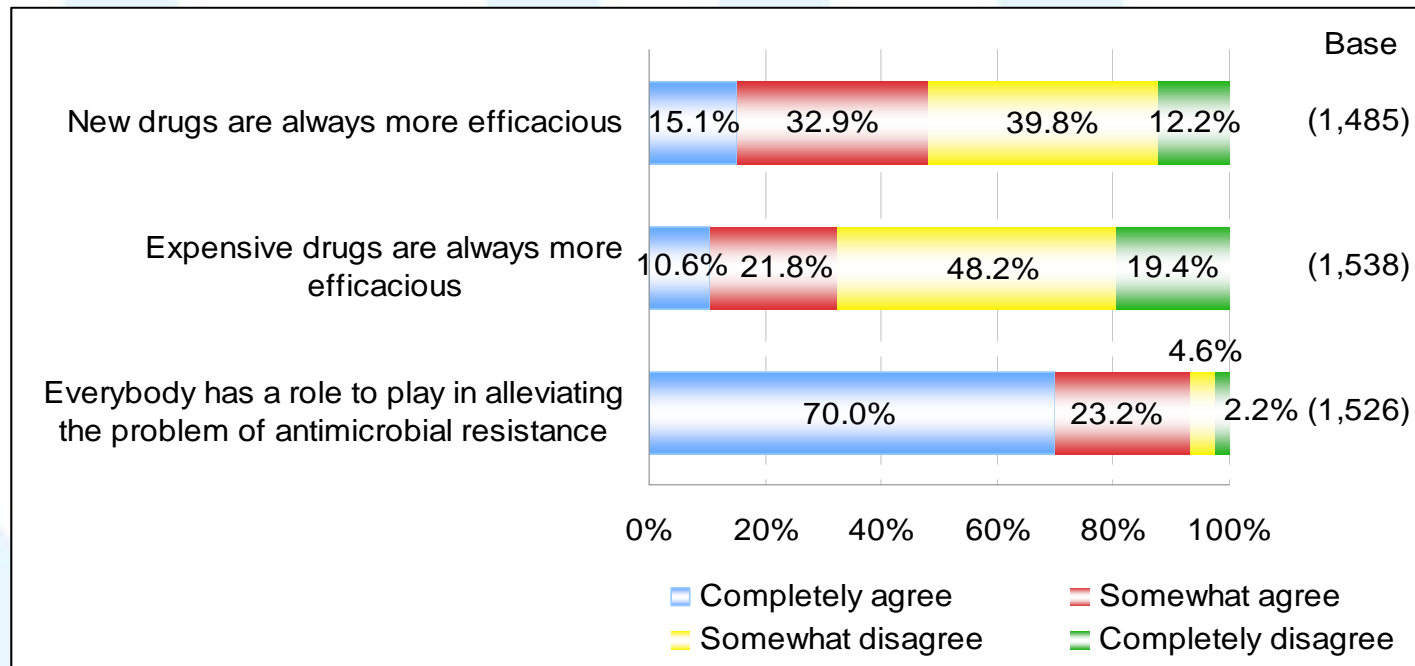
Attitude towards antibiotics

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



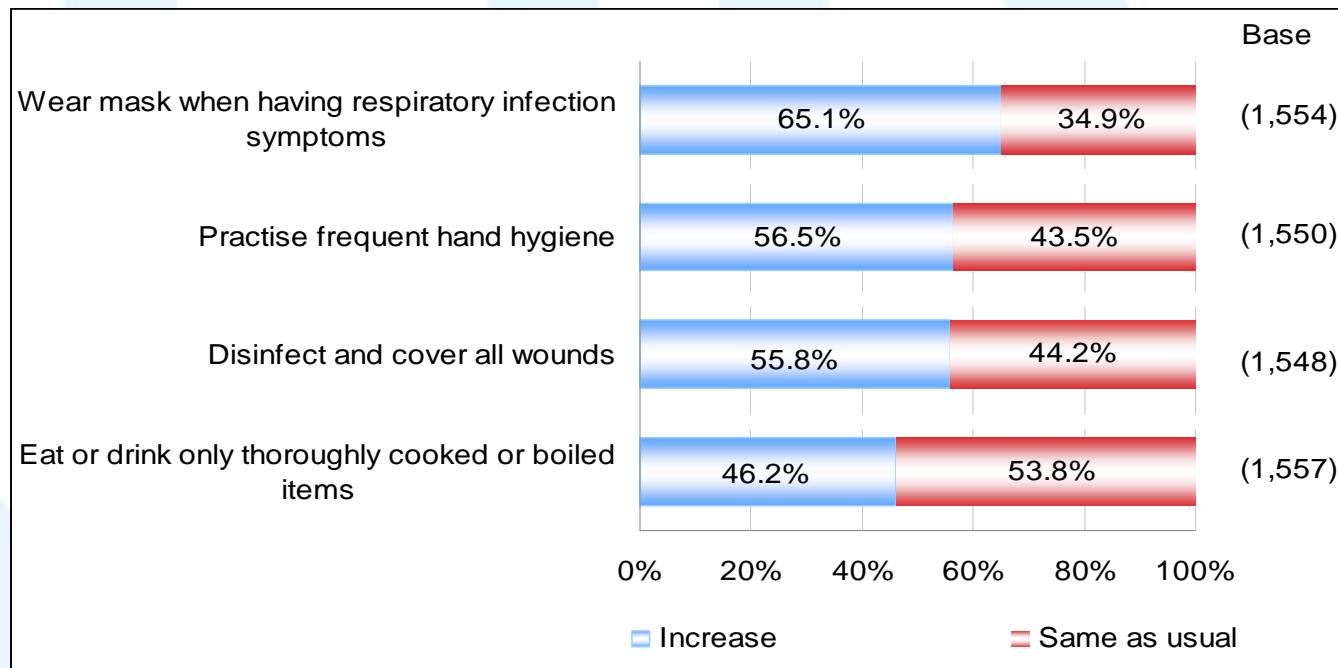
Attitude towards antibiotics

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



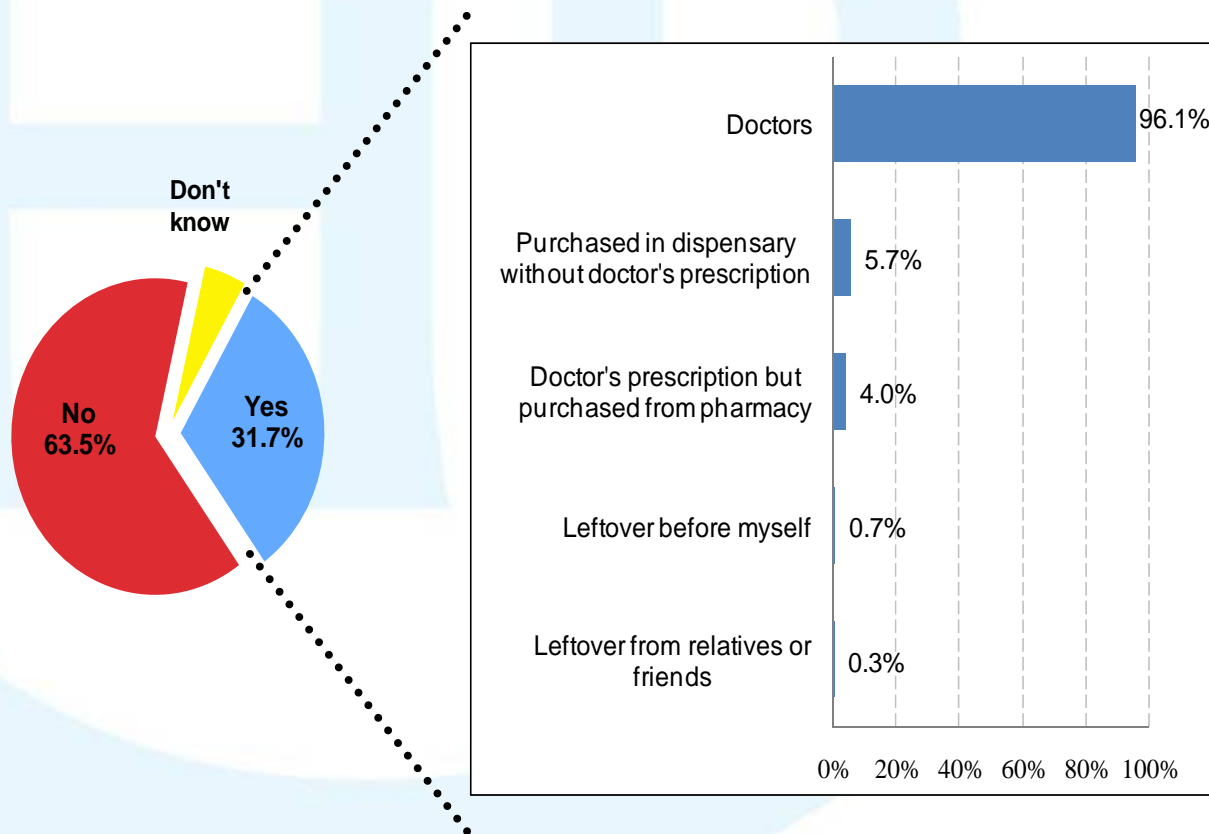
Practice

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



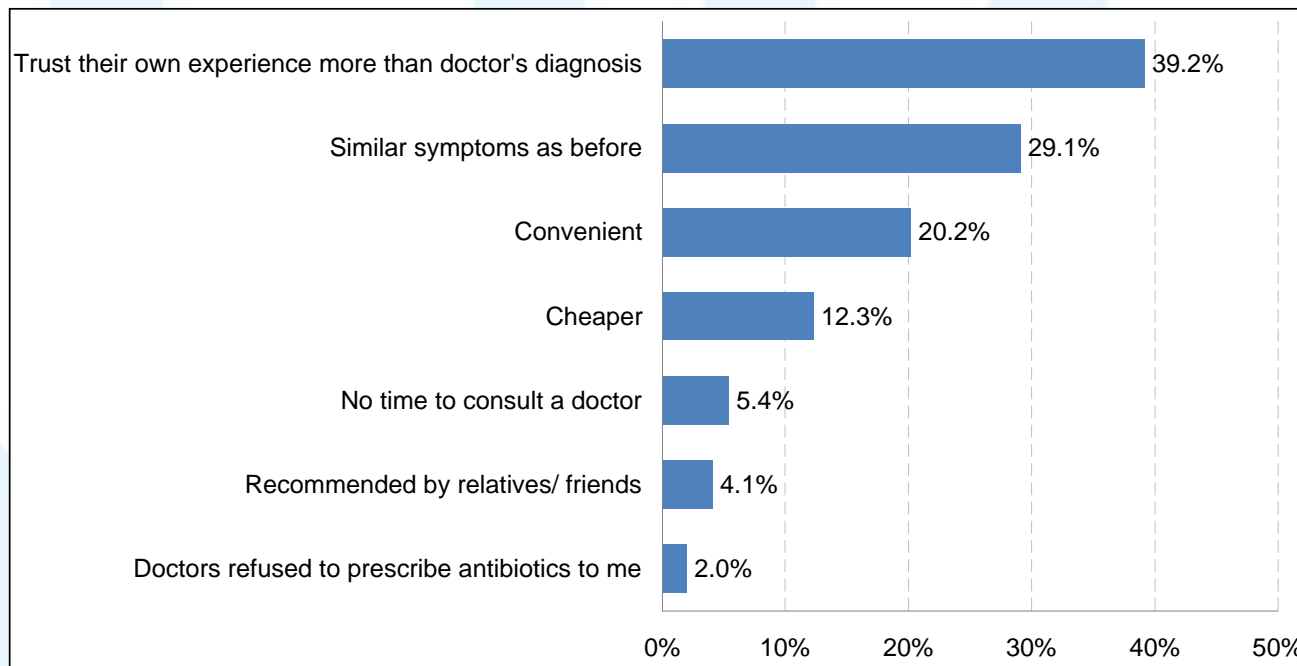
Practice

- 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%).



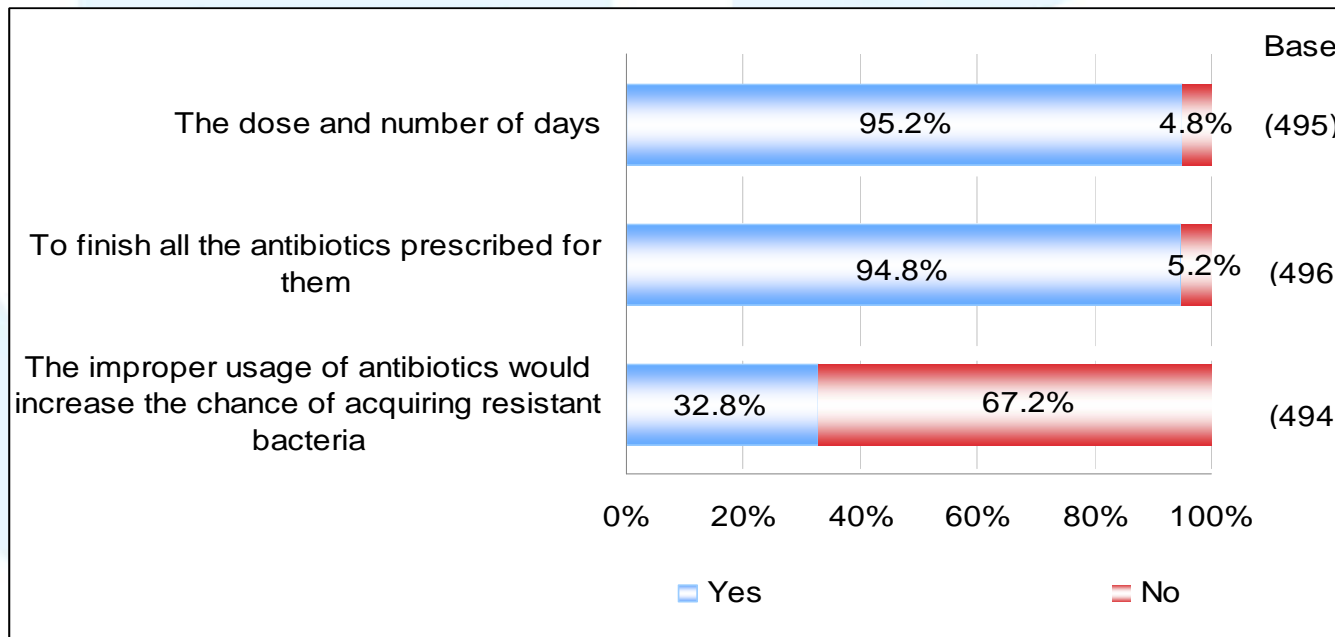
Practice

- 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%).



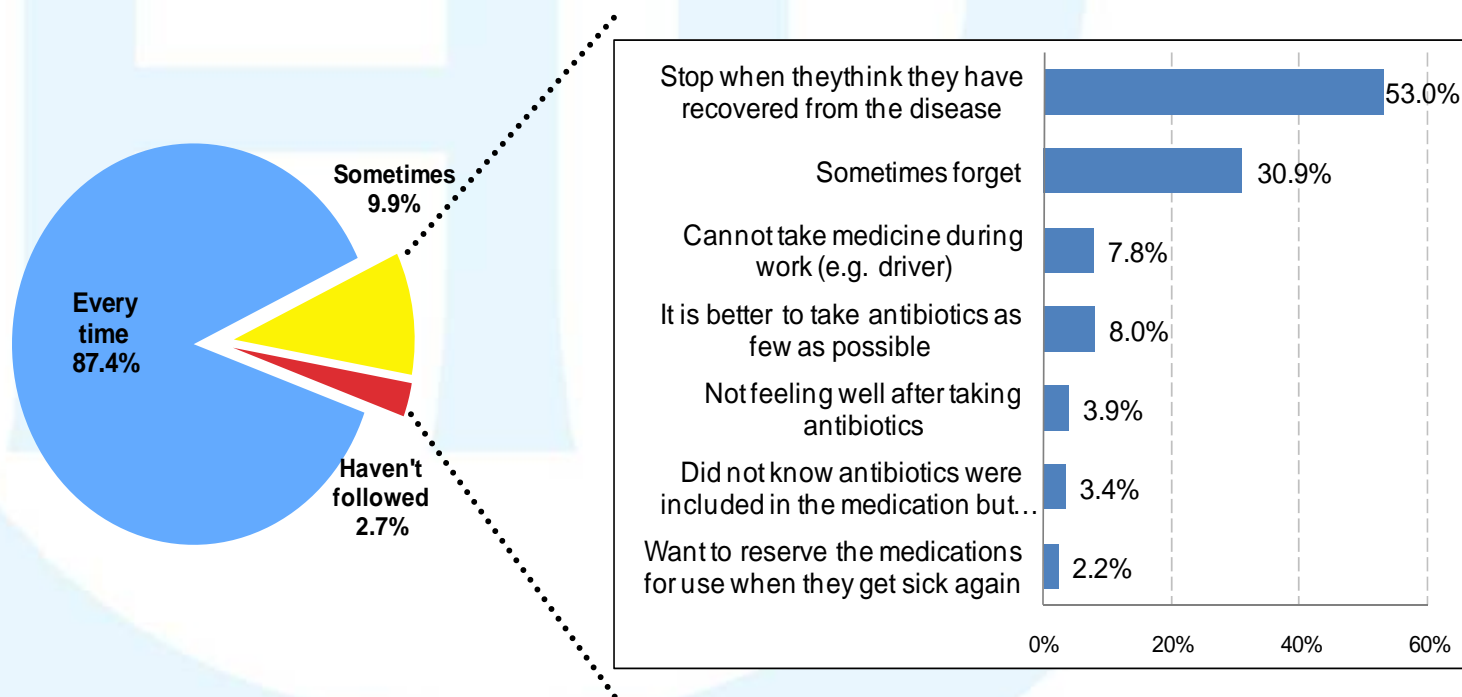
Practice

- 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.



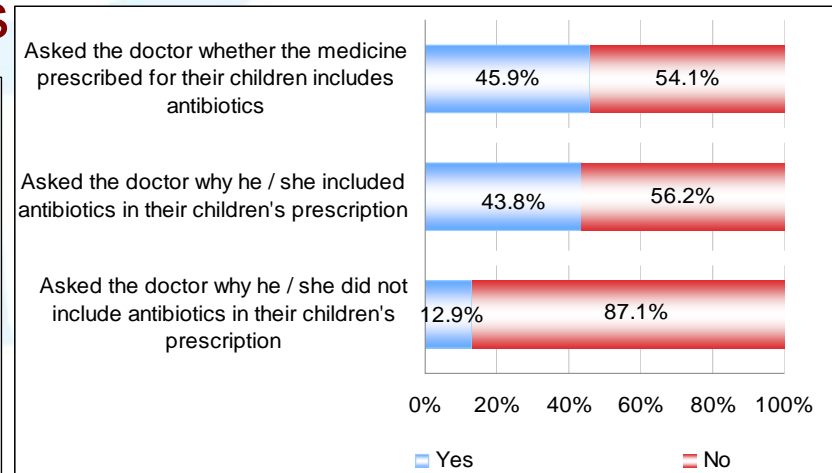
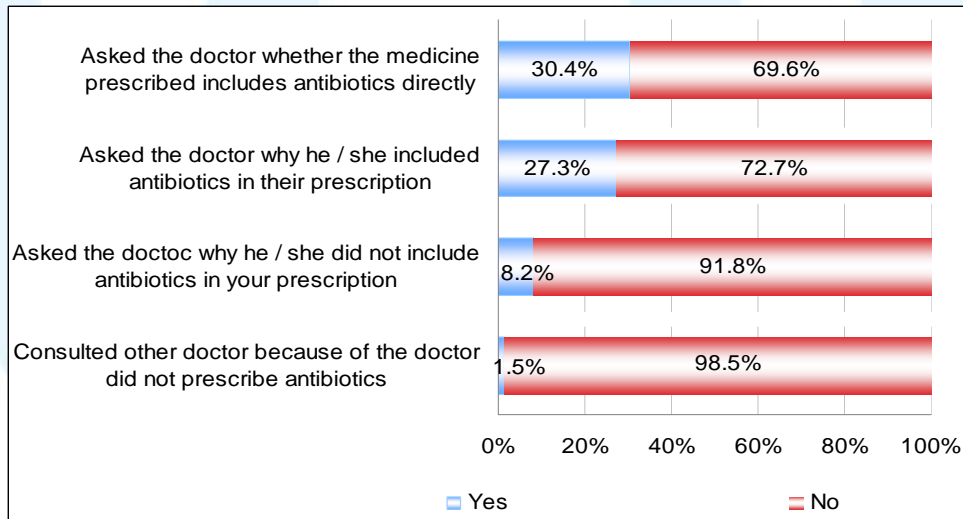
Practice

- 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.



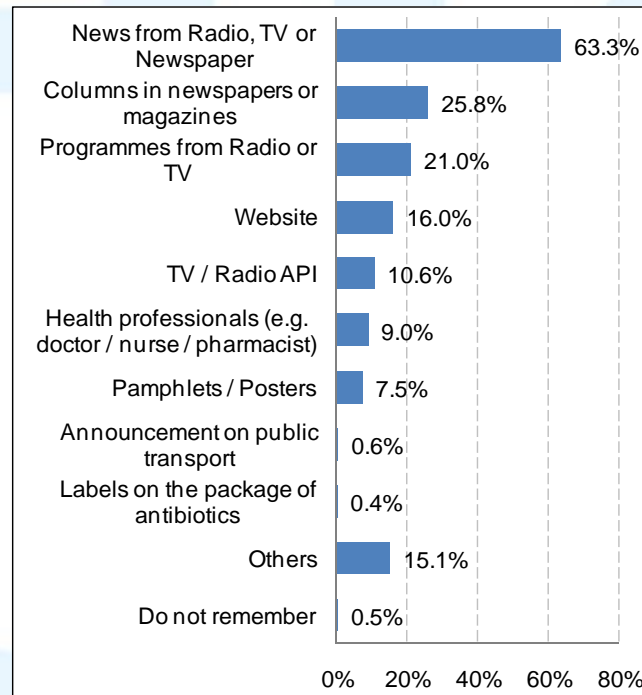
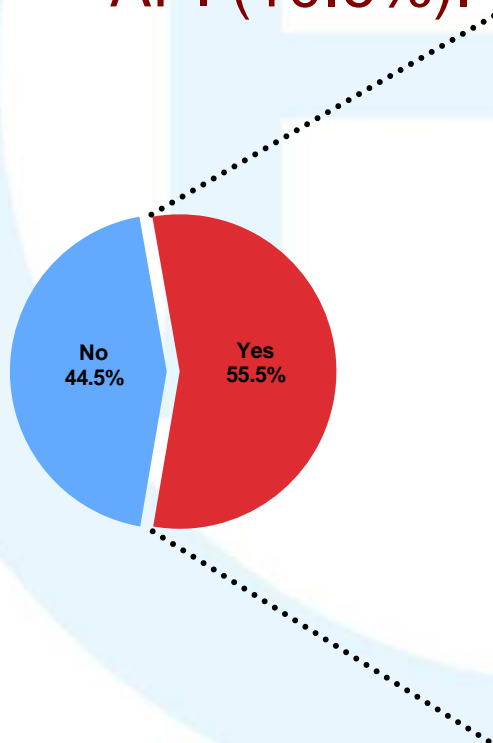
Practice

- 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.

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

善用抗生素 保護生命
Safe Use of Antibiotics Save Lives



www.chp.gov.hk

Banner

■ At Markets and Roadside

睇醫生 問清楚
Ask the right questions



抗生素 咪食錯
Use antibiotics smartly



衛生署
Department of Health



醫院管理局
HOSPITAL
AUTHORITY

www.chp.gov.hk



衛生署
Department of Health

Sticker

善用抗生素 保護生命
Safe Use of Antibiotics Save Lives

世界衛生日
 World Health Day
7.4.2011



Poster

■ Communication

睇醫生 問清楚
Ask the right questions

抗生素 咪食錯
Use antibiotics smartly

衛生署
Department of Health

HP 衛生防護中心
Centre for Health Protection

醫院管理局
HOSPITAL
AUTHORITY

www.chp.gov.hk

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 <i>Escherichia coli (E.coli)</i>	尿道炎、腸胃炎 Urinary tract infection, diarrhoeal diseases
肺炎球菌 <i>Streptococcus pneumoniae</i>	肺炎、中耳炎 Chest infection, middle ear infection
金黃葡萄球菌 <i>Staphylococcus aureus</i>	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？ 2) If I have fever, do I need antibiotics?
- 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。
 - Fever is a common symptom which may or may not be caused by bacteria. If you have fever, please consult your doctor first.
- 3) 如鼻涕呈現黃色或綠色，是否需要抗生素？ 3) Do I need antibiotics when my nasal discharge changes to yellow or green?
- 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。
 - 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

衛生防護中心網站

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

衛生署24小時健康教育熱線

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

二零一一年三月印製
Printed in March 2011



睇醫生問清楚
Ask the right questions

抗生素咪食錯
Use antibiotics smartly

衛生防護中心
Centre for Health Protection

衛生署
Department of Health

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

- 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

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 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?



- 充足休息和多喝水。如徵狀持續，便應求醫
- 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

- 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

必須權衡利弊，才使用抗生素。

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：

1) 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



內含抗生素

This contains antibiotics



- 請根據醫生的指示服用。
 Please follow your doctor's instructions in taking it.
- 請根據藥劑師的指示服用。
 Please follow your pharmacist's instructions in taking it.
- 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。
 If suspected of allergic reaction
 (for example, skin rash or shortness of breath)
 after taking antibiotics, please consult a doctor immediately.

勤洗手 別做傳染病「幕後黑手」

GUARD AGAINST INFECTIONS
ALWAYS WASH YOUR HANDS



視液
LIQUID SOAP



酒精搓手液
ALCOHOL HAND RUB

衛生署二十四小時健康教育熱線
24-Hour Health Education Hotline of
the Department of Health 2833 0111
www.chp.gov.hk



潔手 Hand Hygiene

一個既簡單
且有效預防感染的方法
An easy and
effective way to
prevent infection



衛生署
Department of Health



何時應洗手

When to Wash Our Hands



- 進食及處理食物前**
Before eating & preparing food
- 如廁後**
After using the toilet
- 打噴嚏及咳嗽後**
After coughing or sneezing
- 接觸病人前後**
Before and after coming in contact with patients
- 觸摸眼睛、鼻子或嘴巴前後**
Before & after touching eyes, nose and mouth
- 觸摸公共物件後**
After touching public equipment



正確洗手五部曲

5 Steps For Proper Hand Washing



- 1 用水弄濕雙手**
WET hands with water
- 2 加入視液，揉搓雙手最少20秒**
Apply soap, RUB for at least 20 seconds
- 3 用水沖洗乾淨**
RINSE with water
- 4 用抹手紙抹乾雙手**
DRY with paper towel
- 5 再用抹手紙關上水龍頭**
Use paper towel to TURN OFF the faucet

勿忘 Don't miss

- 手掌 Palms
- 手背 Back of hands
- 指縫 Between fingers
- 指背 Back of fingers
- 手腕 Wrists
- 指尖 Finger tips
- 拇指 Thumbs



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

