

A report from the Information and Education Division

- Have awareness and understanding of the public and healthcare professionals improved?
Education and Awareness activities—

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National Center for Global Health and Medicine

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National Action Plan on Antimicrobial Resistance (AMR)

1



Public Awareness and Education

Improve Public Awareness and Understanding, and Promote Education and Training of Professionals

2



Surveillance and Monitoring

Continuously Monitor Antimicrobial Resistance and Use of Antimicrobials, and Appropriately Understand the Signs of Change and Spread of Antimicrobial Resistance

3



Infection Prevention and Control

Prevent the Spread of Antimicrobial-resistant Organisms by Implementing Appropriate Infection Prevention and Control

4



Appropriate Use of Antimicrobials

Promote Appropriate Use of Antimicrobials in the Fields of Healthcare, Livestock Production and Aquaculture

5



Research and Development

Promote Research on Antimicrobial Resistance and Foster Research and Development to Secure the Means to Prevent, Diagnose and Treat the Antimicrobial-resistant Infections

6



International Cooperation

Enhance Global Multidisciplinary Countermeasures against Antimicrobial Resistance

GOAL 1

Improve Public Awareness and Understanding, and Promote Education and Training of Professionals

Strategies

- (1.1) Promote Public Awareness-raising Activities to Improve Public Knowledge and Understanding of AMR
- (1.2) Promote Education and Training on AMR of Professionals Involved in Related Fields

Information and educational projects

[Objective] Increasing recognition of efforts to control AMR and promoting a change in behavior

For the general public

- Operation of a website and social media
- Public relations:
E.g., Providing information to the media
- PR campaigns:
AMR Awareness Month (November)
- Outreach efforts: at schools and other places
- Preparing and distributing various materials

For medical and public health personnel

- Operation of a website and social media
- Drafting guidelines and manuals
- Holding various seminars and online courses
- Preparing and distributing various materials
- Advice related to AMR and other activities

Activities for the general public

- Raising awareness of AMR and getting knowledge about AMR measures
- Explain the basics of infectious diseases and AMR on our information website
- Campaign (Events and other public relations), focusing on the AMR awareness month(November).



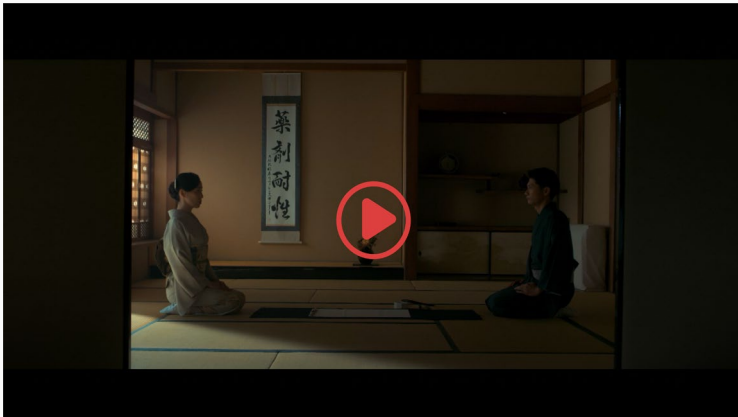
<https://amr.ncgm.go.jp/>



Activities for the general public

In 2021,

- We adopted famous Japanese anime characters for the campaign.
- Videos of AMR awareness were distributed via web and train ads.
- Educational materials and novelty items about AMR were distributed to the public through insurance pharmacies and pediatrics departments.
(442 facilities, 47,500 copies)



<https://amr.ncgm.go.jp/materials/>



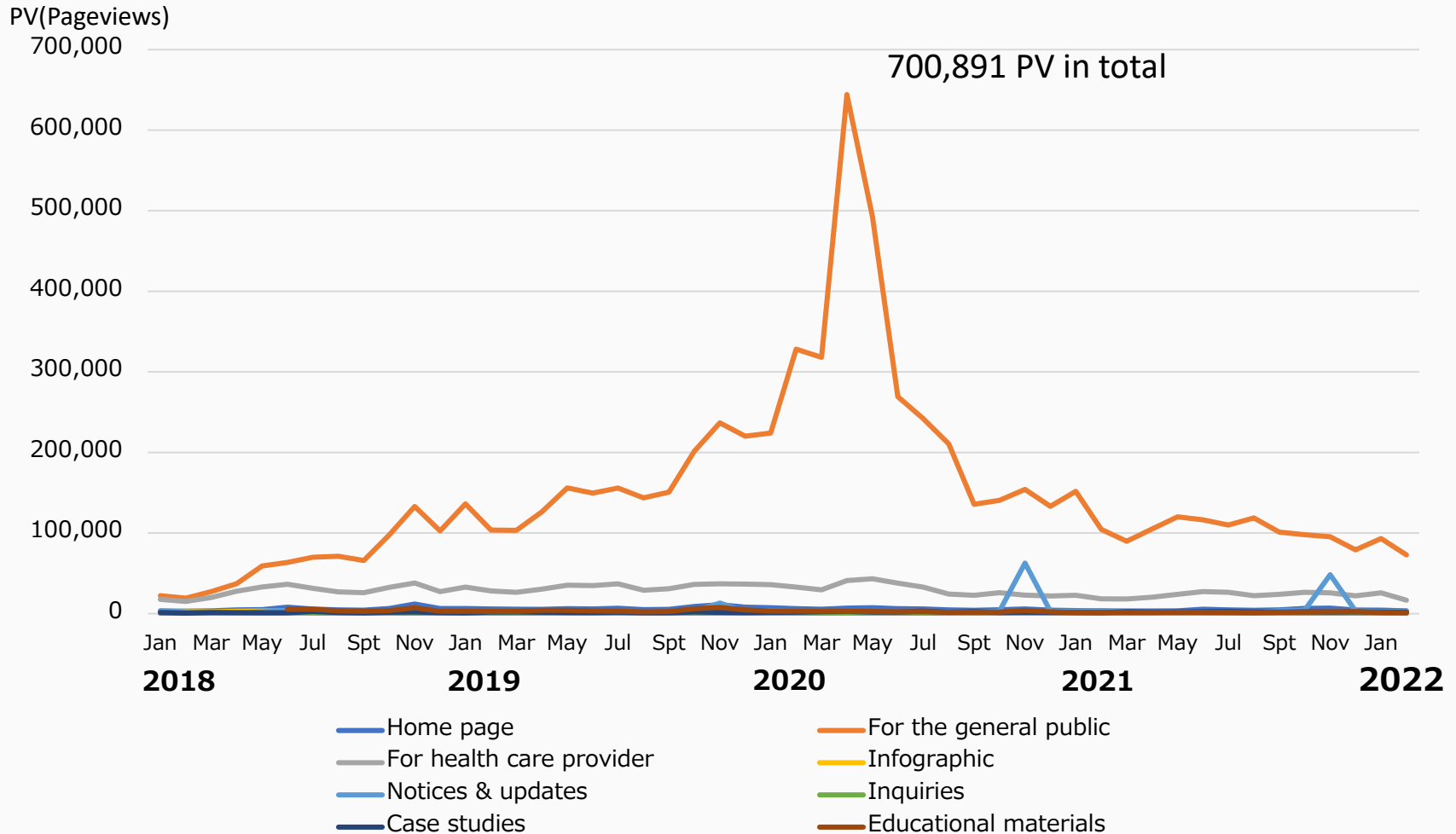
<https://amr.ncgm.go.jp/information/campaign2021.html>

-
- The image is a composite of several elements:
- Top Banner:** A pink ribbon banner with the text "一般部門" (General Department).
 - Left Certificate (Yellow background):**
 - Award: 銀賞 (Silver Award)
 - Product: 耐性菌 まん延防止の措置が要る (Resistant Bacteria: Measures for Preventing Spread are Required)
 - Author: 猫背 (Cat Back)
 - Company Logo: 川薬柳時 (Kawayakuri)
 - Right Certificate (Pink background):**
 - Award: 金賞 (Gold Award)
 - Product: 阻止しよう 使える薬が 無い未来 (Let's Stop It: A Future Where Usable Medicine is Gone)
 - Author: はるちゃん (Haru-chan)
 - Company Logo: 川薬柳時 (Kawayakuri)
 - Newspaper Clipping:**
 - Headline: 鍵山「銀」宇野「銅」 (Keyama "Silver", Uno "Bronze")
 - Sub-headline: 羽生4位4回転半は転倒 (Yuzuru Hanyu 4th place, 4-loop and a half jump was a fall)
 - Image: A gymnast performing a jump.
 - Text: 北京2022 (Beijing 2022)
 - Bottom Section:**
 - A red arrow points from the certificates to a collage of various Japanese newspaper clippings.
 - URL: <https://amr.ncgm.go.jp/>

https://amr.ncgm.go.jp/information/2021senryu_result.html

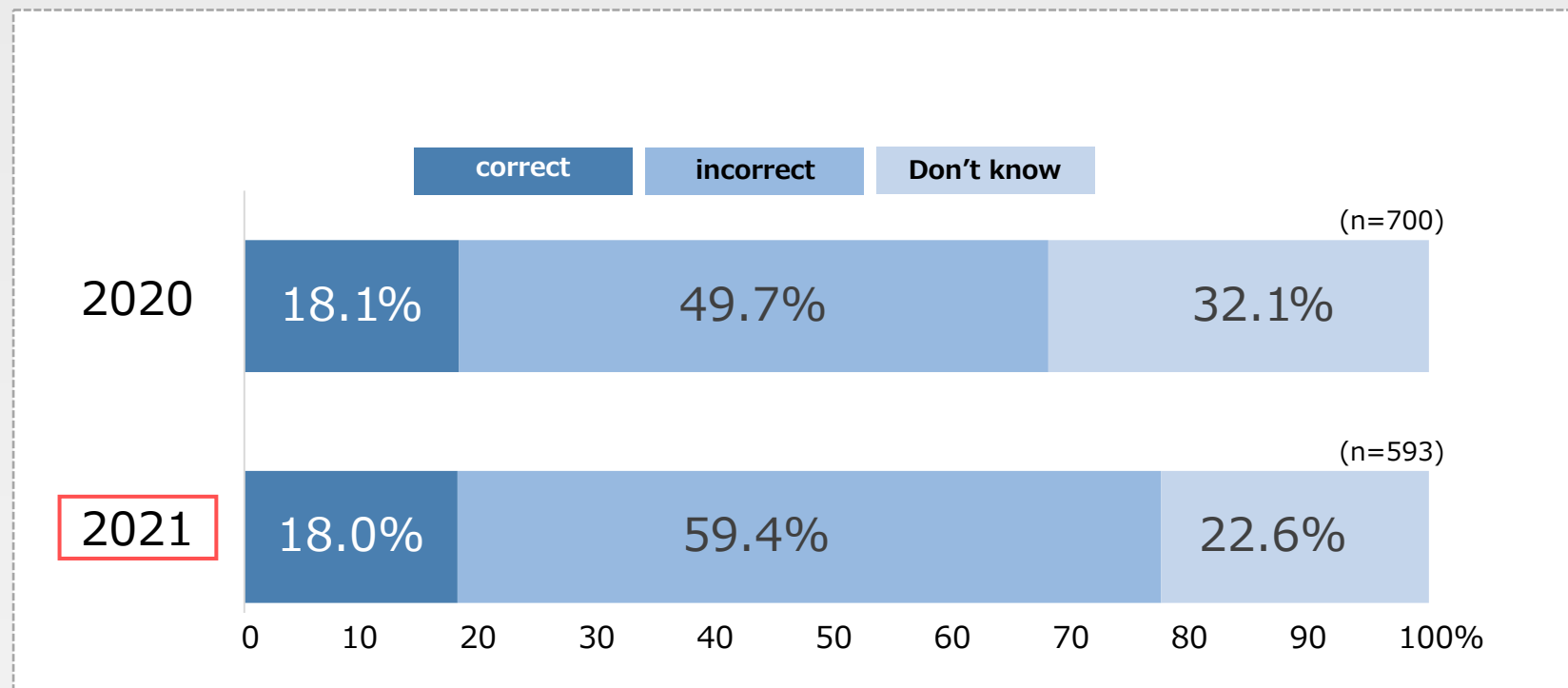


Information website pageviews



The public knowledge and understanding of AMR is still limited

“Antibiotics are effective against viruses”



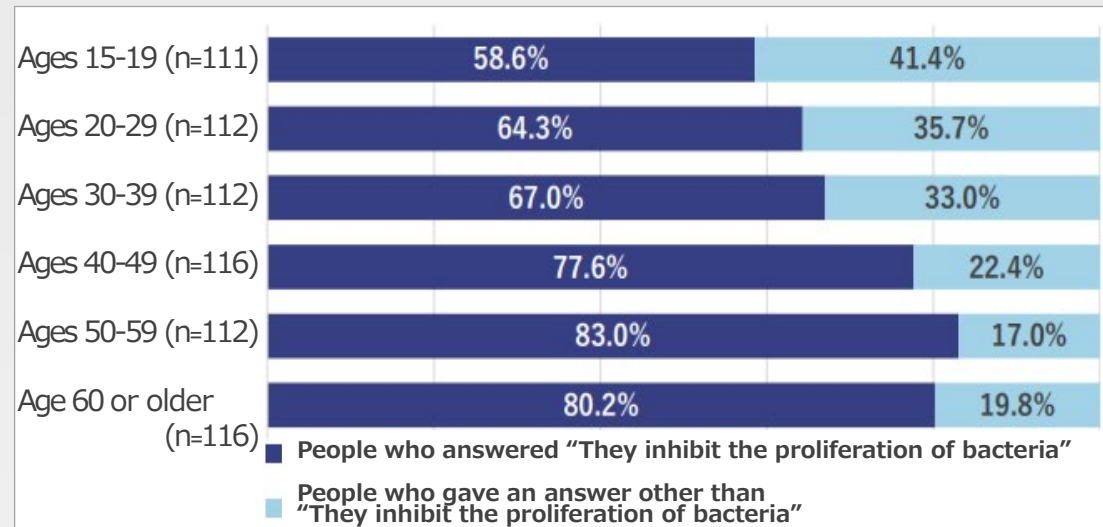
The percentage of people who correctly answered antibiotics are not effective against viruses has not changed

Younger generations are less likely to have correct knowledge

What do you think antibiotics are?

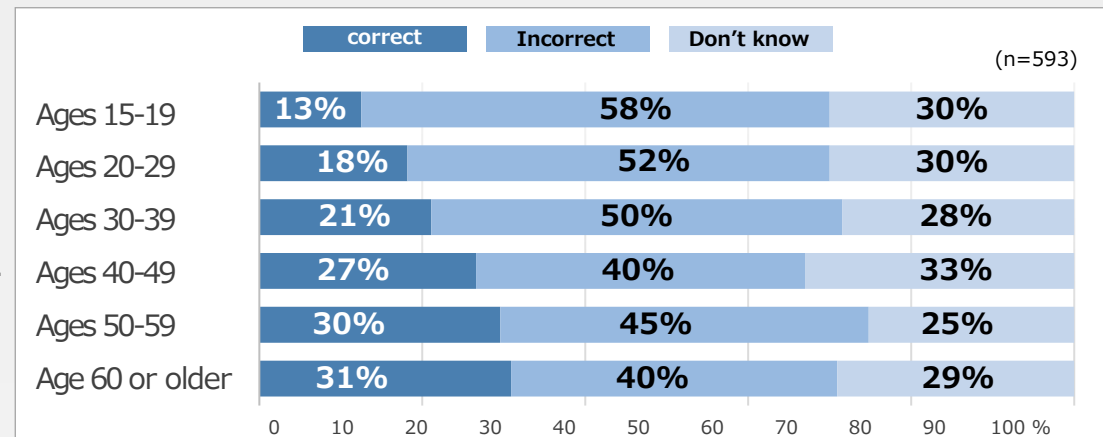
Correct answer: They inhibit the proliferation of bacteria

Antibiotics awareness survey report 2018
http://amr.ncgm.go.jp/pdf/20181026_ig_vol8_report.pdf



Antibiotics are effective against colds

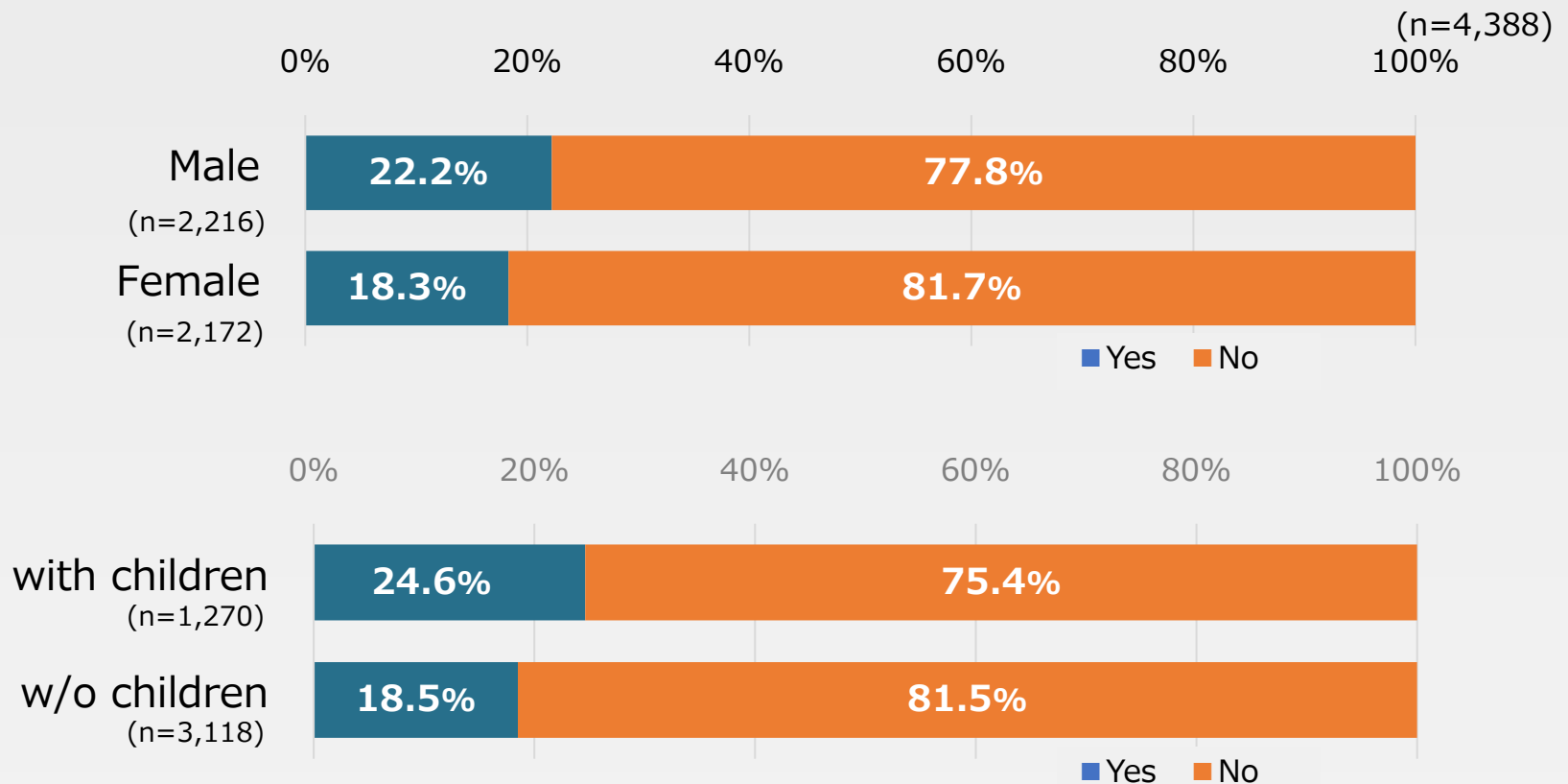
Antibiotics awareness survey report 2021
http://amr.ncgm.go.jp/pdf/20211004_report.pdf



Around 30% of those in the 40-60age group answered correctly, while only 10-20% of those in the 10-30age group did.

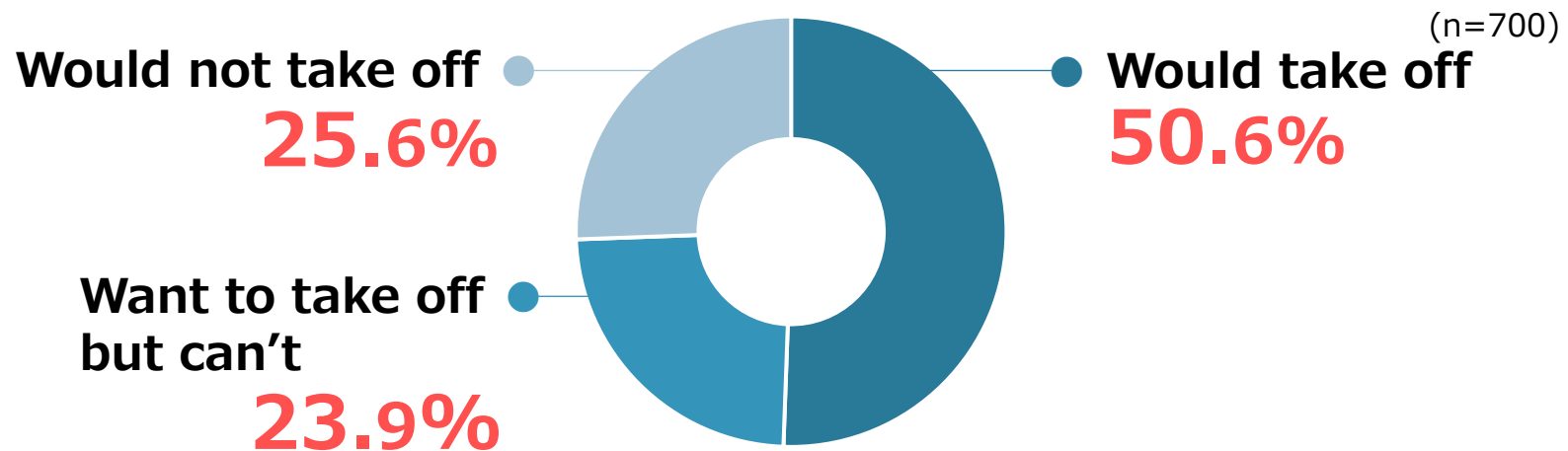
The percentage of people with accurate knowledge differs depending on their situation

Have you ever requested antibiotics at a hospital or clinic?



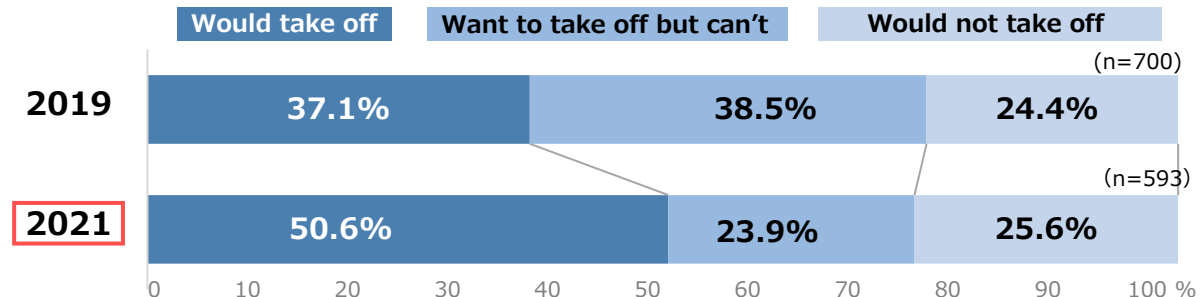
Attitudes about infection control are gradually changing

If, for example, you woke up this morning with a runny nose, cough, sore throat, and sense of fatigue. You have a fever of 37.6°C. Would you take off from school or work?



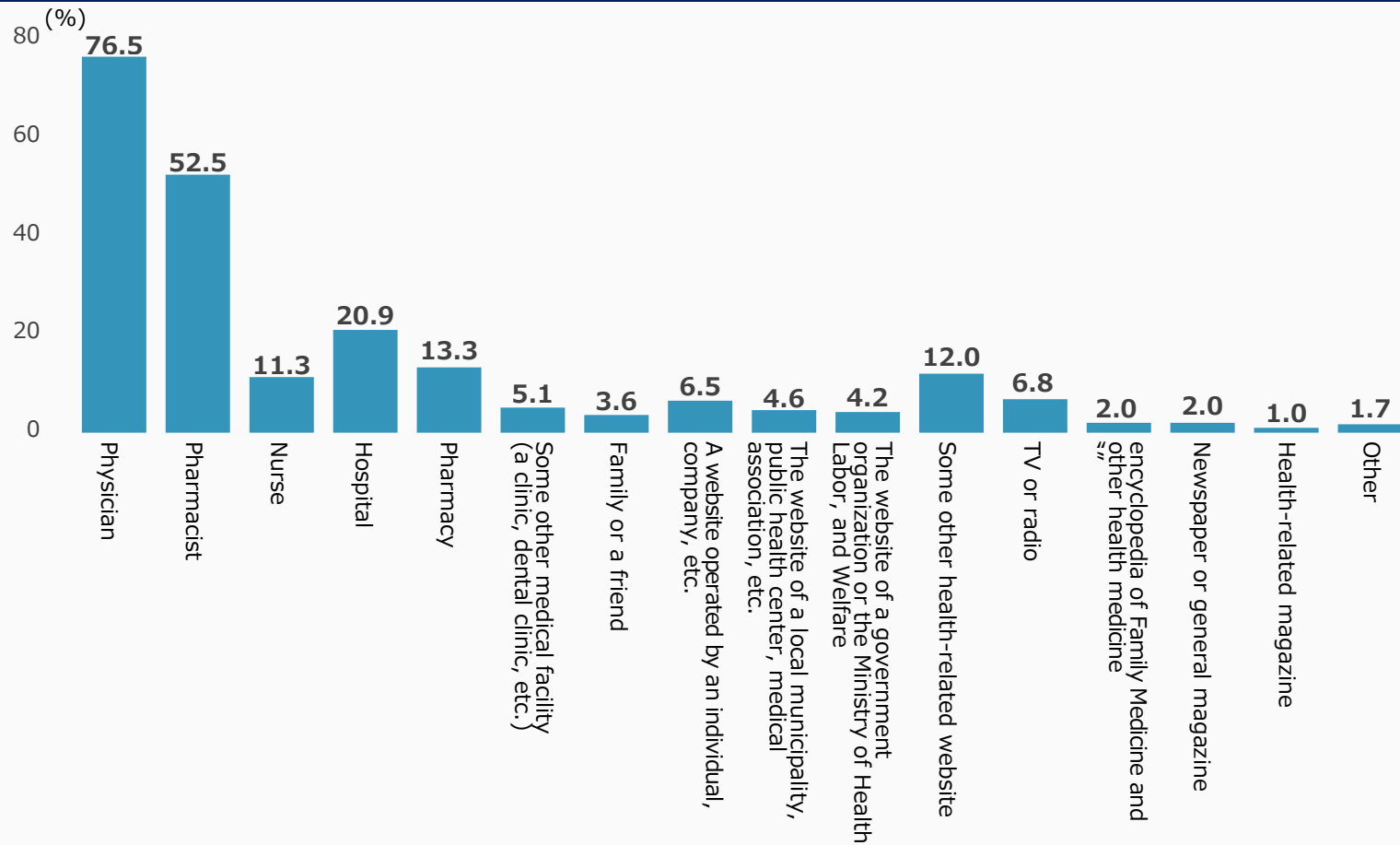
<comparison with the survey 2019>

50.6% of respondents "would take off," but the total of "want to take off but can't" and "would not take off" was 49.5% .



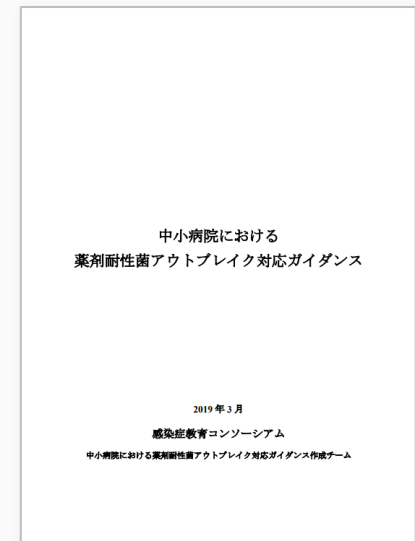
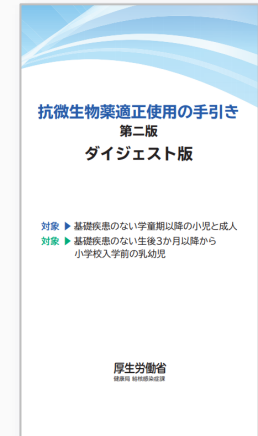
A lot of information from medical personnel

What sources of information do you use to get good information about antibiotics? List up to 3 sources.



Activities for professionals involved in related fields

- Basic policies
 - Raising awareness of AMR widely and encouraging health care provider to change behavior
 - Supporting implementation of AMR counter-measure activities throughout Japan
 - Supporting implementation of AMR counter-measure activities in medical institutions with no/few specialist
- Education and awareness-raising using “Manual of Antimicrobial stewardship”
- Developing guidelines related to AMR measures and providing on-site support.



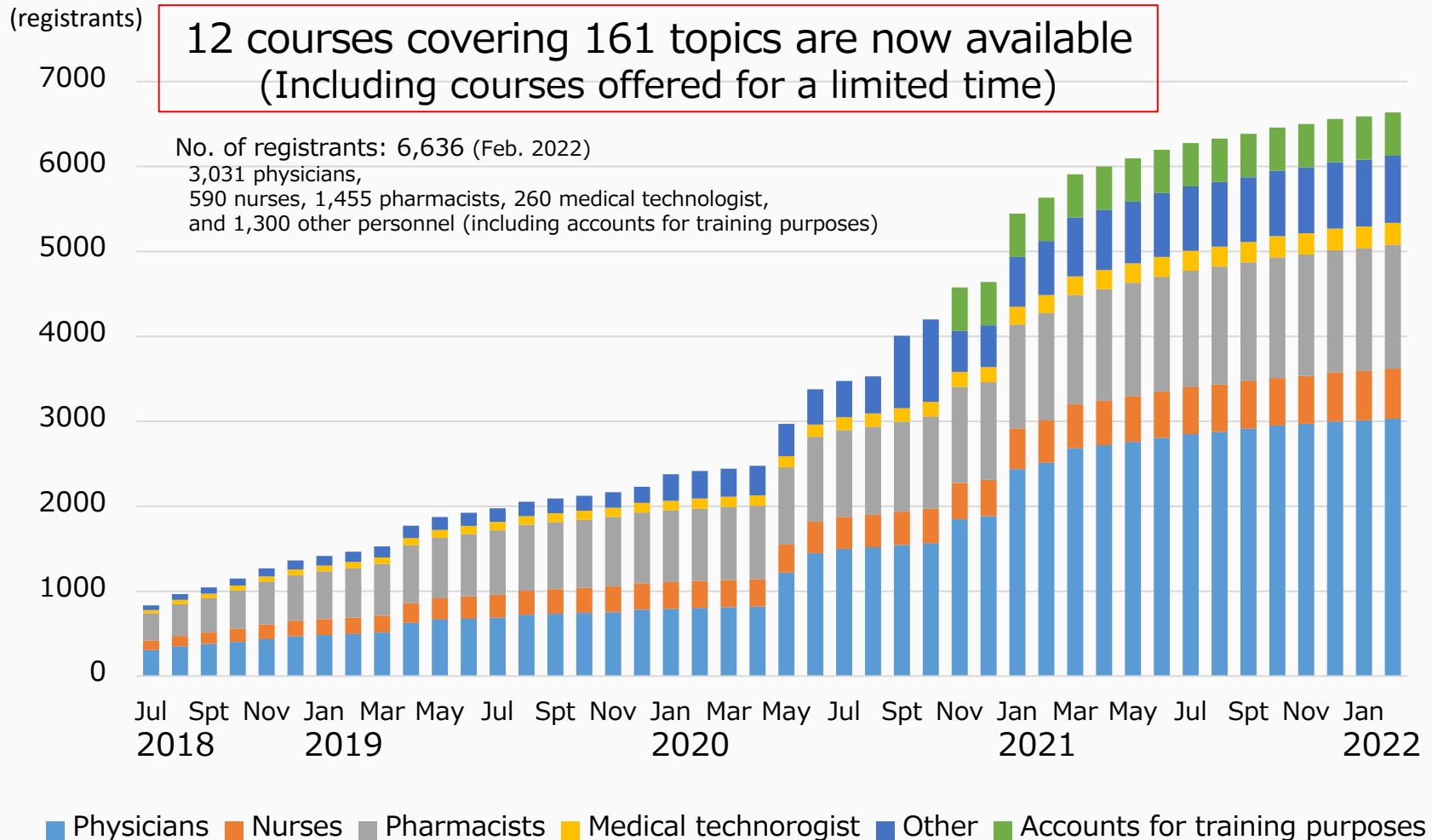
Seminar and Workshop

- **Plan and implement seminars in various regions of Japan**
(results from 2017-January 2022)
 - Clinical Seminar on AMR Measures: 21 sessions (1,735 attendees)
 - Workshop to brush up on cold treatment : 11 sessions (406 attendees)
 - Dental clinical seminar on AMR Measures : 4 sessions (1,057 attendees)
 - Seminars for Public Health Professionals: 10 sessions (690 attendees)
 - Seminars held jointly with academic societies and other facilities: 10 sessions
 - Some of the seminars and workshops were made into e-learning contents.
- **Seminars have mainly been implemented online since FY2020**

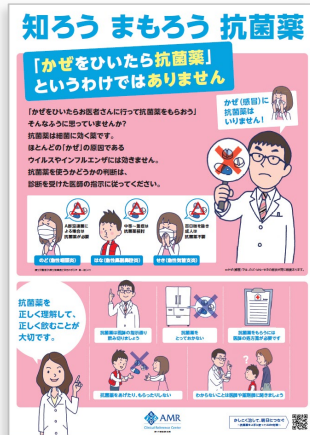


<https://amrlearning.ncgm.go.jp/>

Number of registrants for e-learning



Educational materials



Poster



Poster



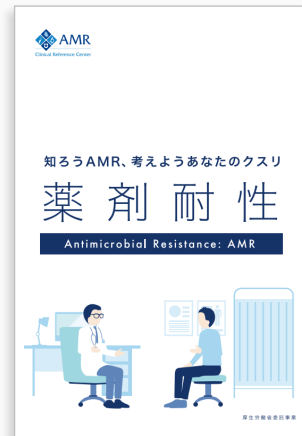
Poster



Poster



Leaflet



Leaflet



Booklet



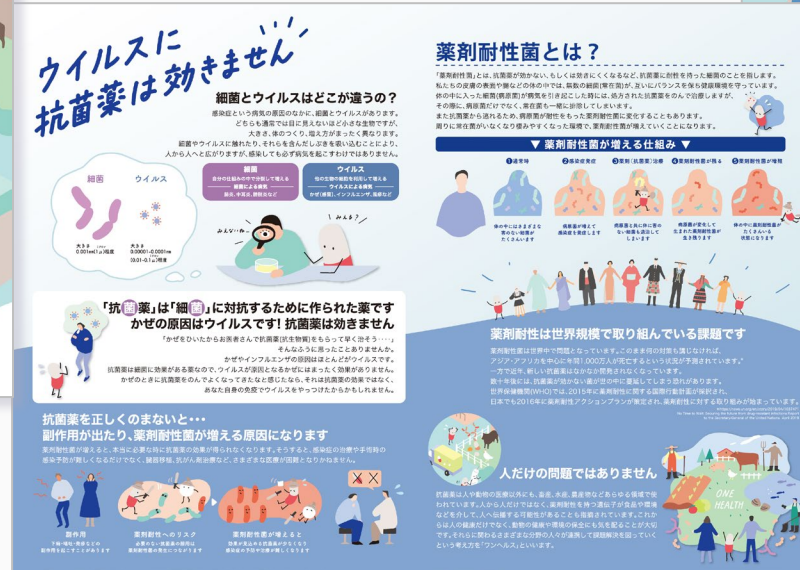
Booklet

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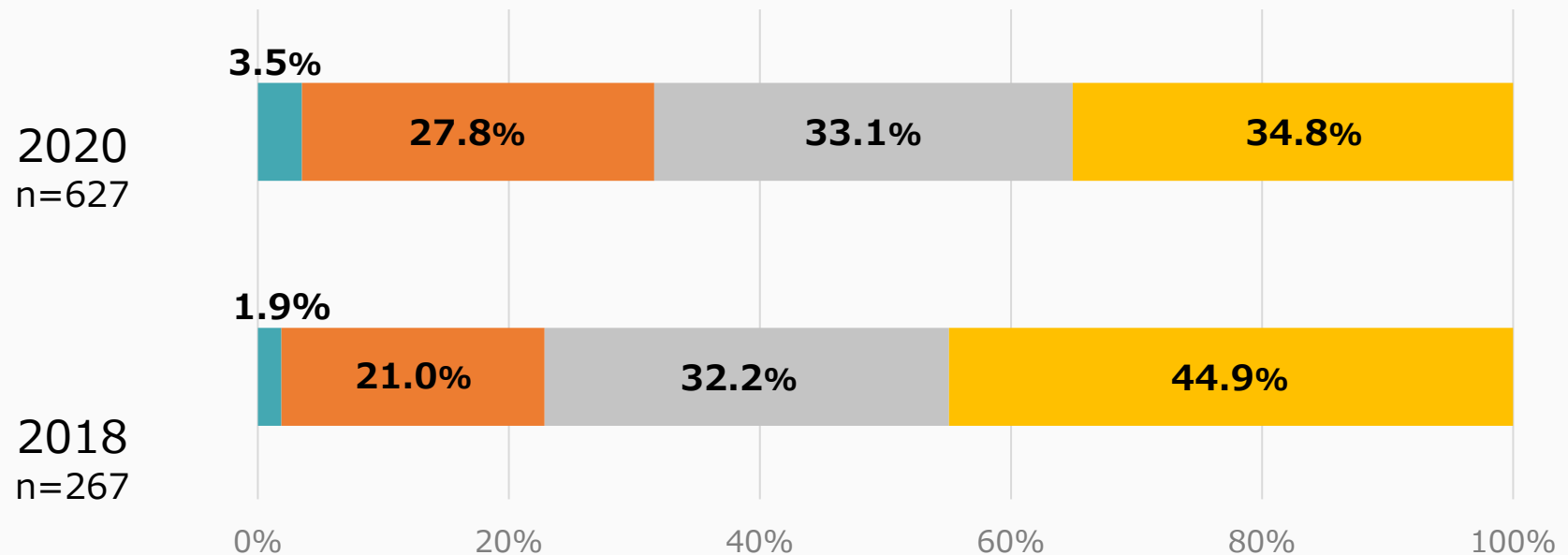
Educational materials



Latest new leaflet



How many clinic doctors know about National Action Plan on AMR?



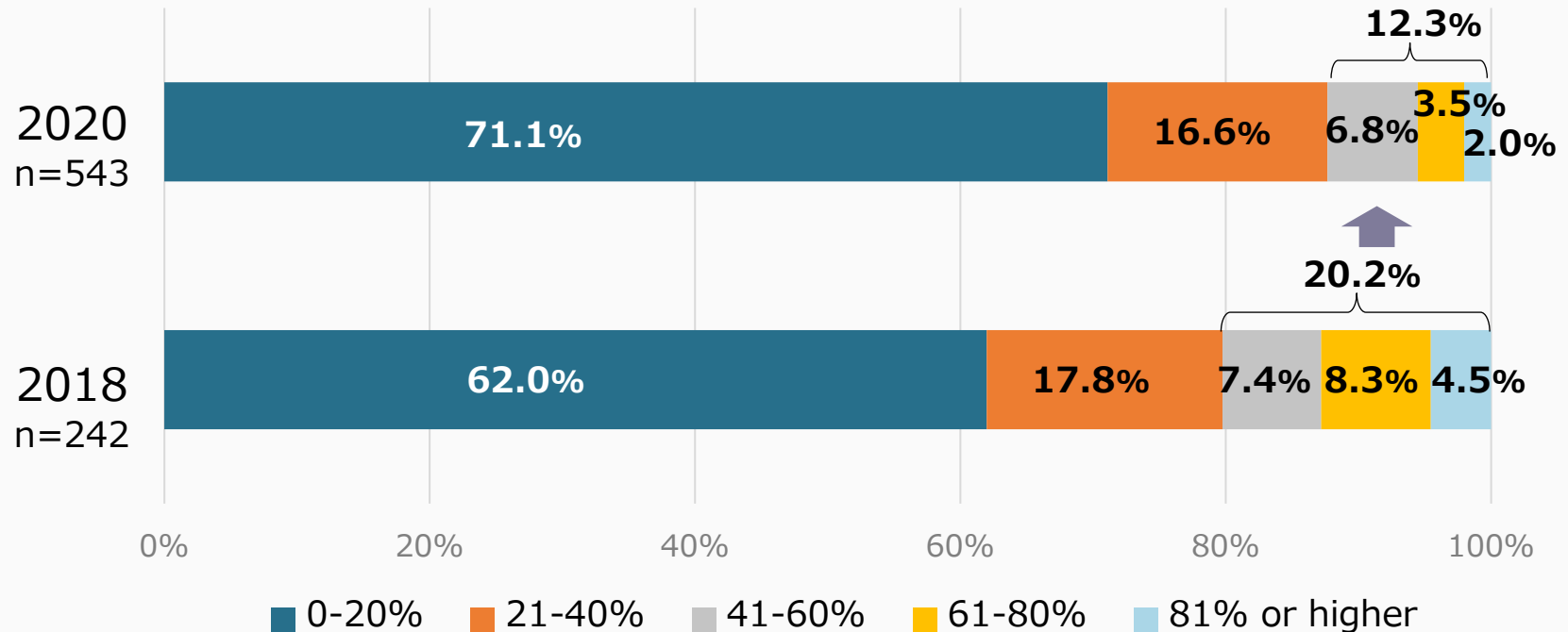
- Able to explain National Action Plan on AMR
- Understand National Action Plan on AMR
- Have only heard "National Action Plan on AMR"
- Know nothing about National Action Plan on AMR control

A nationwide questionnaire survey of clinic doctors on antimicrobial stewardship in Japan(2020)
 The 95th Annual Meeting of the Japanese Association for Infectious Diseases, The 69th Annual Meeting of the Japanese Society of Chemotherapy
 The investigative committee on antimicrobial stewardship in the outpatient setting

Frequency of antibiotics prescription varies widely among clinic doctors.

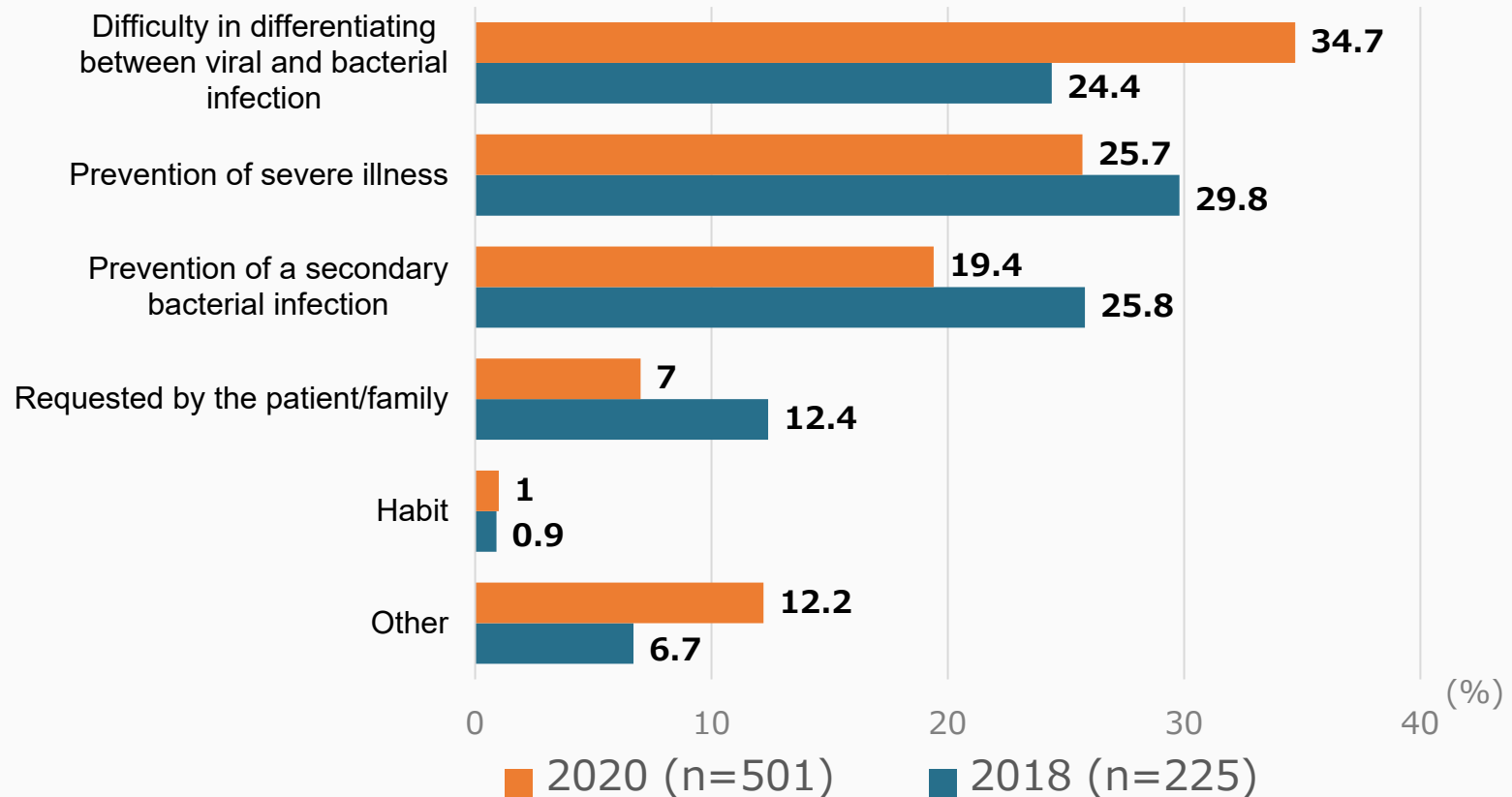
Percentage of physicians who prescribed antibiotics when they diagnosed a patient with a cold (over the past year)

Physicians who prescribed antibiotics to 41% or more patients with a cold decreased from 20.2% to 12.3%



Awareness of appropriate use of antibiotics is gradually rising among clinic doctors

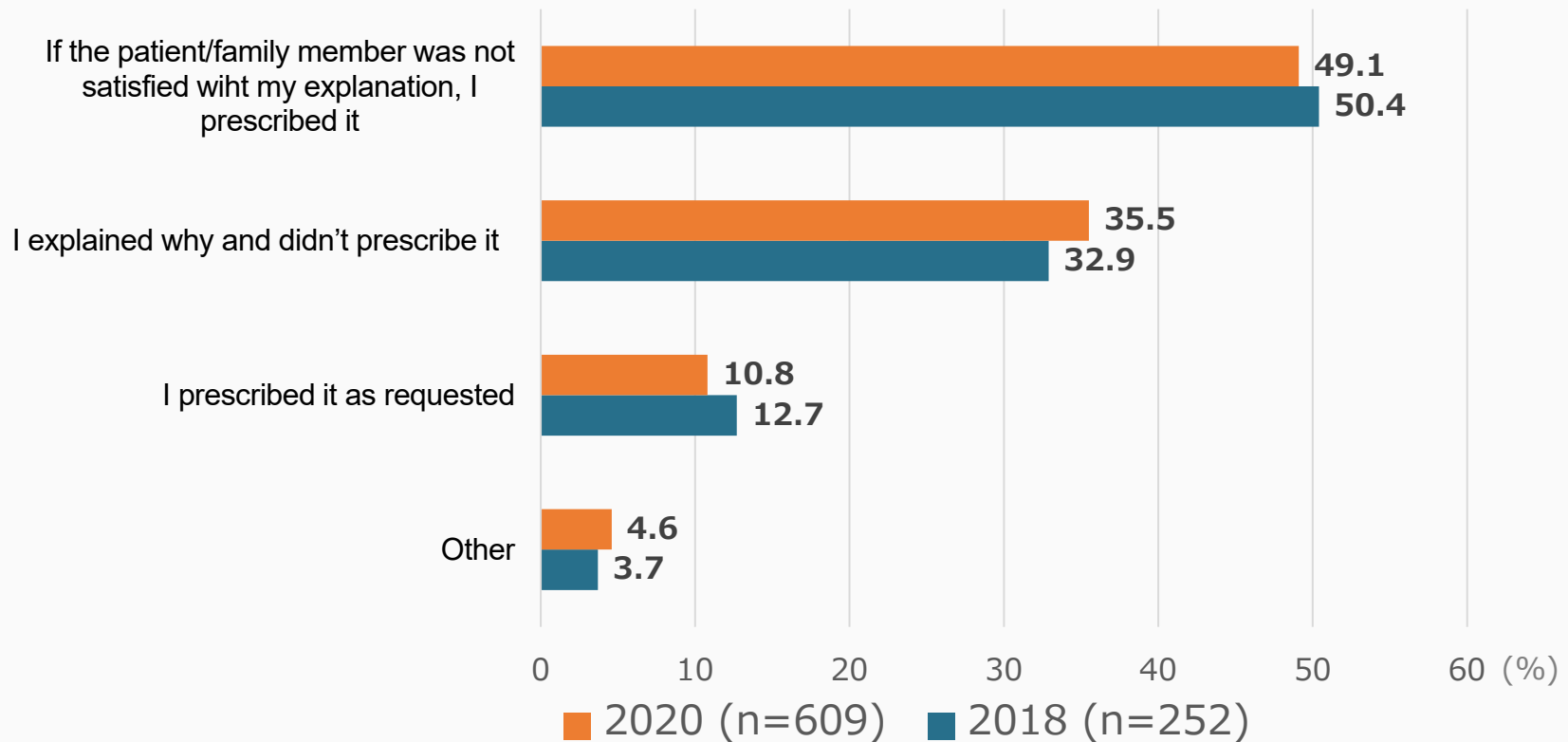
Reason why clinic doctors prescribed antibiotics for the common cold



A nationwide questionnaire survey of clinic doctors on antimicrobial stewardship in Japan(2020)
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Need to Improve both public and healthcare professionals' awareness and understanding

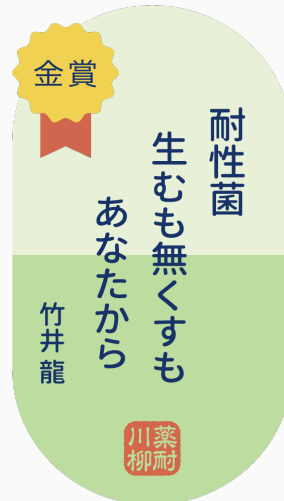
What would you do when a patient or family member diagnosed with the common cold requests an antibiotics?



Senryu [humorous poem] AMR Grand Prize winners



1st annual contest



3rd annual contest



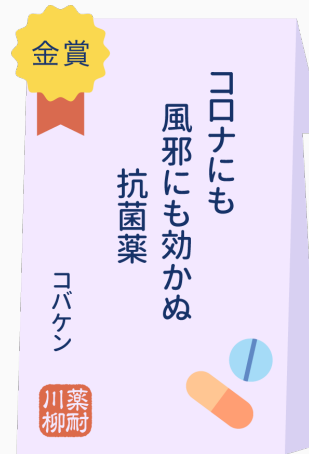
5th annual contest
(General public)



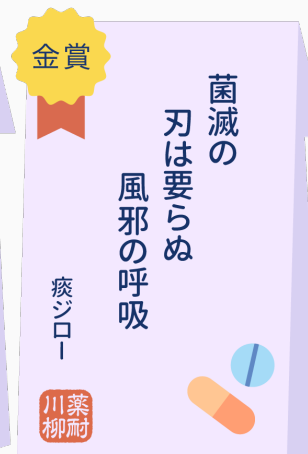
5th annual contest
(Medical personnel)



2nd annual contest



4th annual contest
(General public)



4th annual contest
(Medical personnel)

Educational efforts and changes in attitudes

- We promoted Public Awareness-raising activities and education and training on AMR of healthcare provider.
- There are few major changes in public knowledge and understanding of AMR, but awareness of AMR should gradually become rising.
- Awareness of AMR and appropriate use of antibiotics is gradually rising among healthcare provider and their behaviors are gradually changing.
- We need to develop education and awareness of AMR tailored to the target audience for the future.