2019 Survey on Healthcare in Japan

Health and Global Policy Institute September, 2019



I. Summary

Health and Global Policy Institute has conducted regular surveys of public opinion on healthcare issues since 2006 to gain a better understanding of public perceptions and a better awareness of the health services and health care policies that the public desires. Continuing on from previous surveys, the 2019 survey included questions on the level of satisfaction that the public feels with the current healthcare system. The survey also inquired about public participation in healthcare policy and sustainability of the National Health Insurance system. In addition, it inquired about issues that have been garnering attention recently, namely high-cost drugs, antimicrobial resistance, and vaccines.

(1) Survey Highlights

Satisfaction levels towards healthcare and healthcare systems

• 62% of respondents were satisfied with healthcare and healthcare systems in Japan. The highest satisfaction was reported for "safety of care."

Public participation in healthcare policy

About 80% of respondents want their opinions reflected in the healthcare policy creation process.

Sustainability of the National Health Insurance system and high-cost drugs

About 80% of respondents supported providing health insurance coverage for high-cost drugs.

Antimicrobial resistance

 Over half of respondents did not know that antimicrobials and antibiotics are ineffective for treating the common cold or influenza.

Vaccines

 About 70% of respondents did not know that the HPV vaccine is effective at preventing HPV infection and the conditions that lead to cervical cancer.

(2) Future discussion points in healthcare policy suggested by survey results

Public satisfaction towards medical safety and the quality of technology was high, so it is safe to say that the public recognizes the value of the work done by healthcare providers in clinics and hospitals. On the other hand, opportunities for the public to be involved in promoting countermeasures for each disease have been limited. This has resulted in in low satisfaction levels towards both the transparency of the healthcare system policy creation process as well as measures to reflect public opinion in that process. Approximately 80% of respondents stated that they want their opinions reflected in healthcare policy. Examination committees for policy formulation and other such groups should include public interest members and members of committees representing people receiving healthcare. In addition, it may be necessary to hold discussions on and rebuild mechanisms and systems for reflecting public opinion in healthcare policy in the future.

- Respondents showed clear support for providing public medical insurance coverage for high-cost drugs. This raises the question of how to develop recognition that some items will not be covered due to limited financial resources. Given the fact that drug spending accounts for less than 20% of total healthcare costs, the question of how to improve the overall efficiency of the healthcare system in a way that the public will support must be clarified through future surveys.
- ✓ In the field of vaccines and antimicrobial resistance (AMR), it was clear that information based on scientific evidence has yet to penetrate among the public. To ensure the health of every member of society regardless of their literacy on the topic of vaccines and AMR, it will remain important to examine methods of disseminating evidence-based information and developing evidence-based policies.

II. Overview of Survey

An internet-based public opinion survey was administered to 2,000 males and females over 20 years of age throughout Japan during July 2019. The breakdown of respondent demographics is shown in Figure 1. The survey was distributed to 2,434 individuals. It was administered only to those who gave informed consent after having read an explanation of the survey's objectives. The questionnaires were self-administered, and a serial number was given to each respondent to ensure anonymity.

In recent years, there has been a decline in the efficacy of traditional survey methods due to factors such as decreased response rates for mail-in surveys or in-person interviews and expansions in survey restrictions, which has led to higher expectations for internet surveys. However, the conduction of a survey on the internet introduces a fixed sampling bias in that it selects only for respondents who can use the internet, and hence have a certain level of education, as internet literacy is generally correlated with education level^{1, 2, 3, 4, 5}. It is important to take this limitation into account when interpreting the results of this survey.

"2019 Survey on Healthcare in Japan" Study Overview

Figure 1

- Survey Period: July 2019
- Method: Online survey
- Respondents: 2,000 nationally representative males and females aged 20 and above, selected from the monitor panel of the research firm that conducted the survey
- Number of valid responses: 2,000
- Breakdown of respondent demographics

Area			Age		Sex
• Hokkaido - Tohoku	11.3%	• 20s	11.6%	• Male	48.0%
 Kanto 	34.0%	• 30s	14.9%	 Female 	52.0%
• Chubu	18.3%	• 40s	17.8%		
• Kinki	16.3%	• 50s	14.9%		
• Chugoku - Shikoku	8.9%	• 60s	17.6%		
• Kyushu - Okinawa	11.2%	• 70 and	above 23.2%		

¹⁾ Smith MA, Leigh B, 1997, Virtual subjects: Using the Internet as an alternative source of subjects and research environment. Behavior Research Methods, Instruments, & Computers, 29, 496–505.

²⁾ Osumi N, Maeda T, 2007, Problems with online surveys - Observations from experimental investigations (Part 1) (From members). Japan Association for Public Opinion and Research Newsletter Yoron, 100, 58-70.

³⁾ Osumi N, Maeda T, 2008, Problems with online surveys - Observations from experimental investigations (Part 2) (From members). Japan Association for Public Opinion and Research Newsletter Yoron, 101, 79-94.

⁴⁾ Miura A, Kobayashi T, 2015, Monitors are not monitored: How satisficing among online survey monitors can distort empirical findings. Japanese Journal of Social Psychology, 31, 1–12.

⁵⁾ Hanibuchi T, Muranaka A, Ando M, 2015, Challenges of Data Collection through Internet Research: Analysis of "Frivolous" Responses, Response Time, and Geographical Pattern. E-journal GEO, 10 (1), 81-98.

Ⅲ. Survey Results

- (1) Satisfaction levels towards healthcare and healthcare systems
- 62% of respondents were satisfied with healthcare and healthcare systems in Japan. The highest satisfaction was reported for "safety of care."
 - ✓ Respondents were asked to rate various items concerning healthcare systems in Japan on a four-point scale that included "satisfied," "somewhat satisfied," "somewhat dissatisfied," and "dissatisfied." 11.0% of respondents selected "satisfied" and 51.0% answered "somewhat satisfied" on the topic of overall satisfaction level, showing that 62.0% of respondents were satisfied with healthcare and healthcare systems in Japan (Figure 2).
 - ✓ Examining individual items, the highest level of satisfaction could be seen for the safety of healthcare, for which 71.8% of respondents selected "satisfied" or "mostly satisfied." Second was "quality of technologies for diagnosis and treatment," which received positive ratings from 68.4% of respondents (Figure 2).
 - ✓ "Reflection of public opinion in the healthcare policy creation process" had the lowest level of satisfaction at 33.7%. The next lowest items were "transparency of the healthcare policy creation process" (33.8%) and "simplicity of healthcare policy" (37.4%) (Figure 2).

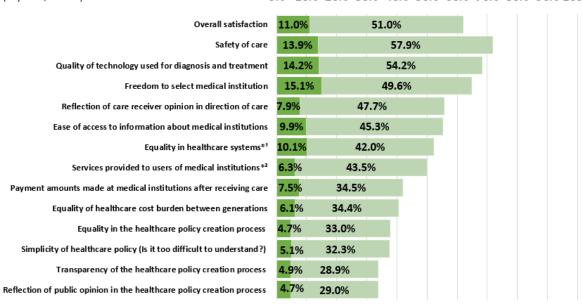
62% of respondents were satisfied with healthcare and healthcare systems in Japan. The highest satisfaction was reported for "safety of care"

Figure 2

Q: How satisfied are you with current healthcare and healthcare systems in Japan?

(July 2019, n=2000)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



■ Satisfied ■ Somewhat satisfied

^{*1} Services besides those related to medicine, such as attentiveness of staff, environments at medical institutions, and wait times

^{*2} Whether or not everyone can receive the same healthcare regardless of economic disparities

[Commentary]

- ✓ On the topic of healthcare and healthcare systems in Japan, our survey indicated that respondents were highly satisfied with the safety of healthcare and the quality of technology used for diagnosis and treatment. However, responses concerning healthcare systems indicated significantly low satisfaction levels. This demonstrates that many members of the public perceive the policy creation process as unfair and lacking in transparency due to the complexity of healthcare systems or because public opinion is absent from the process.
- ✓ Given the results of HGPI's past public opinion surveys, this is a clear trend.
- ✓ Healthcare systems greatly affect the everyday lives of members of the public. Not only is it necessary to publicize information concerning healthcare systems in a way that can be easily understood, it is also necessary that measures are taken to disclose the policy creation process for healthcare systems and to involve the public in said policy creation process.

(2) Public participation in healthcare policy

About 87% said cooperation between various stakeholders is important to provide better healthcare, but only about 39% felt that stakeholders are cooperating

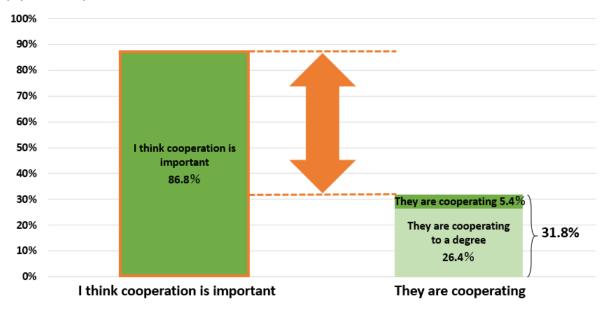
- ✓ On the topic of providing better healthcare to the public, respondents were asked if they felt it is important for various organizations or their representatives outside of medical institutions or the government (such as private businesses, research bodies, and members of civil society) to cooperate. Respondents were provided two options, to agree or to disagree. 86.8% of respondents indicated that they believe cooperation between various stakeholders is important (Figure 3).
- ✓ Respondents were also asked if they think that that the aforementioned people and organizations from various fields in Japan are currently cooperating to provide better healthcare. Respondents were presented with five options: "they are cooperating," "they are cooperating to a degree," "they are mostly not cooperating," "they are not cooperating," and "unsure." 31.8% respondents selected "they are cooperating" (5.4%) or "they are cooperating to a degree" (26.4%) (Figure 3).

About 87% said cooperation between various stakeholders is important to provide better healthcare, but only about 39% felt that stakeholders are cooperating

Q. Do you believe that cooperation between people and organizations in various positions outside of medical institutions and the government such as private businesses, research organizations, or civil society organizations* is important for providing better healthcare? Also, do you believe stakeholders in Japan are currently cooperating?

Figure 3

(July 2019, n=2000)



^{*}Specifically, non-profit organizations representing the people receiving healthcare like NGOs and NPOs

Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

■ About 80% want their opinion to be reflected in the healthcare policy creation process

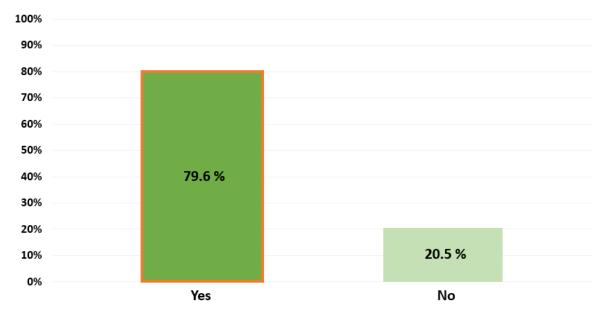
Respondents were told that the participation of citizens and people receiving healthcare in policy discussions led to the establishment of the Cancer Control Act in 2006. They were then asked if they wanted their opinions reflected in healthcare policy in a similar manner to create and provide healthcare or social support that reflects the opinions of the public and people receiving healthcare. 79.6% of respondents wanted their opinions reflected while 20.5% did not (Figure 4).

About 80% want their opinion to be reflected in the healthcare policy creation process

Figure 4

Q. Because members of the public and people receiving healthcare participated in policy creation discussions, the Cancer Control Act was enacted in 2006. This led to the creation of healthcare and social support services that reflected public opinion. Do you want your opinion to be reflected in a similar matter when healthcare policy is created?

(July 2019, n=2000)



Most of the respondents with medical histories said they wanted their opinions reflected in healthcare policy during the policy creation process

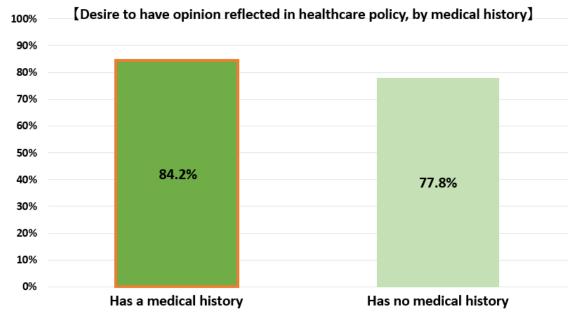
✓ The responses people with medical histories gave to the previous question was compared with the responses of those who had no medical histories (Figure 5). More of the respondents with medical histories (84.2%) wanted their opinions reflected in healthcare policy compared to respondents with no medical histories (77.8%) (Figure 5).

Most of the respondents with medical histories said they wanted their opinions reflected in healthcare policy during the policy creation process

Figure 5

Q. Because members of the public and people receiving healthcare participated in policy creation discussions, the Cancer Control Act was enacted in 2006. This led to the creation of healthcare and social support services that reflected public opinion. Do you want your opinion to be reflected in a similar matter when healthcare policy is created?

(July 2019, n=2000)



- About 47% thought that people receiving healthcare should proactively inform others of their needs to ensure their opinions are reflected in healthcare policy
 - ✓ Respondents were asked which actions people receiving healthcare should proactively take to ensure that their opinions are reflected in healthcare policy (Figure 6).
 - √ 46.9% of respondents said that people receiving healthcare should proactively provide information about their needs, making it the most popular response. The other most popular responses were "the people receiving healthcare should learn about healthcare policy" (22.1%), "multiple organizations representing people receiving healthcare should cooperate to enhance their ability to publicize information" (17.8%), and "people receiving healthcare and organizations representing them should make policy proposals" (12.4%) (Figure 6).

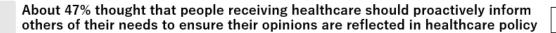
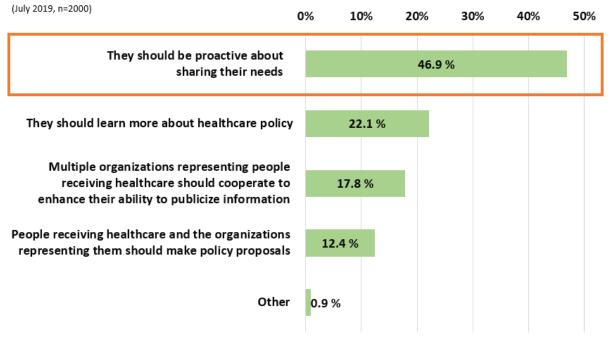


Figure 6

Q. What actions members of the public take to make sure that their opinions are reflected in healthcare policy? Please select one of the following.



Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

[Commentary]

- There is widespread belief that medical institutions and the government must cooperate with various stakeholders like private businesses, research institutes, and people and organizations from civil society to achieve better healthcare. However, many believed that these stakeholders are not currently cooperating in Japan, indicating a significant gap between the hopes of the public and reality.
- Given the fact that about 70% of respondents wanted their opinions reflected in healthcare policy, it is important to proceed with a strategic and unified approach using a platform that allows stakeholders to share information and cooperate to solve problems. People who are currently experiencing or have experienced disease had particularly strong feelings on this topic. To promote policy proposals from these stakeholders, it is necessary to provide them with continuous support to popularize peer support and to develop their ability to propose policies and promote wider understanding of healthcare policy.

- In the field of disease countermeasures, the Cancer Control Act specified that people with cancer and their family members will be included on the Cancer Control Council. The law established after that act called the Basic Act on Stroke, Heart Disease and Other Cardiovascular Disease Measures also emphasizes the participation of those most affected. Similarly, in other areas of disease, people receiving healthcare and other parties most affected are participating in deliberation councils, investigative meetings, and other gatherings held by the government and administrative districts throughout Japan. Further discussion is necessary to create processes and mechanisms for incorporating the opinions of people receiving healthcare and other parties most affected into policy and to build consensus on scientifically sound, effective methods of policy promotion.
- ✓ HGPI operates NCD Alliance Japan, a civil society platform for gathering multi-stakeholders to take a crosscutting approach to NCD prevention and control. NCD Alliance Japan is working to create a better healthcare environment for the people living with NCDs, by co-creating policy recommendations and empowering people living with NCDs as active participants through the policy making process.

(3) The sustainability of the National Health Insurance System

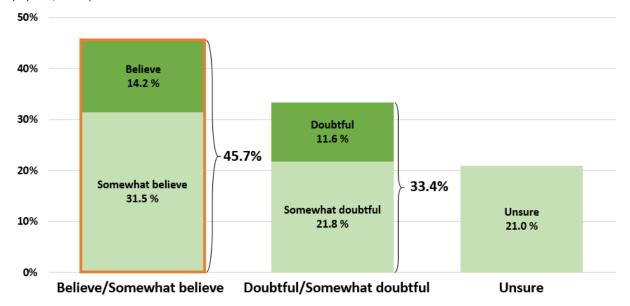
- Will National Health Insurance continue as high-cost drugs appear one after another? About 46% of respondents thought that the National Health Insurance system will still exist in 2040
 - ✓ Respondents were asked if they think Japan's National Health Insurance system will still exist as it does now in 2040. Respondents could choose one of five options: "believe," "somewhat believe," "somewhat doubtful," "doubtful," and "unsure." 14.2% of respondents selected "believe" and 31.5% selected "somewhat believe" for a total of 45.7% of all respondents (Figure 7).
 - ✓ On the other hand, 11.6% of respondents were "doubtful" and 21.8% or "somewhat doubtful" for a total of 33.4% of all respondents. 21.0% of respondents said they did not know (Figure 7).

About 46% of respondents thought that the National Health Insurance system will still exist in 2040

Figure 7

Q. Currently, every Japan citizen is covered by some form of healthcare insurance including the National Health Insurance system in which people provide mutual financial support for healthcare. Do you believe that Japan's National Health Insurance system will exist as it does now in 2040?

(July 2019, n=2000)



Younger generations were more doubtful of the continued existence of the National Health Insurance system, mostly those in their 30s

- Respondents who were "doubtful" or "somewhat doubtful" of the continued existence of the National Health Insurance system were compared by age group (Figure 8).
- ✓ Doubtful response rates by age group were: those in their 20s, 38.4%; those in their 30s, 40.6%; those in their 40s, 39.1%; those in their 50s, 33.6%; those in their 60s, 24.7%; and those in their 70s, 28.2% (Figure 8).
- ✓ The average rate of doubtful responses per age group was 33.4% (Figure 8).

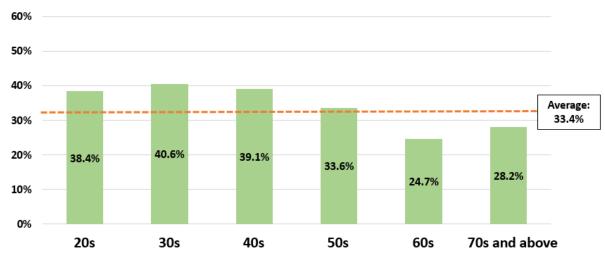
Younger generations were more doubtful of the continued existence of the National Health Insurance system, mostly those in their 30s

Figure 8

Q. Currently, everyone in Japan is covered by some form of healthcare insurance including the National Health Insurance system in which people provide mutual financial support for healthcare. Do you think that Japan's National Health Insurance system will exist as it does now in 2040?

(July 2019, n=2000)

[Respondents who were doubtful NHI will continue to exist by age group]



Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

[Commentary]

- ✓ The average negative response rate was 33.4% with a pessimistic trend for respondents in their 20s, 30s, and 40s. These age groups showed the most concern about the failure of insurance finance.
- ✓ On the other hand, 21% of respondents said they did not understand the issue of the National Health Insurance system's continued existence. Measures are needed to improve literacy among people who feel that the issue does not concern them.

(4) High-cost drugs

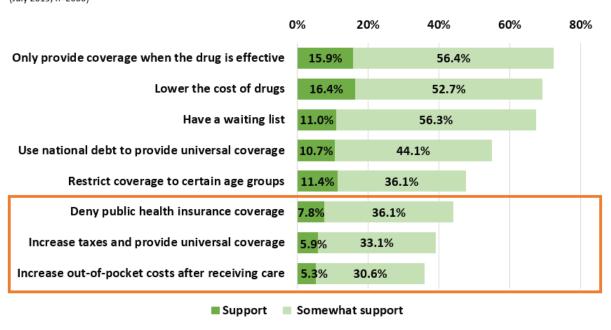
Respondents did not want an increase in individual burden due to high-cost drugs

- ✓ Respondents were asked to rate to the following eight methods for effectively using high-cost drugs with limited financial resources. They were presented with four options: "support," "somewhat support," "somewhat oppose," and "oppose" (Figure 9).
 - Only provide coverage when the drug is effective (for people who will see clear improvement (Example: Provide coverage only for those with outlooks of complete recovery))
 - Lower the cost of drugs (however, this carries the possibility of decreasing the number of new drugs made available in Japan)
 - Create a waiting list and allow people to receive treatment in some order, for example in order of severity (with the risk of longer wait times)
 - Obtain financial resources by increasing the national debt and provide treatment to everyone regardless of the cost of drugs
 - Introduce an age limit to people who are covered (for example, by making people over 75 ineligibles for coverage)
 - Make high-cost drugs that are difficult for individuals to afford ineligible for coverage through
 National Health Insurance (make them pay themselves or pay through private health insurance)
 - Increase public taxes and provide treatment to everyone regardless of the cost of drugs
 - Increase the amount people have to pay out-of-pocket after receiving care
- ✓ 72.3% of respondents selected "support" and "somewhat support" for "only provide coverage when the drug is effective," making it the most popular option. It was followed by "lower the cost of drugs" (69.1%) and "create a waiting list and allow people to receive treatment in some order, for example in order of severity" (67.3%) (Figure 9).
- ✓ Fewer respondents supported "deny public health insurance coverage" (43.9%), "increase taxes and provide universal coverage" (39.0%), and "increase out-of-pocket costs after receiving care" (35.9%) (Figure 9).

Respondents did not want an increase in individual burden due to high-cost drugs

Figure 9

Q. High-cost drugs are difficult for individuals to afford. The methods listed below are being discussed to ensure their effective use while financial resources are limited in Japan. Do you support each method? (July 2019, n=2000)



■ About 80% supported NHI coverage for high-cost drugs

Respondents were presented with the following specific example of a high-cost drug being covered by National Health Insurance. They were asked to indicate their support with one of four responses: "support," "somewhat oppose," and "oppose" (Figure 10).

In May 2019, a new drug called Kymriah became eligible for National Health Insurance (NHI) coverage. Kymriah has been found to be highly effective at treating certain diseases that do not respond to normal treatment such as leukemia. Kymriah is a high-cost drug with a retail price of ¥33,493,407, but it was deemed eligible for coverage under NHI. For example, its cost for users with annual incomes between approximately ¥3.7 million and ¥7.7 million is about ¥400,000. The difference is covered by insurance premiums and taxes.

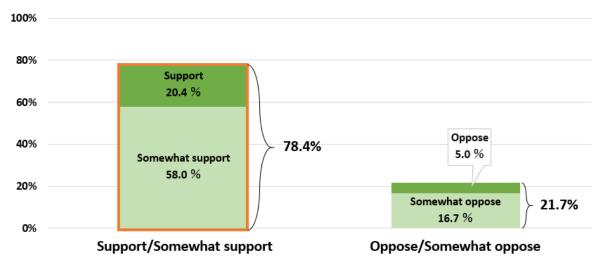
✓ When asked about covering high-cost drugs with National Health Insurance, 20.4% of respondents selected "support" and 58.0% selected "somewhat support" for a total of 78.4% of all respondents (Figure 10).

About 80% supported NHI coverage for high-cost drugs

Figure 10

Q. Do you support providing NHI coverage for high-cost drugs that are difficult for individuals to afford? To give a specific example, a new drug called Kymriah became eligible for National Health Insurance coverage in May 2019. Kymriah has been found to be highly effective at treating certain diseases that do not respond to normal treatment such as leukemia. Kymriah is a high-cost drug with a retail price of ¥33,493,407, but it was deemed eligible for coverage under NHI. For example, its cost for users with annual incomes between approximately ¥3.7 million and ¥7.7 million is about ¥400,000. The difference is covered by insurance premiums and taxes.

(July 2019, n=2000)



Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

[Commentary]

- ✓ While awareness of the problem of high-cost drugs is high in the media and among the public, it is only one issue facing the effort to balance innovation and sustainability in the healthcare system. Because drug spending accounts for less than 20% of the total cost of healthcare, discussions on maintaining an effective National Health Insurance system based on the value it provides to people receiving healthcare should not only focus on the cost of drugs. Broad discussions that include the public on improving the overall quality and efficiency of healthcare technologies and services are necessary.
- ✓ Based on public support for high-cost drug coverage through National Health Insurance, we anticipate

future public opinion surveys will cover issues related to that topic, such as the scope of insurance coverage for retail drugs that contain the same effective ingredients as prescription drugs.

(5) Antimicrobial resistance

■ About 40% did not know about antimicrobial resistance

- Respondents were asked about their awareness of microbes for which antibiotics and antimicrobials are ineffective (known as antimicrobial resistant bacterium). They were provided with three options: "I know a lot about it," "I have heard of antimicrobial resistant bacterium," "I know nothing about it" (Figure 11).
- ✓ The most common response was "I have heard of antimicrobial resistant bacterium" at 47.3% and the least common response was "I know a lot about it" at 14.2%. Meanwhile, 38.6% of respondents selected "I know nothing about it" (Figure 11).

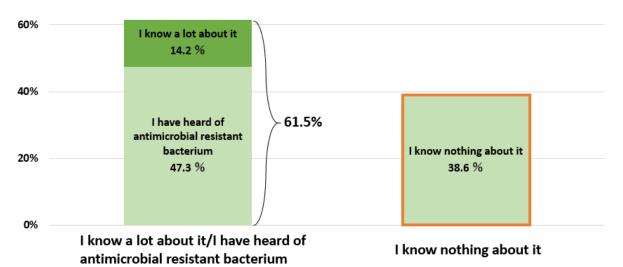
About 40% did not know about antimicrobial resistance

Figure 11

Q. Did you know that there are microbes (called antimicrobial resistant bacterium) for which antimicrobials and antibiotics are ineffective?

(July 2019, n=2000)

80%



Over half did not know that antimicrobials and antibiotics are ineffective for treating the common cold or influenza

✓ 48.8% of respondents knew that antimicrobials and antibiotics are ineffective for treating the common cold or influenza while 51.2% did not (Figure 12).

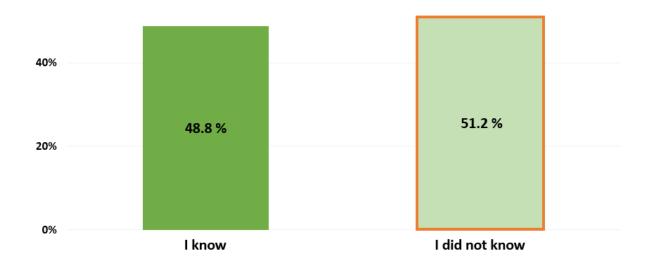
Over half did not know that antimicrobials and antibiotics are ineffective for treating the common cold or influenza

Figure 12

Q. Did you know that antimicrobials and antibiotics are ineffective for treating the common cold and influenza?

(July 2019, n=2000)

60%



About 40% said they can ask doctors or pharmacists about the necessity of antimicrobials or antibiotics when they are prescribed

- ✓ Respondents were asked if they can question doctors or pharmacists on the necessity antimicrobials and antibiotics when they are prescribed. Respondents were given three options: "I can ask," "I can ask when prompted," and "I cannot ask" (Figure 13).
- ✓ The most popular response was "I cannot ask" (42.0%). 18.1% of respondents said they can ask and 40.0% said they can ask when prompted (Figure 13).

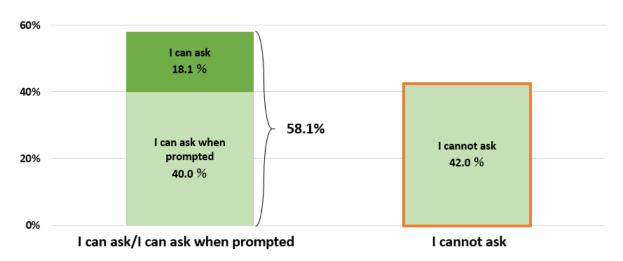
About 40% said they can ask doctors or pharmacists about the necessity of antimicrobials or antibiotics when they are prescribed

Figure 13

Q. Are you able to ask your physician or pharmacist about the necessity of antimicrobials or antibiotics when they are prescribed?

(July 2019, n=2000)

80%

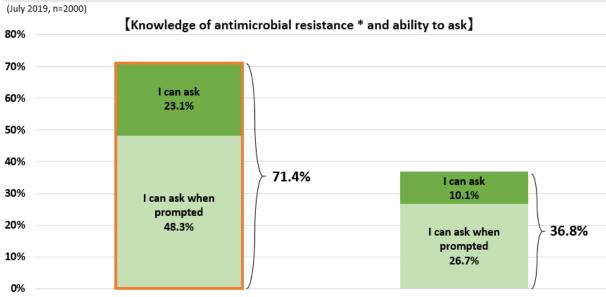


- The more knowledgeable respondents were about antimicrobial resistance, the easier it was for them to ask doctors and pharmacists about the necessity of antimicrobials and antibiotics
 - ✓ We split respondents into groups based on their response to the question, "Did you know that there are microbes (called antimicrobial resistant bacterium) for which antimicrobials and antibiotics are ineffective?" and compared their ability to ask doctors or pharmacists about the necessity of antimicrobials and antibiotics when they are prescribed.
 - ✓ Of the respondents that had knowledge of antimicrobial-resistant bacterium, 23.1% responded "I can ask" and 43.8% answered "I can ask when prompted." Fewer respondents among those who did not know about antimicrobial-resistant bacterium selected "I can ask" (10.1%) and "I can ask when prompted" (26.7%) (Figure 14).

The knowledgeable respondents are about antimicrobial resistance, the easier it is for them to ask doctors and pharmacists about the necessity of antimicrobials and antibiotics

Figure 14

Q. Are you able to question your physician or pharmacist on the necessity of antimicrobials or antibiotics when they are prescribed?



*In response to the question, "Did you know that there are microbes (called antimicrobial-resistant bacteria) for which antimicrobials and antibiotics are ineffective?"

Knew about antimicrobial resistance

Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

Did not know about antimicrobial resistance

On the topic of antimicrobial-resistant bacterium, respondents were most interested in the appropriate use of antimicrobials

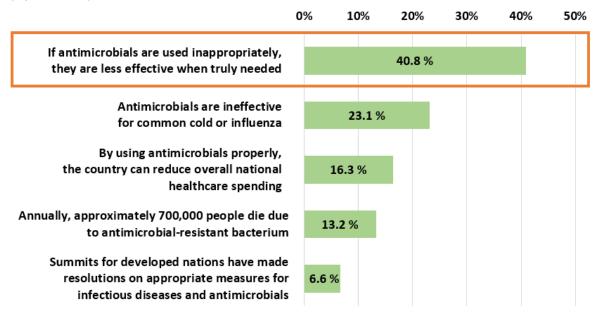
- ✓ Respondents were informed that the number of antimicrobial-resistant bacterium is increasing and that this is becoming a significant problem in Japan and abroad. They were then asked to select what information about antimicrobial-resistant bacterium interested them most (Figure 15).
- The most popular response was "if antimicrobials are used inappropriately, they are less effective when truly needed" (40.8%), followed by "antimicrobials are ineffective for common cold or influenza" (23.1%), "by using antimicrobials properly, the country can reduce overall national healthcare spending" (16.3%), and "annually, approximately 700,000 people die due to antimicrobial-resistant bacterium" (13.2%) (Figure 15).

On the topic of antimicrobial-resistant bacterium, respondents were most interested in the appropriate use of antimicrobials

Figure 15

Q. The number of antimicrobial-resistant bacterium that cannot be treated with antimicrobials and antibiotics is increasing. That is becoming a significant problem in Japan and abroad. Please select the following fact that makes you the most concerned.

(July 2019, n=2000)



■ 90% have not seen the government's AMR Action Plan educational material

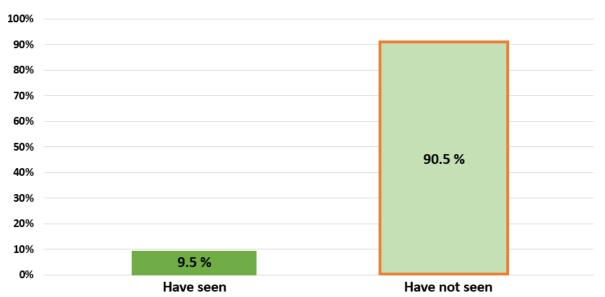
✓ When asked if they had ever seen educational materials published as part of the AMR Action Plan adopted by the Japanese government in 2016, 90.5% of respondents said they had not (Figure 16).

90% have not seen the government's AMR Action Plan educational material

Figure 16

Q. Due to the misuse of antimicrobials and antibiotics and similar reasons, there are many cases in Japan and abroad of antimicrobial resistance (AMR), in which antimicrobials and antibiotics become ineffective. In 2016, the Japanese government formulated the AMR Action Plan to advance the effort against AMR. One of the items in that plan was developing public awareness. Have you ever seen AMR Action Plan materials for raising awareness?

(July 2019, n=2000)



Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

[Commentary]

- ✓ Based on the fact that antimicrobial-resistant strains cause approximately 700,000 deaths per year worldwide, the WHO adopted the Global Action Plan for AMR in May 2015. Countermeasures in Japan are advancing after the enactment of the National Action Plan on AMR in April 2016.
- ✓ As part of that effort, HGPI has united with related academic societies and citizen groups to form AMR Alliance Japan, which has created policy proposals to promote AMR countermeasures.
- ✓ On the topic of future activities and policy promotion, the survey showed that the public is not well-informed about AMR. The more knowledge respondents had about AMR, the easier it was for them to question doctors and pharmacists about the necessity of antimicrobials and antibiotics. For that reason, methods for effectively publicizing AMR information and for developing public recognition of this issue must be examined to enable more people to make accurate decisions on antimicrobials and antibiotics.

(6) Vaccines

About 70% knew that vaccines use the immune mechanism

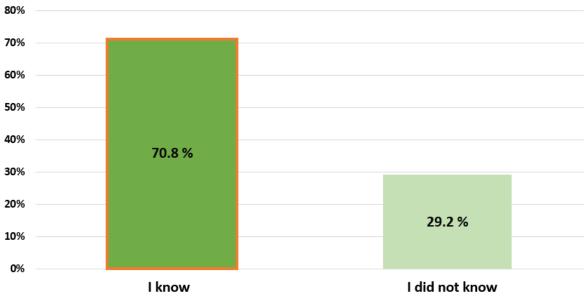
Respondents were asked if they knew that vaccines work by using the immune mechanism to attack pathogens that invade the body from outside. 70.2% knew while 29.2% did not (Figure 17).

About 70% knew that vaccines use the immune mechanism

Figure 17

Q. Do you know the following facts about vaccines?

• Vaccines work by using the immune mechanism to attack pathogens* that invade the body from outside. (July 2019, n=2000)



*Microbes, etc. that cause disease

■ About 69% of respondents knew that all vaccines, such as the influenza vaccine, can have side effects

✓ 69.4% of respondents knew that all vaccines have side effects compared to 30.7% who did not (Figure 18).

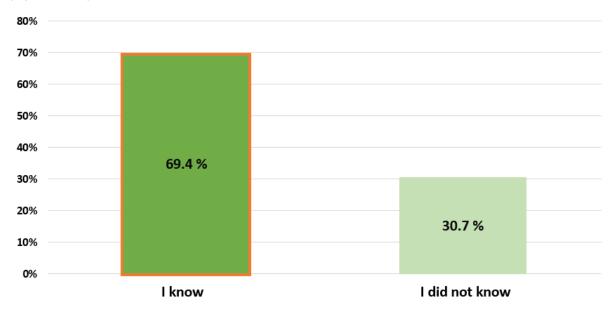
About 69% of respondents knew that all vaccines, such as the influenza vaccine, can have side effects

Figure 18

Q. Do you know the following facts about vaccines?

· All vaccines, such as the influenza vaccine, have side effects*.

(July 2019, n=2000)



^{*}Refers to effects of drugs or vaccines other than the ones they are taken for (such as when a cold remedy causes drowsiness or a vaccination causes someone to feel unwell)

■ About 68% knew that immunity gained through immunizations can prevent the spread of infectious diseases in a group even if someone in the group gets infected

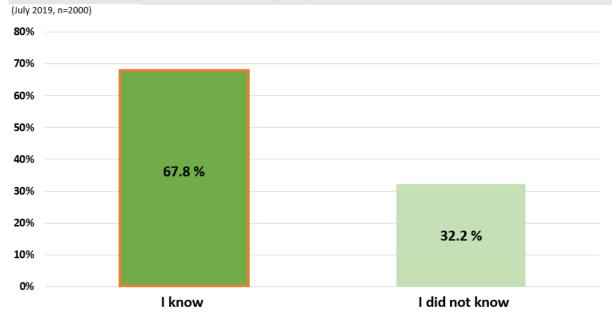
✓ 67.8% of respondents knew that the spread of an infectious disease in a group can be prevented if many people in that group are vaccinated and gain immunity (called "herd immunity") while 32.2% did not (Figure 19).

About 68% knew that immunity gained through immunizations can prevent the spread of infectious diseases in a group even if someone in the group gets infected

Figure 19

Q. Do you know the following facts about vaccines?

• If many people gain immunity to an infectious disease through immunization, it is possible to prevent that disease from spreading even if someone in the group gets infected.



- About 70% of respondents did not know that HPV vaccine is effective at preventing HPV infection and the conditions that lead to cervical cancer.
 - ✓ 32.0% of respondents knew about the Human Papillomavirus (HPV) vaccine's ability to prevent HPV infection and the conditions that lead to cervical cancer while 68.1% did not (Figure 20).

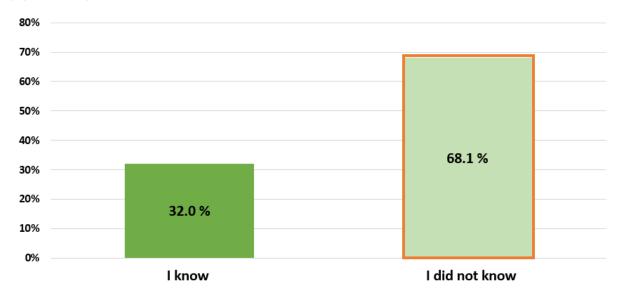
About 70% of respondents did not know that HPV vaccine is effective at preventing HPV infection and the conditions that lead to cervical cancer

Figure 20

Q. Do you know the following facts about vaccines?

• Human Papillomavirus (HPV) vaccine is effective at preventing HPV infection and the conditions that lead to cervical cancer.

(July 2019, n=2000)



^{*}A virus that can cause various types of cancer, particularly cervical cancer

■ About 68% of respondents knew that rubella infection during early pregnancy can increase the child's risk of being born with congenital rubella syndrome

✓ 67.7% of respondents knew that the risk of a child being born with congenital rubella syndrome is greater if their mother does not possess adequate rubella immunity and is infected by rubella during early pregnancy. 32.4% of respondents were unaware of this fact (Figure 21).

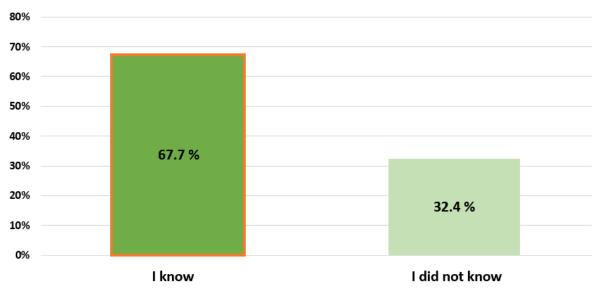
About 68% of respondents knew that rubella infection during early pregnancy can increase the child's risk of being born with congenital rubella syndrome

Figure 21

Q. Do you know the following facts about vaccines?

• If a woman does not possess adequate rubella immunity and is infected by rubella during early pregnancy, it increases the risk that her child is born with congenital rubella syndrome.

(July 2019, n=2000)



^{*}An illness that can result in congenital abnormalities (mainly cataracts, congenital heart disease, and hearing impairment) caused by prenatal infection with rubella virus

■ About 62% knew that rubella is currently spreading in Japan because there was a period when vaccination for it was incomplete

✓ 61.9% of respondents knew that rubella is currently spreading in Japan because there was a period when vaccination for it was incomplete. 38.2% of respondents were unaware (Figure 22).

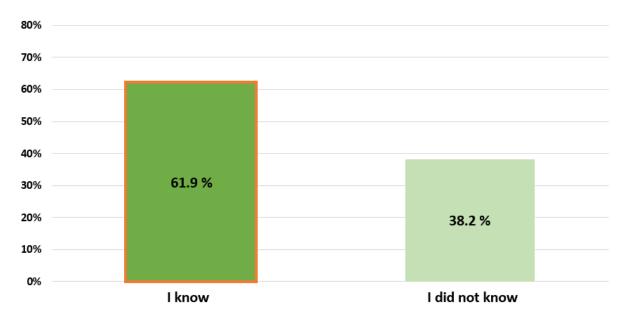
About 62% knew that rubella is currently spreading in Japan because there was a period when vaccination for it was incomplete

Figure 22

Q. Do you know the following facts about vaccines?

• Rubella is spreading in Japan because there was a period when rubella vaccination was incomplete.

(July 2019, n=2000)



About 30% would get vaccinated for rubella if their local government provided vaccination vouchers, while about 27% want it included in yearly health examinations provided by employers

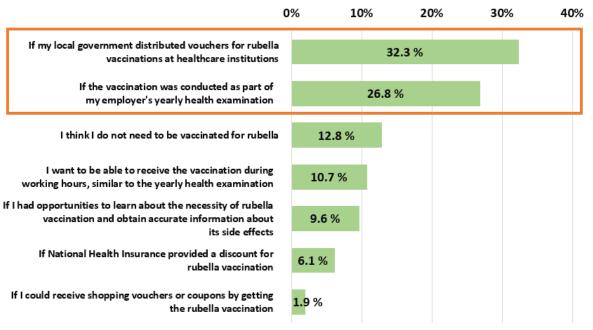
- Respondents were asked what policy or type of support would make them want to get vaccinated for rubella if they were not already vaccinated. The most popular response was "if my local government distributed vouchers for rubella vaccinations at healthcare institutions" (32.2%) followed by "if the vaccination was conducted as part of my employer's yearly health examination" (26.8%) (Figure 23).
- ✓ 10.7% of respondents selected "I want to be able to go for the vaccination during working hours, like the yearly health examination," 9.6% replied "if I had opportunities to learn about the necessity of rubella vaccination and obtain accurate information about its side effects," 6.1% selected "if National Health Insurance provided a discount for rubella vaccination," and 1.9% answered "if I could receive shopping vouchers or coupons by getting the rubella vaccination" (Figure 23).
- ✓ On the other hand, 12.8% of respondents did not think they needed to be vaccinated for rubella.

About 30% would get vaccinated for rubella if their local government provided vaccination vouchers, while about 27% want it included in yearly health examinations provided by employers

Figure 23

Q. Assuming you were not already vaccinated for rubella, what policy or type of support would make you want to get vaccinated? Please select one of the following.

(July 2019, n=2000)



Source: "2019 Survey on Healthcare in Japan" (Health and Global Policy Institute, 2019)

[Commentary]

About 70% of the public was aware that vaccines work by using the immune mechanism, that vaccines have side effects, and about herd immunity. On the other hand, respondents knew very little about HPV vaccination, which can lower cervical cancer rates. Although the government has halted the active promotion of HPV vaccination, the public is unaware of HPV vaccination and its effects and more and more people are unaware that the vaccine even exists. This creates the risk that the number of people in the community with HPV will increase. Knowledge about vaccines based on scientific evidence must be provided to the public at various places including in schools.

✓ While the MHLW and local governments have been proactively publicizing information about the rubella vaccine, some still do not believe they need to be vaccinated for rubella. This shows that further efforts to develop public recognition of the necessity of rubella vaccination are necessary. Incentives should be provided to encourage the public to get the vaccine, such as vaccination vouchers and vaccinating during annual health examinations.

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