HGPI Health and Global Policy Institute

Immunization and Vaccination Policy Promotion Project

A Life Course Approach to Immunization and Vaccination Policy – Five Perspectives and Recommended Actions

Health and Global Policy Institute（HGPI）

Perspective 1 – Immunization and vaccination policies based on a life course approach should be advanced.

1. Eligibility requirements for routine vaccinations should be expanded to cover people with certain underlying medical conditions and risk factors so high-risk individuals can receive the benefits of vaccination.
2. Special measures should be taken that expand catch-up vaccinations among unvaccinated people or people who have lived abroad and that reduce the cost burden on people who receive catch-up vaccinations.
3. To improve access, more facilities should be allowed to provide vaccinations.
4. Steps to offset the cost burden of vaccinations should be considered. These may include establishing progressive out-of-pocket payment rates by income bracket, granting public health insurance coverage, or revising the medical service fee schedule.
5. Methods of managing individual vaccination records should be reviewed, individual vaccination records over the life course should be made viewable, and those records should be sharable among municipalities.

Perspective 2 – Dissemination, awareness-building, and communication strategies that target healthcare professionals and the public should be created.

1. Departments responsible for science and risk communication should be established, and efforts should be made to promote the dissemination of and awareness-building for immunizations and vaccinations by providing appropriate information at appropriate times.
2. Training systems should be introduced and best practices should be shared with the goal of improving awareness and literacy among healthcare professionals.

Perspective 3 – To achieve science-based policy decision making and evaluation, steps should be taken to promote the creation of a system that analyzes and shares the epidemiological effects of vaccinations by linking vaccination practices with information systems that track outbreaks of targeted diseases.

1. The systems for gathering information and managing vaccination ledgers should be revised and a joint platform that is useful to healthcare professionals and municipalities, who are the parties responsible for entering registry information, should be built.
2. An information registration system for accurately recording individual vaccination histories and that makes effective use of medical IDs and other such tools should be built.
3. Steps should be taken to make information on adverse events viewable by revising the information utilization system for evaluating vaccinate effectiveness and safety.
4. A unified evaluation system for the collection and analysis of adverse event information should be built.

Perspective 4 – Steps should be taken to create a system that enables multi-stakeholders to hold continuous discussions on vaccine policy.

1. The public and specialist organizations should be invited to participate in efforts to foster social consensus.
2. Protective measures should be developed to guard against biased, alarmist disinformation or medical misinformation.

Perspective 5 – Investments should be accelerated in immunization policies that address both non-emergency and emergency situations and anticipate future vaccine demand.

1. Special approval processes that reflect the significance of vaccination during public health crises must be established. A system that remains operational during non-emergencies must be built for distributing vaccines, selecting targeted groups for vaccination, and assigning vaccination priorities.
2. A domestic R&D and provision system for vaccines must be established.

Perspective 3 – To achieve science-based policy decision making and evaluation, steps should be taken to promote the creation of a system that analyzes and shares the epidemiological effects of vaccinations by linking vaccination practices with information systems that track outbreaks of targeted diseases.

Since vaccinated people cannot say when an infection has been prevented by a vaccine they received, the effects of vaccines must be evaluated epidemiologically. One measure for accurately tracking and analyzing information on infectious disease outbreaks outlined in the Act on the Prevention of Infectious Diseases is the National Epidemiological Surveillance of Infectious Diseases (NESID) program. However, a sufficient system which allows results from NESID to be utilized promptly at the national level has yet to be created. Therefore, the Government should expand and link the national registry (where information on vaccinations is registered) and the surveillance system (a disease prevention system for accurately and continuously identifying and tracking outbreaks of diseases covered by vaccinations). This will result in a system that can readily evaluate epidemiological data on vaccination practices and disease outbreaks. Rapidly provided data obtained with this system to the public and medical personnel will also be important. Digitizing and centralizing vaccination records will also enable the vaccination surveillance system to accurately grasp information on vaccinated people. To improve vaccine reliability, it will also be essential to regularly monitor vaccination effectiveness. This can be achieved by expanding the functions of the infectious disease surveillance system and linking that system to the immunization system. Furthermore, to utilize data, a cross-organizational, collaborative system that links vaccination and infectious disease data should be established. To achieve these goals, the following four initiatives will be necessary.

1. The systems for gathering information and managing vaccination ledgers should be revised and a joint platform that is useful to healthcare professionals and municipalities, who are the parties responsible for entering registry information, should be built.

As the parties responsible for implementing vaccination programs, local governments are required to manage and maintain vaccination ledgers for five years. However, there are no systems to coordinate the sharing of information among local governments or to ensure data consistency. Public health centers are responsible for compiling data from local governments and providing it to municipalities, including special wards, but there is no common foundation to serve as a platform for information sharing. This means it is difficult for local governments to provide real-time reports to public health centers. Information management systems need to be digitalized, but there are also challenges to improving efficiency for the people who enter information into the system at healthcare institutions and local governments. If a platform can be built, it will become possible to identify unvaccinated people and track vaccination histories when people eligible for vaccinations move from one municipality to another. Therefore, a system that can be linked to initiatives such as the information provision and disclosure system (the My Number Portal) should be designed while reflecting opinions from healthcare institutions and local governments, the necessary investments should be made, a budget for educating healthcare professionals and local governments should be secured, and the Immunization Act and related laws obligating local governments to manage vaccination programs should be revised.

2. An information registration system for accurately recording individual vaccination histories and that makes effective use of medical IDs and other such tools should be built.

It is essential that an information system is created which can track individual vaccination histories, take various life events such as moves and name changes into account, and serve as the foundation for promoting immunization policies based on the life course. To promote said policies, it is desirable a system is created in which individual vaccination histories are recorded through a common information sharing platform such as the My Number Portal where people including those who move to different municipalities can be tracked by the parties responsible for implementing vaccination programs, namely local governments and healthcare professionals. Anticipation is also high for the use of personal identification information that is linked to the social security and tax systems such as My Number to build a national registry. The Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures (the "My Number Act"), the Immunization Act, and other applicable laws should be revised so a system that enables the use of the information contained in that national registry, including personal identification information, can be developed for surveillance and similar purposes.

3. Steps should be taken to make information on adverse events viewable by revising the information utilization system for evaluating vaccinate effectiveness and safety.

It is important to build a registry and use registry information effectively so that vaccine effectiveness can undergo scientific evaluation. Three elements must be kept in mind to determine vaccine effectiveness: the vaccinated person, the infectious disease, and reactions post-vaccination. Epidemiological information such as immunity acquisition among vaccinated individuals and infectious disease prevalence is needed to determine vaccine effectiveness, so primary prevention effects must be made visible. Regarding adverse events, the FY2012 revision of the Immunization Act requires the physician who administered the vaccine to submit a report through the adverse event reporting system when targeted symptoms are observed. These reports are used to collect information on adverse events and symptoms suspected to be caused by vaccine side effects that occur after vaccination. Deliberation councils then create individual measures for each type of adverse event and other post-vaccination event. However, it is difficult to say that those measures have a uniform scientific basis. To relieve any concerns of the public, it is desirable that a Vaccine Adverse Event Reporting System which can scientifically evaluate vaccine effectiveness is built and operated in a flexible manner.

4. A unified evaluation system for the collection and analysis of adverse event information should be built.

The main drawbacks to the current surveillance system are the spontaneous nature of reporting and its reliance on passive surveillance, which requires healthcare providers to take initiative when reporting adverse events or symptoms suspected to be adverse reactions. It will be difficult to assess vaccine safety and effectiveness in a rapid and objective manner using only the existing passive surveillance systems. With the current system, there are times when discussions must be held in a manner that can be influenced by speculation or reporting bias, which occurs when certain bits of information are revealed or suppressed. Accurately evaluating adverse events requires information on unvaccinated people, and health authorities need active surveillance to access that information. Therefore, the creation of a system that provides active surveillance and is designed with the intent to enable transparent discussions should be considered. This is likely to require revisions to the Immunization Act that make it easier to access information, such as the total number of adverse reactions, or to conduct comparison between vaccinated and unvaccinated populations.


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