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The Study on Policy Process after the Incidents of New Epidemic Diseases Referred to New Influenza, Super Bacteria*

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신종플루(new influenza 또는 swine flu)와 다제내성균(superbacteria, extreme drug resistance) 같은 바이러스에 의한 전염병의 확산은 전 국민의 생활에 직접적으로 영향을 줄 수 있다. 그리고, 국가 경제에도 큰 타격을 입힐 수 있다. Birkland의 사건중심 정책변동 모형(Model of Event-Related Policy Change)을 분석 틀로 하여 정책과정에서의 정책변동 패턴 분석을 시도하였다. 본 연구는 국내 신종재난 사건 이후 정책변동의 일반적이고 종합적인 패턴을 찾고자 한다. 이론적 근거가 되는 Birkland 모형을 통해 신종재난 같은 정책 취약성을 띠는 사건들로부터 확산을 예방하고 피해를 줄이기 위한 정책채택과 정책학습에 대한 정책적 함의를 찾고자 한다. 왜냐하면 이러한 신종재난의 특성상 정책결정자들의 위협에 직면하게 될 초점사건으로 다루어지기 때문이다. 또한 이러한 신종재난 이후의 이슈형성과 정책의제화 되는 관점에서 정책변동이 어떻게 이루어지는지를 살펴보고자 한다. 한국의 사례 중 신종 재난사건과 관련된 신종플루 확산, 다제내성균 발생 등의 초점사건을 중심으로 사전적 조사 성격의 탐색적 사례 연구로 접근하였다.

Keywords: 신종플루, 다제내성균, 정책과정, 사건중심 정책변동 모형

Ⅰ. Introduction

Focusing events such as major disasters can have bad effects on our society because they can instantly change or collapse the whole structure of our life. Not only are governments required to cope with these events, but preventing such disasters is one of the utmost duties for civic leadership. A focusing event could be used as the key concept for interest groups, government leaders, policy entrepreneurs, and the public to perceive new problems that arise, to recognize potential affairs which existent but are not of concern at present, or to understand why policies

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sometimes fail. Properly used, focusing events enable people to find the solutions(Birkland, 2006, 2009). Birkland(2006: 7) contends that all policies are political, but especially strategic policies, which are of relatively less concern and are less developed than others, are even more affected by politics. Thus, the ultimate purpose of disaster management policy is to use political power to ameliorate risk. The main stream of the social science field refers to focusing events and windows of opportunity as ways to implement significant policy change(Nohrstedt, 2008: 258). Generally speaking, it is not an entirely new assertion that exogenous shock might be helpful to stop from being stuck in a rut and to lead to crucial policy change. Since the criterion for whether a specific event can be qualified as the disaster or crisis is not so clear and defined, the possible explanation for political diversity caused by a disaster or shock and for why some stimulations bring about the significant result of policy change and others don't, has been limited.

Within the scope of classifiable focusing events, new epidemic diseases can be a policy agenda which is relevant to the degree of importance and impact of incidents. From this point of view, this article will focus on exploratory case studies namely diffusion of new influenza and emergence of super bacteria. These events are regarded as the representative cases for focusing event in Korea. This case study has strong implication for future research in that field. This article tries to analyze the pattern of policy change using the Model of Event-Related Policy Change framework designed by Birkland(2006, 2009). This effort is aimed to figure out the general, comprehensive pattern after new national disaster incidents. Also, in order to prevent the spread of new epidemic diseases and lessen the damage in the vulnerable policy field, this paper seeks to examine the implications about policy adoption and policy learning through Birkland's model.

Ⅱ. Literature review

1. Focusing events as policy and institution issues

Focusing events of crisis and disaster bring up challenges for the policy process, actors and policy formulating organizations and institutions(Handmer & Dovers, 2007: 43) since these events can give rise to building or collapsing one's political career, jolting the class of bureaucracy, and deciding the fate of organizations(Boin, t'Hart, Stern, and Sundelius, 2005: pix). Meanwhile, Handmer and Dovers(2007: 44-45) defined disasters as a Gordian knot. It is widely admitted that

an important opportunity for policy change or policy reflection comes just after specific severe disasters causing a great loss of lives, economy, and environment. This is known as an unpredictable policy window(Handmer &Dovers, 2007: 133). Also, this opportunity is legitimized by considering the validity for action and preparation, instantly arising public outrage, or combining both of them. This kind of policy learning opportunity conveys not only positive phenomenon but also potential risk. Because disaster is inherently unforeseeable and political, it is easy to take garbage can model approach to disaster response unless political leaders build in sophisticated information that considers the lapse of time. In this situation, a long-term strategy for lessening structure vulnerability can be useless without a well-constructed response system. For these reasons, policy actors suggest some applicable alternatives that provide for more predictable policy windows and opportunity windows for informing policy learning. The opportunity covers voting procedures, shifting government policy, budget-cycling, devolving the check period of policy program, and some seasonal starting points such as dry season for forest fire, cyclone season, flooding and seasonal epidemic disease. Nevertheless, a focusing event is meaningful tool for creating a policy window in an unpredictable situation and to mitigate damage in future emergencies(Handmer & Dovers, 2007: 133-134).

2. Possibility of policy change after focusing event: issue formation and agenda setting

Birkland(2006) suggests that we have to understand policy change as a learning process because policy change can precede actual events in a field that is not vulnerable to disaster. Generally, after a calamity, the effort to learn how to prevent disaster will accelerate. Moreover, the frequency of these catastrophic occurrences is rare even though the impact we feel is huge. Because of this property of disasters, learning from experience in calamities makes policy makers feel the need to do something. Adding to this, if their active step is strong relevant to political benefit, they are encouraged to find some resolution for preventing disaster(Nohrstedt, 2008). Since policy change sometimes occurs before incidents, some could contend that a focusing event does not automatically lead to policy change. However, most of the time a focusing event becomes a policy agenda, and so policy change is more clear and visible.[1] Before tuning in to policy agenda,

1) According to Baumgartner and Jones(1993), a focusing event can draw interest in specific cases but most of them are negative. As interest is concentrated on policy supporters, it arouse suspicious questions and even in some cases, a focusing event will lose control of formulating 'policy image' by emerging actors of policy monopoly. Also, the advocacy coalition framework by Sabatier(1993) mentions that the policy community organization in most policy sectors is not compromised of dozens of groups, but consist of roughly two to four advocacy coalitions organized by shared belief.

a focusing event inherently is regarded as 'policy without a public' because most fields relevant to a focusing event require special technologies and skills(Birkland, 2006: 161). Despite its distinct characteristics, a focusing event without the engineer or technical expert group might also contribute to policy change. In this case, we should be careful to ascribe policy change or policy failure to one certain reason(Birkland, 2006: 160). Through the formulating issue of disaster and risk, policy makers are burdened by policy failure which is revealed through 'threatening stiff argument' and then this issue goes into the stage of agenda setting to resolve it. Agenda setting cannot guarantee to instantly produce policy change and it is also necessary to discuss whether the policy process is indeed positive. However, this research just focuses on how policy change begins in the perspective of the issue formation and agenda setting when policy makers encounter a focusing event.

3. Main propositions of Birkland's policy change model

A focusing event can be defined as a natural or human disaster which abruptly brings serious damage to a huge number of people (Birkland 1997, 1998). After these big incidents, the press or media will add emphasis by frequently broadcasting reports. This focused attention creates 'windows of opportunity' to make the event part of national agenda which should be discussed. Normally, the government focuses the policy agenda on response or restoration rather than on precaution or provision in case of disaster. In fact, considering the expense of policy design, precaution policy requires government to spend more time contemplating the political, social, and economic factors.

Meanwhile, we should investigate if focusing events are really crucial element for policy change and then we should also look at how policy change proceeds after the incidents. Many prior researchers conducted studies in stable condition with balanced models, so they offers only limited explanations and cannot account for the dynamic process of policy change. In other words, a focusing event is treated as only one of exogenous factors, just a single event, which simply affects agenda setting and policy process. Unlike former literature reviews, Birkland suggests that a policy change model which is designed to explain how a dynamically focusing event effects policy change and policy plan. His policy change model presents the following propositions.

Proposition 1. Prior to the occurrence of a focusing event, there could be similar cases in the perspective of policy failure and absence of learning so that the argument for those incidents would be in a cycle.

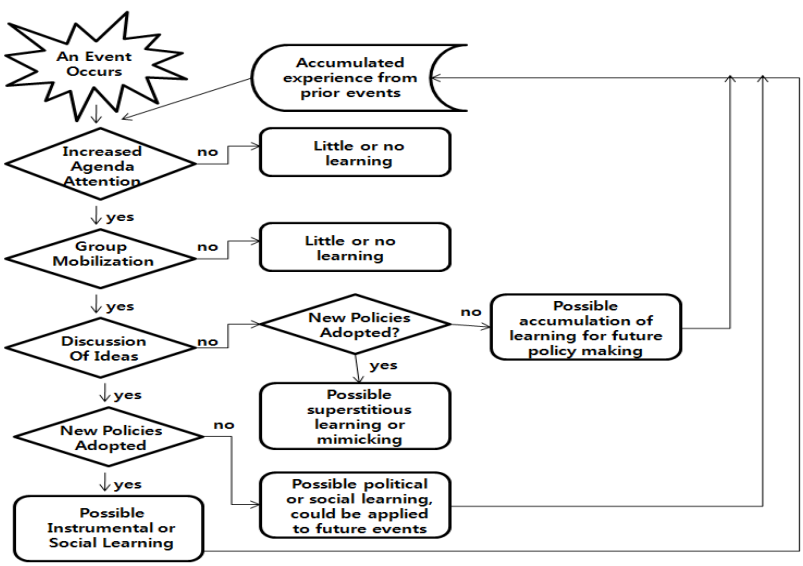
Proposition 2. When a focusing event takes place, it gets high interest from public. This implies that policy change will probably happen. That is to say, the chances of policy change might get higher.

Proposition 3. After a focusing event, the politicized agenda which would interact with other policies will influence the actors in the policy sub-system.

Proposition 4. There is interrelationship between learning and strategy of coalition among actors. Privileged groups such as policy makers and ruling parties, according to the impact and potential influence of the focusing event, sometimes regards minor groups, namely civil society or opposition parties, as a menacing existence. Each will set up their strategy for self-interest with learning imitation, learning suspension, and affirmative action

Proposition 5. Policy outputs can fluctuate according to the degree of strategy and result of learning. It could cause both big and small change. However, if a policy change does not occur or fails to happen, it is possible for a focusing event to expand the range of the calamity or to reproduce a disaster.

Proposition 6. As time goes by, policy change could wane because a time gap between accidents often makes participants in the policy process forget what they have learned from the events.



<Figure 1> Policy change analysis model of Birkand related to the event

※ Source: Birkland, 2006. 2009.

4. Logic of Event-Related Policy Change by Birkland

In his study, Birkland divided the focusing event device into two parts to clarify its concept and to make the analysis clear. When an event occurs, a few stages appeared. In the first stage, the news media shows the immediate responses to attributes like levels of damages or the number of casualties. The second stage involves both the political constituents associated with that event and the long-term responses by the active citizens who can affect to policy makings. At this stage, there are several salient variables; the volume of news reports, the extent of how the elites or groups show their movement and attention and how they mobilize their power, and the scarcity and scale of that event.

Birkland argues that lots of activities happen for 2 years after that event. While media attention rises intensively in the first few weeks following an event, as we see in the case review, focused institutional responses appear about 3-6 months after events occur. Agenda-setting is not an exclusive area of government; public preference makes the agenda in a very decisive way. It is specified as a combination of the levels of public interest and the systematic evidences which relate to public mobilization. These evidences appear as forms of media description.

On the other hand, institutions such as legislature cannot respond as fast as new media since there are some constraints: norms, processes and patterns of common behavior. Although the media usually forces the legislature to deal with current issues, it takes long time for it to investigate the issues because of increasing information(Birkland, 1997: 30). After this decisive event, politic activities raise transformation-friendly forces by responding to it directly. Testimony is the most common skill that interest groups normally use as a lobbying activity(Davidson & Oleszek, 1994: 298). Public hearings are a main indicator of an institutional agenda, since it is very popular to group competition and is a way to document consistently and openly the legislative proceedings(Bikrland, 1997: 34).

5. Nationwide spread of new epidemic diseases

A new virus[2]combines the A virus which originate from pigs infected by the avian influenza (AI) and the influenza virus in people who have a subtype influenza composed of both

2) H plays an important role on attaching virus to somatic cell, and has 15 different subtypes. On the other hand, N plays a role of cutting infections off from virus in order to infect another somatic cell by evading infections, and is divided into 9 subtypes(NAVER medical information).

hemagglutinin(HA, surface antigen of virus) and neuraminidase(NA). Because this A influenza virus changes to a variety of subtype influenza, they are likely to occur as forms of H1N1 or H3N2 or so. In the year of 2002, British scientists found the key to solving tolerance problems of antibiotics by completing a genetic map of streptomyces coelicolor and in the same year researchers in America also made progress by discovering key genes of super bacteria. However, antibiotic resistant strains could survive or make mutations, and so new forms of super bacteria are also likely appear. To prevent this situation, the Ministry of Health and Welfare is discussing ways to supervise hospitals more strictly and make its own task force(TF) team to reflect opinions of the medical community and the patients.[3)]

III. Research design

The study of focusing events can be described well through qualitative studies. This event study has to be historical and to trace panel activities following occurrences of each event. This process includes the arguments and evidences of policy failure and the use of this event as a ground of change. In this sense, it is worthwhile to analyze the process of regulation enactment and changes(Birkland, 1997: 148). In this paper, the case study is primarily focused on issue formation by the press or media and on policy making in legislatures, as it is documented consistently in the National Assembly.

We conducted a documentary survey to define what policy change really is and to organize its evidence. Specifically, we collected data concerning the National Assembly On-Line Information retrieval System(NOLIS), which includes testimonies, reports, bills, parliamentary reports, and enactment/amendment, using the search engines of National Assembly and the Legislative Office. We also used widely released media reports that increased public agenda awareness; mainly new reports of disasters in national and local areas. We collected data on the policy change model by referring to Assembly reports, hearing materials, and bill records from NOLIS and websites including the Korea Press Foundation. We would like to construct the theoretical and institutional foundation by understanding the type and definition of policy change. This is entirely done by

3) Jun Byung-yul, disease control policy maker, said, "Budget on the dispersion of resistant bacteria increased over 10 times from 395,000 thousand won to 4,390,000 thousand won. We are going to expand protective system and by organizing TF team in six months to discuss about the way of controlling infection and of publicizing to the citizens(Yakup newspaper, 2011-02-28).

searching the diffusion of influenza A in 2009 and the occurrence of super bacteria in 2010, and by examining policy change in terms of agenda setting. In describing the case, we tried to maintain accuracy and objectivity while considering historical and academic value. And so, this paper is primarily focused on the facts, not our subjective judgment or interpretation, and we tried our best to reflect diverse points of view in our analysis and explanation.

Case 1. Event analysis of Influenza A subspecies or subtype[4)]

The case of new influenza or influenza A, which is sometimes called swine flu,[5)] first appeared in May 2009 and spread rapidly beginning in August of that year.[6)] The department of inoculation control under Korea Centers for Disease Control and Prevention, the agency which belongs to the Ministry of Health and Welfare, reported that the cases of fourth group of epidemics was approximately 100 individuals by 2008 but increased dramatically up to 706,985 due to the influenza A (H1N1). The existing influenza virus HA had species-specificity, and so it did not spread to human.[7)] But the new influenza virus makes genetic recombination of human and animal, which causes double infection between individuals.[8)]

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4) Influenza A virus can be shown as many subtypes, it can be marked as H1N1, H3N2 or so with its type. Influenza has a unique feature called antigenic variation, which happens every year, and through this variation flu can be epidemic constantly. The antigenic variations have 2 antigenic shifts and these regard to HA and NA variation on the surface of virus. HA is especially important, because whether there is antibody of HA determines defense against infections. antigen mutation can only be in Influenza A, and it means that the HA or NA among the existing virus genes is transformed. (http://www.snuh.org/). - subspecies or subtype of virus A: H1N1 · H1N2 · H2N2 · H2N3 · H3N1 · H3N2 · H3N8 · H5N1 · H5N2 · H5N3 · H5N8 · H5N9 · H7N1 · H7N2 · H7N3 · H7N4 · H7N7 · H9N2 · H10N7

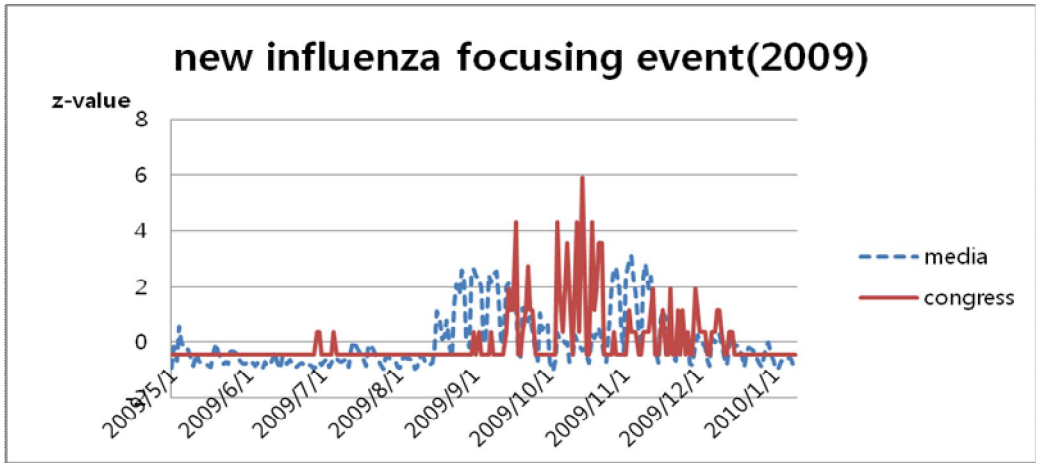
5) There are 3 types of influenza; type A, type B, type C. Type A uses mammals and birds as its host. Most of them are non-pathogenic, but some viruses, which are combinations of H1, H2, H3 and N1, N2, can infect human (http://www.who.int/mediacentre/factsheets/avian_influenza/en/). Type B uses only humans and seals as its host bodies. As subspecies or subtype of virus, it barely develops mutations (Osterhaus, A, D,. Rimmelzwaan, G,F,. Martina, B,E,. Bestebroer, T,M,. & Fouchier, R,A,.(2000)). Type C is known only to use humans and pigs as its host bodies. Its mutation change is at relatively slow, so it is not pandemic and the vaccine hasn't been developed yet (http://www.ictvdb.org/).

6) http://www.sotongsinmun.com/bbs/board.php?bo_table=news-all_01&wr_id=206&page=3&sca=%C6%AF%BA%B0%B1%E2%C8%B9&page=3

7) Influenza A was detected on nasopharyngeal suction specimens of a 10 year old infant, who visited hospital for fever, cough and nausea, in San Diego at March 2009 (NAVER medical information).

8) Wikipedia.

The new influenza was a big issue and its countermeasures were discussed. After the first diagnosis was confirmed, the press covered it 118 times on May 4th, and 63 times on May 5th. At the end of August, it was covered 243 times on September 9th, and 251 times on September 10th. Since the crisis alert was up to profound level, the press covered it 246 times on November 3th and 277 times on November 4th. The countermeasure of foot-and-mouth disease was also discussed (See Figure 2). All totaled in this case, there were 17,034 press reports. On average, it was referred 66.80 times at media and 0.54 times at National Assembly during 255 days.[9]



<Figure 2> Reports and reference on new influenza at media and National Assembly

In conclusion, after its first outbreak on May 2009, there were massive media reports and discussions of involved group such as assembly and government. First, the media pointed out systematic problems of countermeasures including the administration's slow response. Then, policy entrepreneurs proposed resolutions that would interrupt the diffusion of new influenza such as free of charge vaccine, reserves of anti-virus, expanding of base hospitals and further response plans such as strengthening health education, tightening quarantine and immigration controls, promoting a method of precaution, and increasing budget support for vaccine production. In spite of these various discussions and ideas, policy change never occurred. Simply, organizations, which include

(http://ko.wikipedia.org/wiki/2009%EB%85%84_%EC%9D%B8%ED%94%8C%EB%A3%A8%EC%97%94%EC%9E%90_%EB%B2%94%EC%9C%A0%ED%96%89)

9) Descriptive statistics related to new influenza focusing event of media and assembly in 2009.

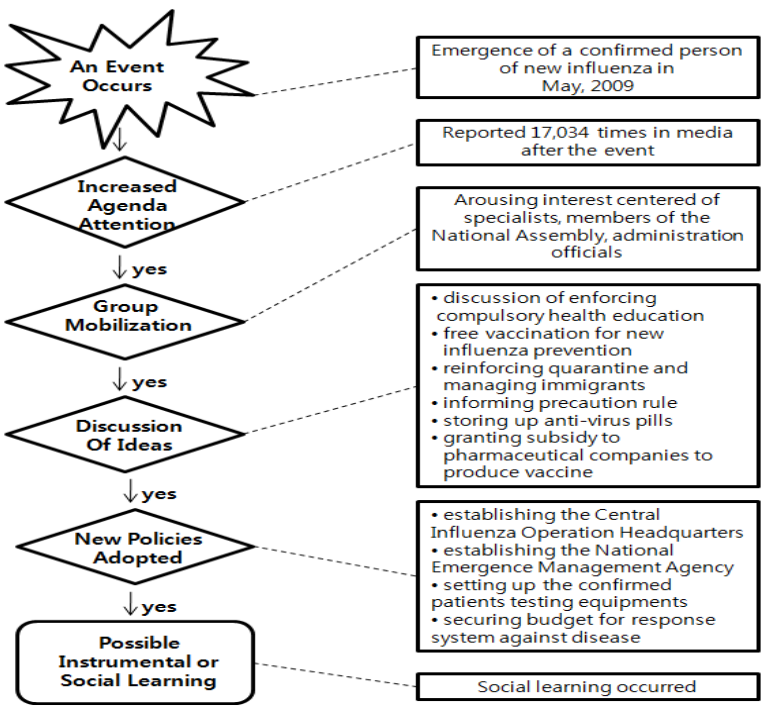
Type	The number of cases (day)	Min	Max	Mean	SD
Media	255	.00	277.00	66.80	66.77
Assembly	255	.00	8.00	.54	1.26

the central of anti-influenza headquarters, that of anti-calamity headquarters and local centers of new influenza were created as the response of new influenza. Also, local institutes of health and environment installed confirming devices and expanded plans of base hospitals that had been already prepared by paying them incentives. Besides, there were some budget changes regarding the construction of a system to deal with epidemic diseases including new influenza. However, these actions were merely preventing means of stopping diffusion and providing immediate treatment. Thus, there should be a further discussion for establishing long-term and fundamental preventive measures. Like this, a variety of ideas were discussed, but all of the issues did not directly lead to policy change even though the government established the Central Anti-Influenza Operations Headquarters, the National Emergency Management Agency, and the Municipal Disaster Relief Center in order to deal with new influenza. In a separate action, not only was the local Institute of Health & Environment equipped with an inspection system for distinguishing confirmed groups but the government also offered incentives to the hub hospitals to increase the number of them. What is more, including new influenza, there were many efforts on building a new disaster confrontation system . However, most of them just focused on primary treatment which only helps prevent spreading disease. An effective long-term counterplan is still required to resolve the more underlying problem.

<Table 1> Application of Birkland model to influenza focusing event

Steps of process	Contents of empirical events	
Occurring event	Emergence of a confirmed person of new influenza in May 2009	
Interest accrual based on small group	existence	• broadcasting 17,034 times in the press or media after occurring specific events
Mobilization of groups	existence	• Arousing interest centered of specialists, members of the National Assembly and administration officials at the Assembly plenary session, a standing committee and the press
Debating ideas (the stage of taking possibility of finding considerable evidence)	existence	• Pointing out dawdling response by government and the problem with preparedness and response system against disease • discussion of enforcing compulsory health education • free vaccination for new influenza prevention • reinforcing quarantine and managing immigrants • informing precaution rules • storing up anti-virus pills such as Tamiflu • discussion of medical coverage for needy • granting subsidy to pharmaceutical companies to produce vaccine • expanding the number of hub hospitals

Policy process	• establishing the Central Influenza Operations Headquarters • establishing the National Emergency Management Agency • constituting the New Influenza Operations Headquarters in the all municipal levels • setting up the confirmed patients testing equipment at Institute of Health & Environment in the all municipal levels • securing budget for establishing response system against disease(around 1,632 hundred million) • providing incentive to hub hospitals
Overall wrapping up of the model	• after occurring event, not only increasing interest in the case but also debating diverse ideas with various groups • paying out of the reserve fund for Tamiflu and vaccine but lack of establishing underlying countermeasures



<Figure 3> Analysis of new influenza focusing event in 2009

Case 2. Analyzing super bacteria case

Super bacteria[10], which is another type of extremely drug resistance infection, has strong

10) Super bacteria was first called "MRSA (Methicillin-Resistant Staphylococcus Aureus)" when reported in England in 1961 and "VRSA (Vancomycin-Resistant Staphylococcus Aureus)" when reported in Japan in

resistance because of people abusing antibiotics, and as a result, the World Health Organization (WHO) warned of potential crisis from new super bacteria and asked many nations to prevent spreading disease in August 2010. Since a super bacteria positive person was first reported in Japan in September 2009, a total nine people have died. In Korea, the first Carbapenem[11] Resistance Enterobacteriaceae (CRE) infected person appeared in December 2010.[12]

In Korea, this case was a major issue in the media, and plans for resolving CRE came out. In any National Assembly conferences, topics related to CRE were not proposed as the issue they were going to discuss even though the media broadcast CRE relevant news many times - nine times on December 9th which is the first day of confirming a infected person, and twenty-eight times on December 10th as figure 4 shows. The total number of broadcasts through the media was eighty one.[13]

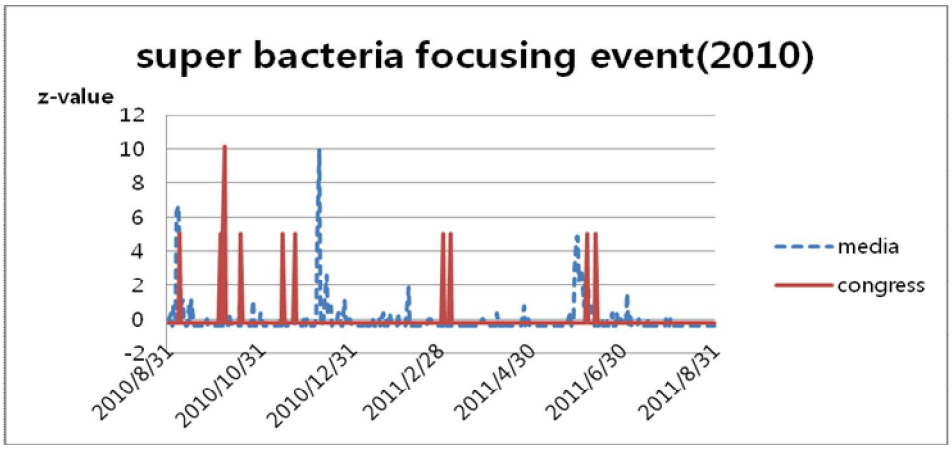
1996. Antibiotics are remarkably effective in relieving infection, which is a drug for treating infectious disease. However, in case of using it very often, strains which are resistant to antibiotic would be prolific through tolerance or mutation. Thus, pathogen which is more resistant to antibiotic than former one emerges so stronger antibiotic should be used for remedy. Then, the bacteria enduring any powerful antibiotics appears, which is called "super bacteria" (NAVER encyclopedia).

11) Cabapenem is one of the most significant antibiotics which are resistant to specific bacteria namely beta-lactamase and cephalosporin. Meanwhile, Cabapenem Resistance Enterobacteriaceae (CRE) is resistance bacteria to the antibiotic which has resistance to Escherichiacoli, Klebsiella pneumoniae, Enterobacter cloacae which causes many infectious diseases such as urinary tract infection, pneumonia, septicemia and so on. Thus, emerging strain like CRE warns signal of possibility for popping up superbacteria or extreme drug resistance (Seoul National University Hospital Dr. Lim, Ju Won, Dec. 9, 2010).

12) The types of infectious superbacteria designated by government , which is called "extreme drug resistance" as a medical terminology, are total six: meticillin-resistant staphylococcus aureus, Cabapenem Resistance Enterobacteriaceae, acinetobacter and so on (Hankooki.com, Jan. 14, 2011, "super bacteria...flu...there is no safety zone").

13) Descriptive statistics related to super bacteria focusing event of media and assembly in 2010.

Type	The number of cases (day)	Min	Max	Mean	SD
Media	48	.00	28	1.69	4.31
Assembly	48	.00	.00	.00	.00



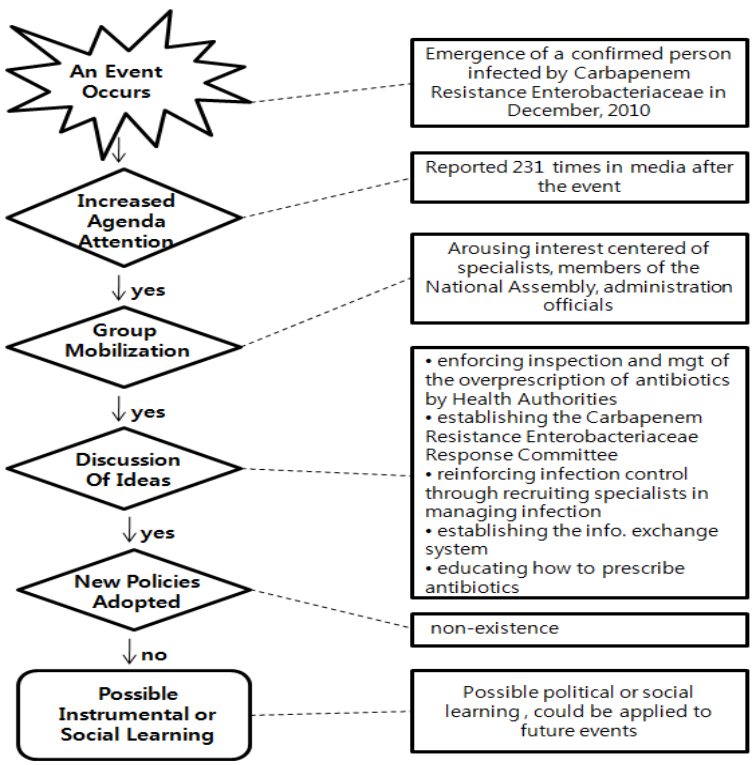
<Figure 4> Reports and reference on Carbapenem Resistance Enterobacteriaceae at media and National Assembly

After the first patient was reported in February 2010, the media and expert panels were in the center of the discussion and it was mainly that the government would not only designate CRE as a legal communicable disease, but also a committee and council for CRE disease control should be institutionalized in order to handle CRE systematically. Also, with the financial support for an infection control facility by government, there were discussions that it was desperately necessary to consolidate the inspection of emerging disease and to educate people about overusing antibiotic. However, these ideas discussed were not placed on floor of the National Assembly. Of course, it did not lead to policy change, either. Only did the Ministry of Health and Welfare announce that they would put emphasis on managing CRE and enforcing support in the 2011 annual operational planning report (the press release by the Ministry of Health and Welfare on December 22, 2010). Thus, it is essential to find the solution to controlling damage from CRE. Especially regulation is required which can prohibit the over-prescription of antibiotics in the long-term, enforce strict supervision by national health authorities, and provide education to the public.

<Table 2> Application of Birkland model to Carbapenem Resistance Enterobacteriaceae focusing event

Steps of process	Contents of empirical events	
Occurring event	Emergence of a confirmed person who was infected by Cabapenem Resistance Enterobacteriaceae in December 2010	
Interest accrual based on small group	existence	• broadcasting total 81 times in the press or media after occurring specific events
Mobilization of groups	existence	• Arousing interest centered of specialists, members of the National Assembly and administration officials at the Assembly plenary session,

		a standing committee and the press
Debating ideas (the stage of taking possibility of finding considerable evidence)	existence	• enforcing inspection and management of the over-prescription of antibiotics by Health Authorities • legislating against antibiotic resistant bacteria and managing it • establishing or institutionalizing the Cabapenem Resistance Enterobacteriaceae Response Committee • reinforcing infection control through recruiting specialists in managing infection • establishing the information exchange system • granting government subsidy for improving infection control facilities and enhancing sanction condition • educating how to prescribe antibiotics
Policy process	Non-existence	
Overall wrapping up of the model	• after occurring event, not only increasing interest in the case but also debating diverse ideas with various groups • but, ideas which were discussed in the National Assembly and government could not lead to policy change so legislation against Cabapenem Resistance Enterobacteriaceae as well as underlying preparedness are required	



<Figure 5> Analysis of Carbapenem Resistance Enterobacteriaceae focusing event in 2010

Ⅴ. Conclusion and Discussion

The spreading of epidemic diseases like new influenza and Carbapenem Resistance Enterobacteriaceae could effect not only human lives directly but also the state economy. This research aimed to analyze the case studies which were relevant to new epidemic diseases namely new influenza and CRE, by applying Birkland's model. The results from the study could be summarized as follows.

First of all, all of the incidents, which were new influenza and CRE, drew attention from the media after the occurrence of the focusing event. That is to say, those cases were regarded as a hot issue after media broadcast those focusing event. Second, the new influenza case in the incipient stage was not selected as an agenda item although it was an issue. Meanwhile, as time goes by, the timing of politicizing the issue which was first broadcast in the press was closer to the timing of and overlapped with the time for being referred to the National Assembly. Lastly, even though a contagious disease by virus like new influenza, super bacteria had periodically occurred, there were not swift actions as a rapid response. Learning ideas from the events that occurred in the nascent stage should have been facilitated. Substantially, this type of policy failure was attributed to a poor learning process.

In fact, social learning as for changing the social constitution which is relevant to legislation, learning method, and perceiving problems has been non-existent although the efforts on accumulating lessons were simply generated. However, cases which are called "new disaster" need to be managed urgently and it is perceived that these incidents could cause severe side-effects. Thus, policy learning is desperately required and policy decisions can be made at a swift time in order to treat the cases in the proper time. Meanwhile, there are some controversial problems resulting in the vulnerability of the policy itself: the policy for treatment with antivirus, policy for controlling contagious disease which might threaten especially pregnant women, chronic patients and children and cause a high rate of mortality and policy for establishing the system of herd immunity and so on. From those problems we have at the moment, hopefully, additional future work that could consider whether a policy decision without sufficient policy analysis and policy learning are necessary or not. As a matter of fact, imitation learning which is not from accumulated lessons could be inevitable in terms of requiring rapid response in order to lessen the damage and to impede the spread of the new disaster. Since a new type of catastrophe takes place in a very changeable environment, new policies or expert groups would be demanded as well. But then, in this process, some unavoidable parts which are perceived as a policy failure

should be reflected upon for future lessons for precaution and response of fore coming disasters.

Followed by future study, we will constantly keep an eye on the recurrent or analogous disaster we would face so we will find out the specific point of policy intervention after a focusing event and some barriers on policy learning. With this, we will grasp the general structure of policy learning and policy adoption as well as trace the threshold and error of a new disaster in the real world. This will be helpful to systemize a well-established policy design.

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李東奎: 성균관대학교에서 행정학 박사학위(논문: 초점사건 이후 정책변동 연구: 한국의 대규모 재난 사례를 중심으로, 2010)를 취득하였다. 국회 예산정책처 경제예산과 예산분석관을 거쳐, 현재 동아대학교 석당인재학부 학부장으로 재직중이다. 주요 관심분야는 정책학 이론 및 방법론, 위기관리, 미래예측 등이다. 최근 주요 논문으로는 "초점사건 이후 이슈주도자에 의한 정책과정 연구 : Cobb과 Elder, 그리고 Birkland의 이론과 모형의 결합 가능성을 중심으로"(2012), "Birkland의 재난 사건관련 정책변동 이론과 모형 검토: 기존의 정책과정 이론과 모형과의 비교"(2012), "Collaborative Network Structure for Information Exchange: Focusing on Settlement Support Program for North Korean Defectors"(2012)등이 있다. 2010년 제8회 행정학 학술논문대회 최우수상, 2011년 한국행정학회에서 제18회 학위논문부문 학술상을 수상하였다. (invictus209@gmail.com, invictus88@dau.ac.kr)

金瑆淳: 미국 코넬대학교에서 석사학위(MS in labor relations)를 취득하고, 성균관대학교에서 박사과정(정책학)을 수료하였다. 국회사무처 기획예산담당관, 국제국장, 예결위 전문위원과 국회예산정책처 예산분석실장을 역임하였으며, 현재 국회예산결산특별위원회 수석전문위원으로 재직중이다. 주요 연구분야는 정책과정이론과 예산 및 재정정책이론 등이다. 저서로는 "국가재정 이론과 실제", (박영사(2012)가 있고, 주요논문으로는 "4대공적연금수지의 전망과 대책"(2010), "의회예산제도지수구축에 관한 연구"(2012), "국회예산과정분석과 확정예산의 정책적 함의"(2012), "의무지출예산의 추이와 결정과정 분석"(2012) 등이 있다. (ck33289@naver.com)

梁고운: 성균관대학교 국정관리대학원에 박사과정을 수료하였으며, 현재 이화여자대학교 법학전문대학원에서 전문법학석사과정에 재학 중이다. 주요 관심분야로는 행정과 법, 정책이론 및 방법론, 지방행정(지역통합) 등이 있다. 최근 주요 논문으로는 "초점사건 중심 정책변동 모형의 탐색: 「한국의 아동 성폭력 사건 이후 정책변동」을 중심으로"(2011), "국가 고속철도망 구축에 따른 국토공간구조 정책변화 동인 연구"(2012) 등이 있다. (goun.yang@gmail.com)

田命秀: 한양대학교 의과대학을 졸업하였다. 한양대학교에서 인턴과 레지던트 과정을 이수하였다. (medix72@hanmail.net)

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The Study on Policy Process after the Incidents of New Epidemic Diseases Referred to New Influenza, Super Bacteria

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The spread of contagious diseases by viruses such as new influenza (or swine flu) and superbacteria have a direct impact on security for people, and it can cause severe damage to the economy. This article tries to analyze the pattern of change in the policy process based on the model of Event-Related Policy Change by Birkland. It can lead us to find a more general and comprehensive pattern of policy change subsequent to new disaster events. It also has implications for policy adoption and learning. Disaster events are usually considered to be focusing events that draw the attention of the public and create political vulnerabilities. To mitigate these vulnerabilities, politicians must find ways to prevent the dispersion and damages from these events. In this article, we will also examine how policy change can be accomplished by viewing it from the issue formation and agenda-setting perspectives. We accomplish this by analyzing case studies on the dispersion and outbreak of new influenza and superbacteria. These events are considered to be new disaster events.

Key words: new influenza, superbacteria, policy process, event-related policy model