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Theoretical and practical exploration of vision building in human influenza pandemic prevention & control

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ABSTRACT

This article introduced the vision building concept about human influenza pandemic prevention and control. Different visions were built by creating different shapes of building blocks which also represented different organizations and physical facilities, respectively. The around-view reflection is required to be developed in the process of building so as to search for the ideal pattern. The correlation of all sectors and systems are established to combine different kinds of things, from one family to another, from communities, towns, counties, cities, rural areas, provinces to the state to handle trivial problems. These training objectives have been successfully accomplished, which has not only enriched the knowledge about prevention and control of influenza pandemic between different departments but also clarified the roles and responsibility. It lays the firm foundation for next cooperation between different departments, and make a bridge for the objective and choice of channel over human influenza pandemic prevention and control.

1. Introduction

With increasing incidence of bird flu and H1N1 epidemic across the world, China is being exposed to the increasing risk of human influenza pandemic^[1,2]. During the practice of prevention and control in human influenza pandemic across China, it is found that the understanding of the influenza pandemic in society as a whole, especially in the relevant government authorities is inadequate and there still are some obstacles in the cooperation system between different authorities^[3]. The work process and relevant duties between authorities failed to be divided clearly^[4]. Meanwhile, taking into account the leading role played by each level of governments, this, to some extent, restricted not only the quality of prevention and control but also further improvement of response capacities^[5]. Currently,

the understanding about research and practice are also insufficient in Chinese government^[4,6]. It is complicated and important to enforce the viewpoints of society as a whole, especially of the relevant government authorities.

In March 2009, the project granted by World Bank avian/human influenza facility in China took the lead in creative application of vision building in human influenza pandemic prevention and control. It is a beneficial attempt to make the project adapt to new situations, where new knowledge will be acquired, and the development bottleneck of prevention and control will be solved. Human influenza pandemic has been analyzed theoretically and practically through combination between vision building and practical training methods. This study is to explore the feasibility of vision building in human influenza pandemic prevention and control.

2. Rationale

The core of vision building is to improve learning capacity

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of organizations and guarantee full performance of their duties. Essentially, vision building is a kind of model for organizational learning, including intrinsic demand for learning^[7]. But its aim is not just individual learning but learning in team. Thus, the connotations of vision building should focus on the development of course and the shared goal. It inspires all members to participate in and learn continuously, to adequately explore the staff's potentials, and deeply thinking^[8]. So it guarantees full performance of their duties and impel the achievements of the shared vision.

Vision building is a carrier which promotes and shapes a sound learning environment by management philosophy and methods organized in the learning type^[9]. However, it is neither a conventional way of promoting learning nor a simple slogan. It can be summarized as three basic works. The first is to develop learning centering on the shared goal, and unify the staff to work hard together. The second is to combine individual learning with the development of organizational courses, and hunt for the talents organizations needed. The last basic work is to promote organizational performance ability^[10,11]. Especially, under the current circumstance of severe influenza pandemic, prevention and control should be promoted in the spirit of creativity. Ceaselessly enriching knowledge, adequately excavate individuals' potentials, and improving the ability to discover and solve problems are all essential.

The vision building is people-oriented and of clear levels. It should insist on the combination between the systematical way of thinking and the working method of composite coordination^[12]. Concerning being people-oriented, only with scientific concept, development outlook and accurate political view, can a group of staff who are innovative and eager to go beyond the objectives be formed. With regard to clear levels of vision, shared vision is a common ideal of gravitation force, objectives and organizations^[13]. When individual visions are encouraged, the visions should be combined with the shared vision of an organization. Regarding combination between systematic way of thinking and working method of composite coordination, systematic thinking, this new way of thinking and language, need be practiced and commanded, and these two methods should be combined together for short-term and long-term, partial and whole, static and dynamic harmony^[14].

Encouraging individual vision is the basis. The shared vision need to be established step by step, and integrated into organizational concept. The organization could decompose the shared vision into individuals so as to make individuals outline their own visions based on the organization's general orientation and share with each other^[15]. Actually, all organizations would encounter challenges during the process of vision building, *i.e.*, how to unify the individuals' visions and the development of the shared vision, and put the vision into practice. When each employee talks about their own visions, they don't just work

for muddling through but work actively to make their own dreams come true, which makes more enthusiasm work and more subjective initiative^[16].

It is necessary for vision building to excavate and cultivate a series of distinct patterns. These typical patterns during practice contain forum, teamwork, etc. However, the core is to deeply explore the problems in practice by collecting the staff's common interests and to put forward the theoretical reflection and working suggestions. In addition, there are also web desktop deduction, on-duty training and other various patterns. When these patterns are applied appropriately, they can effectively promote the development of vision building^[17]. During the practice of vision building, incentive system should be paid high attention. In individual vision building, openness and innovation should be emphasized, and each participator need adequate space to make equal communications with each other.

3. Hypothesis and background

Based on the clinical attack rate in a population-based setting estimated by the World Health Organization^[18], once human influenza pandemic occurs in a county with a population of 500 000, there may be 250 000 patients with influenza clinical symptoms, among which a population of 60 000 would have pneumonia and other complicating diseases and 6 000 people would die. At the peak of influenza, there could be 50 000 new cases within a week. A total of 70 000 people among the crowd with influenza clinical symptom need treatment from professional medical care personnel and 10 000 people need hospital care, among which 2 500 people need intensive care therapy because of severe secondary symptoms.

4. Construction of vision building in human influenza pandemic prevention and control

A total of 47 participators attended the conference, including program executives and officials from government and relevant functional departments of Liaoning and Anhui; project managers, executives, technicians and consultancy experts from Beijing Office of the World Bank, Emergency Office and Loan Office of Ministry of Health, the College of Medicine and Health Management, Tongji Medical College of Huazhong University of Science & Technology, Capital University of Medical Sciences; officials from relevant functional departments such as Agricultural Bureau, Bureau of Public Security, Traffic Bureau, Finance Bureau, Bureau of Civil Affairs, Bureau of Commerce, Bureau of Radio and Television. People from all walks of life shared their cognition and thoughts on preparation of influenza pandemic on the same occasion.

There were 3 000 different shapes and sizes of building

block, which also respectively represented different organizations and physical facilities. The building blocks were set up individually. Participants showed their own visions by creating different shapes of building blocks. Then, the session chair led participants to discuss with creators for 40 minutes. Afterwards, participants from all walks of life were divided into health group, agriculture group and other governmental functional groups to build the common vision shape.

The activity fell into two stages as individual vision and collective vision. The theme for the first stage was the most concern provided that the influenza is currently pandemic. The theme for the second stage was about pattern of ideal prevention and control.

Based on the responsibilities and role definition, reference problems are introduced. These problems include the responsibility of organization during bird influenza pandemic; difficulties in personnel, finance, supplies, information and time; regular or irregular methods and policies to overcome these difficulties, maintain the basic survival and segregated life; the need for the masses' basic life if the epidemic lasts for 6–8 weeks; what and how the local and central governments should do for healthy people, the patients and dead people; how the governmental departments can make division and cooperation.

5. Discussion

The development of around-view reflection is required in the process of building to search for the ideal pattern^[19]. The reflection, including independent reflection of all sectors and systems, networking, and combination of the masses' requirements are developed to find out the unified pattern and solve problems. The correlation are established to combine different kinds of things, combine from one family to another, from communities, towns, counties, cities, rural areas, provinces to the state to handle trivial problems.

China plays a critical role in international response to human influenza pandemic^[20]. The size of the country, significance of China's poultry industry in the international trade, incidence of H5N1 outbreaks to date, and the country's large population all affect the scale and scope of the challenge facing the country^[21].

China established response to human influenza pandemic. It aims to strengthen prevention and control systems of human and animal disease, raise awareness about threat posed by human influenza pandemic, and identify mitigating measures.

Detailed technical assessments of China's response to date were undertaken by the World Bank, the United Nations System and other development partners in November and December 2005^[22]. It revealed that although significant and creditable progress has been made, there were still a number of weaknesses^[23]. China set a plan that appropriately

addresses human and animal health dimensions of the human influenza pandemic threat. However, the plan has yet to be fully adopted by all relevant ministries and agencies or by all levels of government^[24].

Early warning and surveillance capacity particularly at the grass roots level is weak and requires strengthening^[4,25]. The ability of rapid response teams particularly at the grass roots level was hampered due to insufficient support from higher levels of government^[24]. Given the scale of the country, it is important to improve the overall response and its coordination of ministries and agencies especially those at the local level.

Concerning the scope of this application, it can provide rapid and effective support to the response at all levels—identified as an area of particular weakness and as a very high priority by Government. But it is difficult to provide comprehensive support to strengthen integrated country plan. This creative application in operational good practice improves approaches to multi-sector collaboration and communication for pandemic influenza preparedness and response. A web-based system of multi-sector communication and coordination for pandemic influenza preparedness and response has been set up^[16].

This activity focuses on enhancing prevention and control of animal-to-animal, animal-to-human, and human-to-human transmission. It aims to strengthen the national plan for human pandemic influenza and to establish mechanisms for transparent, real time multi-sector communication between officials in the response at all levels of government. Besides, it also particularly emphasizes on strengthening the support and resources at the grass roots level.

There are five important elements in the prevention and control process. Firstly, the government functional departments play the leading role in human influenza pandemic, and it is necessary and significant to establish cooperation mechanism. Secondly, epidemic surveillance and specimen-collection have basic preventive effect on prevention and control. Thirdly, the basic staff's ability of prevention and control, and on-site handling need be improved. Fourthly, laboratory competence and safety building should be enforced to provide effective safeguard against human influenza pandemic. Fifthly, it is vital to make regular and emergent reserve supply and risk communication plan^[26].

Through the drilling pattern of full-participation vision building and constantly inspiring each individual's potential to surpass themselves, these training objectives have been successfully accomplished. This method and the one involving the whole society and currently advocated across the world, are derived from the same origin^[27,28]. It not only enriches the knowledge about influenza pandemic prevention and control but also clarifies the roles and responsibility definition. It lays the firm foundation for next cooperation between different departments and makes a bridge for the objective and choice of channel over human

influenza pandemic prevention and control.

Vision building initially piloted in two provinces, is proved to be a beneficial, feasible, and socially and politically acceptable approach in influenza pandemic intervention. It can be adopted quickly and applied more broadly. The rationale, epidemic situation and expert opinions reveal kinds of explicit judgments, which are required to translate existing knowledge and approach into policy-relevant terms. In conclusion, these findings should be considered in forming national, provincial, local, and facility pandemic plans. In a word, Chinese experience has provided an example for developing countries in scaling-up effort to achieve health-related MDGs.

Conflict of interest statement

We declare that we have no conflict of interest.

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