Measles vaccination and prevention in big cities in China

Li Meina¹,², Liu Xiaodong²,¹, and Zhang Lulu¹,*
¹The Second Military Medical University; Faculty of Health Service; Institute of Military Health Management, PLA; Shanghai, China; ²Donghua University; Fashion and Art Design Institute; Shanghai, China

These authors equally contributed to this work.

Despite the tremendous progress in controlling measles in China, there was measles outbreak in Beijing which was a result of cluster of unvaccinated people or people failure to vaccinate. In order to accelerate measles control efforts and achieve and high levels of measles immunity, it is helpful to implement more targeted management strategy.

Though the past decades has see tremendous progress in controlling measles worldwide, it seems that measles elimination goal may not be achieved on time.¹ There was outbreaks of measles in the United States,² and Beijing’s disease control and prevention center has reported an outbreak of measles in downtown Beijing in China.³ The number of measles cases in Beijing from January 1 to February 28 in 2015 was 397, and there was an increase in measles cases of 87.3% above that of the corresponding period of last year.⁴ The recent surge in measles cases in Beijing was a result of cluster of unvaccinated people or people failure to vaccinate. As is well-known that measles can be prevented by immunization effectively,⁵,⁶ China has introduced free routine measles vaccination and strengthened measles vaccination over a long period of time. Nonetheless, there was an increase in the number of measles cases in Beijing. The main reason was that a portion of people did not receive measles vaccine or failed to develop immunity against measles. People who boycotted measles vaccination or hesitated to get measles immunization were afraid of adverse events following immunization, or saw no necessary to take measles vaccination. While, some people did not have any idea why they should get measles vaccination or where to get vaccination, or they just had no time for measles vaccination. Additionally, with the development of economy, a large number of migrant workers swam into big cities in China which added to the mobility of population and overcrowded dwelling, making it straitened circumstance to promote measles vaccination. It was hard to check their children’s immunization record to find out whether they have gotten measles vaccination in time or not.

In order to prevent and control measles, focused strategy should be carried out. First, along with the national immunization program, government should rev up publicity of free measles vaccination policy and measles immunization safety with national and regional medium to raise public awareness of measles vaccination, alleviate or eliminate doubts about the safety of the vaccine, and build public confidence and demand for measles immunization. Clinical doctors and public health workers should use their professional knowledge to promote measles vaccination to public, especially the floating population and migrant workers, to improve measles vaccination coverage. Second, channels of measles vaccination should be expanded. People usually get measles vaccination in community health service center in China. However, some floating population especially migrant workers do not know where to get measles vaccination for their children or themselves, or they just hardly have time to get vaccination. So door-to-door services may be helpful for migrant workers and should be

Keywords: immunization, measles vaccine, measles elimination, measles control, vaccine safety

© Li Meina, Liu Xiaodong, and Zhang Lulu
*Correspondence to: Zhang Lulu; Email: zllrmit@aliyun.com
Submitted: 03/23/2015
Revised: 04/06/2015
Accepted: 04/06/2015
http://dx.doi.org/10.1080/21645515.2015.1039211
This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non-Commercial License (http://creativecommons.org/licenses/by-nc/3.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. The moral rights of the named author(s) have been asserted.
provided when necessary. Migrant workers often gathered in their workplace or community, hence it is convenient for health workers to offer immunization service. Third, strengthened measles vaccination should be provided more frequently. Besides the current strengthened measles vaccination, more supplementary immunization and additional support may be required to guarantee immunization barrier against measles virus.

Disclosure of Potential Conflicts of Interest

No potential conflicts of interest were disclosed.

Funding

The project was supported by National Natural Science Foundation of China (71303248, and 71233008), and Young Scientist Fund of Second Military Medical University (2012QN09).

References

1. World Health Organization. Global measles and rubella strategic plan: 2012-2020 [Internet]. Geneva, Switzerland: World Health Organization; 2012. [cited 2015 Feb 20]. Available from: http://www.who.int/immunization/news-room/Measles_Rubella_StrategicPlan_2012_2020.pdf.
2. Whitaker JA, Poland GA. Measles and mumps outbreaks in the United States: think globally, vaccinate locally. Vaccine 2014; 32:4703-4; PMID:24992719; http://dx.doi.org/10.1016/j.vaccine.2014.06.088
3. Beijing reports measles outbreak. Chinadaily [Internet]; 2015 Jan 28. [cited 2015 Feb 18]. Available from: http://www.chinadaily.com.cn/beijing/2015-01/28/content_19435963.htm.
4. Beijing-CDC. Monthly epidemic situation report on February by Beijing center for disease prevention and control [Internet]. 2015 Mar 12. [cited 2015 Mar 15]. Available from: http://www.bjcdc.org/article/39839/2015/3/1426149833114.html.
5. Naim HY. Measles virus. Hum Vaccines Immunother 2015; 11:21-6; PMID:25483511; http://dx.doi.org/10.4161/hv.34298
6. Riedmann EM. Measles vaccination: targeted and non-targeted benefits. Hum Vaccines Immunother 2014; 10:815; PMID:24734565; http://dx.doi.org/10.4161/hv.29050