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EBOLA VIRUS DISEASE CONTROL IN POLAND — ARE WE READY FOR FIGHT?

Abstract: Despite very low risk assessment, Polish authorities should be prepared for imported EVD cases and be ready to protect public against the spread of Ebolavirus (EBOV). There is the consistent system of infectious diseases surveillance and control in entire country, regulated by law. In Poland the Public Sanitary Inspection has jurisdiction over infectious diseases surveillance. A reporting system functions at three levels. The entire spectrum of viral hemorrhagic fevers is included in the list of 59th notifiable diseases and causative organisms. EVD is regarded as severe, often fatal communicable disease that should be notified promptly. According to Polish legislation EVD cases would be obligatorily isolated in hospital ward. Each potential contact of EVD case should be individually assessed for risk of exposure and categorized for staying under mandatory quarantine or under active monitoring. The governor of each Polish province has established the Epidemic Active Plan and indicated the place for quarantine if needed. The Ministry of Health established the procedures of management of EVD suspected cases and persons in risk to be infected with EBOV in outpatient care. There are prepared separate procedures for dispatcher of emergency medical service, GP's, hospital emergency departments and airports. There are 10 hospitals with division of infectious diseases, with high level isolation units, ready for EVD patient's admission. There is one reference laboratory in Poland in National Institute of Public Health, which performed tests for EBOV detection. The hospitals and outpatient care services and sanitary inspection were evaluated on possession the appropriate PPE for medical staff, in case of direct contact with EVD patient would be needed. Regardless, very low risk for Poland to be affected by EVD outbreak our country is sufficiently prepared for fighting with EBOV infection.

Key words: Ebola; Poland; infectious diseases surveillance.

INTRODUCTION

Poland has no experience with EVD, yet. Despite very low risk assessment, Polish authorities should be prepared for imported EVD cases and be ready to protect public against the spread of Ebolavirus (EBOV). There is the consistent system of infectious diseases surveillance and control in entire country, regulated by law [1]. Administrative regulations that describe which infectious diseases are to be reported and how they should be reported not vary from one region to another. The lately amended regulations about the mandatory reporting infectious diseases

was issued on December, 2008, including entire spectrum of viral hemorrhagic fevers on the list of 59th notifiable diseases and causative organisms. The purpose of disease reports is to provide necessary and timely information to permit the institution of appropriate investigation and control measures by responsible health authorities.

THE SURVEILLANCE OF INFECTIOUS DISEASES CONDUCTED BY PUBLIC SANITARY INSPECTION

In Poland the Public Sanitary Inspection has jurisdiction over infectious diseases surveillance [2]. A reporting system functions at three levels. The first is the collection of the basic data in the local community where the disease occurs. The data are next assembled at the provincial levels. The country is divided into 16th provinces. The third stage is the aggregation of the information under national auspices of National Institute of Public Health in Warsaw. Finally, for certain prescribed diseases, report is made by the national health authority to the WHO. The physicians or other responsible health care worker should without delay, in 24 hours notify the infectious disease to local health authority. The completion of a notification form should be done immediately on diagnosis or a suspected notifiable disease, no waiting for laboratory confirmation of a suspected infection. Case reports of a communicable disease provide minimal identifying data of name, address, diagnosis, age, gender and date of report for each patient. The right of privacy of the individual must be respected at all levels of the health system. Collective reports with the number of cases, by diagnosis that occur within a prescribed time and without individual identifying data is applied to influenza notification. Fortnightly aggregated reports are forwarded to the next superior jurisdiction by e-mail. The first recognized case in an area or the first case outside the limits of a known affected local area should be reported by telephone as soon as any of these diseases are suspected. The transmission of surveillance data related to infectious diseases between the local, province and national level is very efficient. The weak point of the notification system exists between physicians and local level of collecting data. Case finding is passive, i.e., the physician initiates the report in compliance with regulation. Case finding is active only when a staff member of sanitary inspection searches the GP's or hospital records to find a current case or cases of a communicable disease during epidemiological investigation of disease outbreak. Therefore, the sensitivity of surveillance for some kind of infectious diseases is rather low. It mostly depends on severity of disease. The greater severity of the disease, the higher sensitivity of the surveillance.

POLISH REGULATIONS FOR PUBLIC HEALTH AUTHORITIES IN CASE EVD OUTBREAK — ON NATIONAL AND PROVINCE LEVEL

EVD is regarded as severe, often fatal communicable disease that should be notified promptly. According to Polish legislation EVD cases would be obligatorily isolated in hospital ward. Each potential contact of EVD case should be individually assessed for risk of exposure and categorized for staying under mandatory quarantine or under active monitoring [1]. The governor of each province has established the Epidemic Active Plan and indicated the place for quarantine if needed. The province governor is responsible for management and coordination of the Epidemic Active Plan implementation. At the beginning of October, 2014 each governor constituted Advisory Committee on case of EVD outbreak.

Despite the previous preparations, the risk of EVD challenged public health authorities to evaluate our readiness in case of this disease occurrence in Poland. Furthermore, the Ministry of Health established the procedures of management of EVD suspected cases and persons in risk to be infected with EBOV in outpatient care [3]. There are prepared separate procedures for dispatcher of emergency medical service, GP's, hospital emergency departments and airports. The leaflet with important information for travelers who came from African countries with EVD outbreak is available in Polish airports and on websites of public health authorities. There are 10 hospitals with division of infectious diseases, with high level isolation units, ready for EVD patient's admission [4]. The complete package of procedures and information about pointed hospitals for EVD cases treatment, and important emergency phone numbers was sent to all medical care givers in Poland via Public Sanitary Inspection. The hospitals and outpatient care services and sanitary inspection were evaluated on possession the appropriate PPE for medical staff, in case of direct contact with EVD patient would be needed.

THE ROLE OF HOSPITALS AND PRIMARY CARE FACILITIES

Although, the evaluation regarding PPE possession could be assessed as satisfied in the most of medical centers, there is the question about the health workers skills for safe donning and removing of the PPE, including the relevant decontamination and disinfection procedures. Probably owing to that weak point of preparations to fight with EBOV, the established procedures impose the most duty in taking care on EVD suspected cases on emergency medical service, which is well prepared to secure each stage of medical care, until EVD suspected patient will be isolated in division of infectious diseases. Emergency medical service next to PPE is equipped with portable medical isolation unit used for transporting patients suffering from infectious condition. It enhances the safety of medical staff during patient transportation and protects ambulance device against the contamination.

The numerous of Polish airports are equipped with portable medical isolation unit, and according to established procedures they can transport EVD suspected case to hospital without the cooperation with emergency medical service.

THE LABORATORY CONFIRMATION OF EVD SUSPECTED CASE

After EVD suspected patient admission to division of infection diseases the procedure of case confirmation should be undertaken. There is one reference laboratory in Poland in National Institute of Public Health, which performed tests for EBOV detection. The tests are performed in BSL-3 category of lab using RT-PCR method. The specimens may be directed to the lab around-the-clock by health-care workers from division of infectious diseases only. The information about the procedure of collecting patient's specimens and safety transporting them to the lab was sent to all hospitals prepared for EVD patient admission. The information is available on website of National Institute of Public Health, as well [4].

THE PROCEDURES OF TREATMENT AND EPIDEMIOLOGICAL INVESTIGATION OF EVD CASES

The EVD suspected patient after the notification is taken under epidemiological investigation by professional workers from local sanitary inspection [2]. According to Polish legislation EVD case is classified as urgent and required notification by telephone as soon as reasonably practicable. The information about EVD case must be transmitted urgently by phone between the levels of sanitary inspection and coordinating center of province governor. Sanitary inspection is prepared to conduct EVD epidemiological investigation, assessed the risk of infection in potential contacts and classified them to categories staying under mandatory quarantine or under active monitoring. According to executory procedures the passive monitoring is required only in person with low possibility to be infected with EBOV. It is related to person who came from any country with EVD outbreak but does not declare any contact with EVD cases. That kind of person should receive information on the border coming to Poland, or in any health care facilities about the symptoms that must be passively monitored during 21 days after leaving the affected country. In case of the diseases symptoms occur, the self-monitored person should stay at home and call to dispatcher of emergency medical service using commonly known emergency phone numbers (999 or 112). The staff of emergency ambulance must transport that person as suspected EVD case to pointed division of infectious diseases, where the isolation and the case confirmation procedure would be implemented. For person who has come from any country of EVD outbreak and declares the direct contact with EVD case

should be considered the quarantine or active monitoring. In case of the diseases symptoms occur the procedure is similar to passive self-monitored person calling to dispatcher of emergency medical service. If any patient will come to medical facilities with suspected EVD symptoms that left a country with EVD outbreak should be firstly isolated in separate room. Without necessity health workers should not take any direct medical examination but call to emergency medical service which transports the patient to division of infectious diseases. If the direct contact of medical workers with suspected EVD patient would be necessary before coming of emergency ambulance staff, they have to use PPE according to established procedures [4].

SUMMARY

Regardless, very low risk for Poland to be affected by EVD outbreak our country is sufficiently prepared for fighting with EBOV infection. Healthcare workers must remember about established procedures and train them constantly to improve their skills for safety dealing with EVD suspected cases.

CONFLICT OF INTEREST STATEMENT

None declared.

ABBREVIATIONS

EBOV — Ebolavirus
 EVD — Ebola virus disease
 WHO — World Health Organization

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