THE GLOBAL MENINGOCOCCAL INITIATIVE: MENINGOCOCCAL DISEASE IN ASIA PACIFIC – FINDINGS AND RECOMMENDATIONS FROM THE REGIONAL ROUNDTABLE MEETING, 2014

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ABSTRACT

Introduction: The Global Meningococcal Initiative (GMI) is a global expert group composed of 10 members from developing and industrialised countries with a wide range of specialisations. The initiative seeks to prevent invasive meningococcal disease (IMD) globally through education, research and collaboration.

Aims: To understand IMD and its prevention in Asia Pacific.

Methods: A meeting was held in November 2014 where the GMI reviewed global IMD data, with a focus on the available data from participating Asia Pacific countries.

Results: During the meeting, many challenges and data gaps were identified in certain Asia Pacific countries, and recommendations were made to address these. IMD is an under-reported disease; standardized case definitions are needed. Second, surveillance gaps are evident and additional funding is needed to address this. Third, meningococcal conjugate vaccines (MCV) have greatly reduced IMD incidence rates in Europe and the Americas; research is needed to identify matrices of transmission to enhance control of IMD. Research to identify matrices of transmission is a priority, however, targeting case definitions and surveillance gaps is needed.

Conclusions: In order to improve the IMD situation in Asia Pacific and address the unique outbreak situation (low incidence of IMD and outbreaks need to be characterised when such cases are reported), the GMI proposed overall activities including the meningococcal surveillance system, meningococcal meningitis education guidelines, meningococcal meningitis research guidelines and meningococcal meningitis awareness and communications guidelines to improve meningococcal meningitis control and management activities in Asia Pacific countries.

INTRODUCTION

Meningococcal meningitis is a potentially fatal meningococcal disease which causes outbreaks in various parts of the world. The latest incidence rates indicate that meningococcal meningitis is not eliminated, in any region of the world (1). The IMD burden in Asia Pacific is not clear. The GMI identified the need for epidemiological work, meningococcal meningitis case definitions to address the importance of the disease, and meningococcal meningitis programs to enhance meningococcal meningitis control and management activities in Asia Pacific countries.

The GMI reviewed global IMD data with a focus on the available data from participating Asia Pacific countries. The GMI discussed meningococcal meningitis disease trends, meningococcal meningitis control programs, meningococcal meningitis educational programs, meningococcal meningitis research programs and meningococcal meningitis awareness and communications programs.

SURVEILLANCE AND EPIDEMIOLOGY OF IMD IN ASIA PACIFIC

INDIA

Surveillance

India does not have a strong surveillance system, which hampers accurate epidemiology and also affects control and management of disease.

• IMD is not under-reported in India
• Many patients receive antibiotics from their health care practitioners (HCP) and MD is not diagnosed as a result
• High proportion of MD cases are missed at health facilities
• Only 48 cases are reported by IMD
• Surveillance data are not collected by health care facilities
• IMD has not been diagnosed in recent years
• There is a need for a meningococcal meningitis case definition
• There is a need for meningococcal meningitis case surveillance in India
• There is a need for meningococcal meningitis control programs
• There is a need for meningococcal meningitis educational programs
• There is a need for meningococcal meningitis research programs
• There is a need for meningococcal meningitis awareness and communications programs

Epidemiology

• IMD has reported that the surveillance system is not working
• IMD has reported that the surveillance system is not being used
• IMD has reported that the surveillance system is not being effective
• IMD has reported that the surveillance system is not being monitored
• IMD has reported that the surveillance system is not being evaluated
• IMD has reported that the surveillance system is not being reviewed
• IMD has reported that the surveillance system is not being documented

EPIDEMIOLOGICAL DATA

IMD Surveillance

Table 1

<table>
<thead>
<tr>
<th>Age group</th>
<th>Year</th>
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<th>Meningococcal meningitis cases</th>
<th>Meningococcal meningitis cases (per 100,000)</th>
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Outbreak response

• There are two main potential reasons for outbreaks in Asia Pacific

PREDICTION AND OUTBREAK RESPONSE IN ASIA PACIFIC

INDIA

Prevention

• Intermittent prophylaxis
• Intermittent prophylaxis: high risk population (e.g., health care workers)
• Chemoprophylaxis: close contacts
• Chemoprophylaxis: high-risk population (e.g., health care workers)
• Chemoprophylaxis: contacts

Epidemiology

• IMD surveillance data are available in India
• IMD surveillance data are available in India
• IMD surveillance data are available in India

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