THE PREVALENCE OF HEMOPHILIA IN MAINLAND CHINA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Abstract. The prevalence of hemophilia in mainland China was unclear; therefore, we can conducted a meta-analysis using existing data to evaluate the prevalence of hemophilia and its subtypes hemophilia A (HA), hemophilia B (HB), hemophilia C (HC) and Von Willebrand disease (VWD) in mainland China. We conducted a systematic literature review during August, 2011 using PubMed, EMBASE, and Cochrane Library in English and CBMDISK, CNKI, VIP and Wanfang Database in Chinese. We also carried out a search of general and specific hemophilia related websites. Reference lists of key reviews were hand-searched for further relevant research. Studies providing data of the prevalence of hemophilia or its subtypes were included. Meta-analysis was done using the generic inverse variance model. Twenty-two studies were included in the meta-analysis. The overall weighted prevalence of hemophilia was 3.6 per 100,000 and the prevalence among males was 5.5 per 100,000. The prevalence based on community studies was 2.9 per 100,000. The proportions of HA, HB, HC and VWD were 70.97%, 16.13%, 6.45% and 2.90%, respectively. The prevalences calculated in our study were higher than any previous studies in mainland China, but lower than the world-wide prevalences. The registration rate of hemophiliacs was extremely low. HA and HB were the major subtypes of hemophilia.

Keywords: hemophilia, prevalence, registration, systematic review, meta-analysis