

Emergence of Influenza Pandemic in Bangkok in 1918: Historical Review

To the editor:

Influenza pandemic in 1918 was known as the worst pandemic in human history; it is now well documented to be caused by Influenza A, H1N1 virus. The information regarding this pandemic has been mostly published from the Western countries but only a small number of pieces of information published from Asian countries, even though the origin of this pandemic was speculated to be in China.¹ Unfortunately, only one article regarding this pandemic in Thailand was published in Thai language in 1967 by the late Prof. Dr. Samran Wangspa, an ophthalmologist and a member of the Royal Institute (nowadays, Office of the Royal Society), in Siriraj Hospital Gazette,2 a local medical journal prior to the transformation to international journal standard level as Siriraj Medical Journal. In his article, based on the Interior Ministry announcement on July 14, 1919 by the Minister of Interior Ministry that was published in the Royal Thai Government Gazette on July 27, 1919,3 the total Thai population was nearly 9 million people (8,478,566 outside Bangkok + 500,000 in Bangkok), approximately 2.5 million people (27.8%) got the infection and 81,370 people died (0.9%).

Regarding the 1918 influenza pandemic in Thailand, the article by Prof. Wangspa mentioned that the pandemic occurred shortly after the end of World War I, presumably the spreading was introduced by the soldiers who returned to their homes. The late Emeritus Prof. Dr. Prasert Thongcharoen, a well-known senior virologist in Thailand, concurred with this speculation as shown in the excerption of his presentation on "a chronological outbreak of influenza in Thailand, 1918-2010" at the panel talk in the 9th Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) Global Scientific Conference which was held on 7-11 August 2017 in Chiang Mai, Thailand, as follow: "The outbreak of influenza in Thailand was brought by troops after the World War I (WWI) as Thailand sent the Royal Thai Army Forces to join the Allied Forces in France and returned later when the WWI ended. The troops arrived back with the influenza virus, which was spreading over the frontline. In October 1918, influenza was reported to spread from the harbour city in the southern of Thailand. By November 1918,

the infection had been spread throughout the whole country and it was afterwards subsided in March 1919."4 But, upon the historical review, the Thai troops that joined the WWI could not be blamed for the outbreak of influenza pandemic in Thailand because the 2 Thai troops left Thailand and arrived in France on July 30, 1917 and August 6, 1917, respectively.⁵ Then, after the end of the WWI, the troops arrived in Bangkok with the "welcome back home" ceremony taken place on May 1, 19196 while the influenza pandemic had already swept throughout Bangkok and the whole country in 2 waves, the first one during October and November, 1918 and the second one during January and February, 1919 as documented in the Royal Thai Government Gazette during 1918.

Historical review brought out the interesting event that might be the cause of the emergence of 1918 influenza pandemic in Thailand. On September 12, 1918, The Siam Red Cross posted the donation of 1,554.30 Bahts collected from the tickets (5,181 people attended, if the ticket cost 0.30 Baht) to watch the charity football match between Thai Royal Navy team and British Royal Navy team taken place at the football field at Suankularb College in Bangkok.⁷ The football players of the British Royal Navy team were selected from the crew of the HMS Whiting, a C-class destroyer,8 that visited Bangkok during that very month of September 1918. This football match brought joyfulness to everyone in this event as mentioned in the book entitled "Chaiyo! King Vajiravudh and the development of Thai nationalism" written by Walter F. Vella in 1978 as follow:

The match, held on September 12, was attended by "a huge crowd." The game, after "a hard, ding dong struggle," ended in a tie; the crowd was not displeased, and the match was called "one of the happiest and most successful events in the present naval visit."9

Note: Certainly, the huge crowd with elation in this particular football match is worrisome in term of spreading germs because social distancing, an important measure used to contain COVID-19 at present, cannot be applied!

Historical search in the internet also helps to find out the log book of this British Royal warship. 10 She had been atomized by a spray of a 2% solution of zinc sulphate

from May 2 to 4, 1918 at the Royal Navy's shore base, HMS Tamar, in Hong Kong as a preventative measure against influenza pandemic before departure on May 6, 1918 to Singapore. The warship received 60 tons of coal in Saigon on May 10, 1918. When she arrived in Singapore on May 14, 1918, one petty officer was sent to hospital one hour after docking - 7 days after departure from Hong Kong. Then, 12 days later, on May 26, 1918, the log book recorded "One sick rating left for Tanglin Hospital (returned to ship after a 29-day-long admission)," 8 days after that, on June 3, 1918, "Mr. Ellis discharged to hospital (returned to ship after a 9-day-long admission)," another 8 days later, on June 11, 1918, "One AB left for hospital (AB = Able Seaman)." Look like the crew experienced the first wave of Influenza pandemic as described in the literature. Then, on August 7, 1918, the log book recorded "One Stoker left for hospital," 15 days later, on August 22, 1918, "One AB sent to hospital," 4 days later, on August 26, 1918, "One Stoker discharged to hospital," and 1 day later, on August 27, 1918, "Leading Signalman left for hospital," then, 5 days later, on September 1, 1918, the warship left Singapore for Bangkok where she arrived on September 5, 1918. The crew spent time in Bangkok for 10 days before departing on September 15, 1918. The log book, however, did not mention any activity in Bangkok at all. During that period of HMS Whiting warship visiting Bangkok, there was not any report of influenza epidemic in Bangkok even though King Rama VI had been ill for 10 days, possibly influenza with pneumonia at right lower lobe, from July 27, 1918 to August 5, 1918. On August 17, 1918, the King did not have any abnormal lung sign and he was advised to leave Bangkok for a 4 to 5-week-long vacation so that the next day he moved to Bang Pa-in Palace in Ayudhaya Province. According to the Royal Thai Government Gazette regarding the news of death, mostly the royal family members, government services, army officers, and priests, on July 26, 1918, an army officer died of fever. On August 30, 1918, a government service in Nakhon Sri Thammarat in the South died of fever. On September 28 and 30, an army officer and a government service were reported as died of fever, respectively. Since October 6, 1918, 20 cases were reported as died of fever in October and 12 more cases in November, presumably corresponding to the second wave of influenza pandemic reported all over the world.

The HMS Whiting warship returned back to Singapore and arrived there on September 19, 1918 and on that very day, 2 ratings were discharged to hospital (4 days after leaving Bangkok). Then, 11 days later, on September 30, 1918, "One Signal rating discharged to hospital." And the \log for October 1918 recorded "Singapore dry dock and in harbor during 'flu epidemic" and it started to record sick list during October 1 (sick list of 5) and November 16 (sick list of 8). The peak of sick list was 19 for 3 days during October 12 and 14. There was a note - presumably "Spanish influenza" - recorded on October 8. Even the commander of the ship was recorded to be sent to the hospital on November 13 and he returned on duty 8 days later. No sick list appeared in the log book during November 17 and December 31, 1918 but on January 1, 1919, another sick list of 4 appeared for the very last time and no more! HMS Whiting warship resumed her duty on January 13, 1919. In this log book, no record of death among the crew members is found at all.

However, based on the search of "Royal Navy Service Records" from "The National Archives" website¹¹ for more than 2,000 records, one ordinary seaman year II, aged 25, on service of the HMS Whiting warship, was recorded as "DD October 4, 1918; influenza and bronchial pneumonia. (Note: DD = died of disease)" Nevertheless, the log book of the warship on this particular date recorded only "One AB discharged to hospital." about the illness of the crew members. But, on October 7, the log book recorded "Medical inspection of seven men who were sick." while the sick list was 6.

At this point, based on the above historical review, it is possible that the emergence of influenza pandemic in Bangkok in 1918 was the result of this charity football match between the Thai Royal Navy team and the British Royal Navy team on September 12, 1918. Due to the limitation of time, even after the scrutiny of more than 2,000 records of the "Royal Navy Service Records" from "The National Archives" website above (time spent on 1 entry, approximately 1 minute), another death record (like the one above on HMS Whiting) cannot be retrieved to show whether at least one of the 60 officers and men on this warship had died of influenza prior to their visit to Bangkok. Certainly, there are approximately 35,748 more records during the year 1918 awaiting further scrutiny.

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