Original article

Investigation of Wei (protective), Qi (vital), Ying (nutritive), and Xue (blood) syndromes according to traditional medicine in patients with dengue hemorrhagic fever

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Abstract

Background: Dengue hemorrhagic fever is an infectious disease caused by the Dengue virus, clinically presenting with sudden fever and hemorrhage. It may progress rapidly and can lead to shock or death without timely and appropriate management. **Objective:** To investigate Wei (protective), Qi (vital), Ying (nutritive), and Xue (blood) syndromes according to Traditional Medicine in patients with Dengue hemorrhagic fever and to examine factors associated with these syndromes. **Methods:** A cross-sectional descriptive study was conducted on 123 patients diagnosed with Dengue hemorrhagic fever receiving treatment at the Infectious Diseases Department of Hue Central Hospital. **Results:** Among the patients, Ying syndrome had the highest prevalence (50.4%), followed by Xue syndrome (24.4%), Qi syndrome (15.4%), and the lowest was Wei syndrome (9.8%). There were significant associations between Ying, Wei, Qi, and Xue syndromes with the time of hospital admission ($p<0.05$) and the stage of the disease according to Traditional Medicine ($p<0.001$). **Conclusion:** Ying syndrome was the most common presentation, followed by Xue, Qi, and Wei syndromes. Both the time of hospital admission and the Traditional Medicine disease stage were significantly associated with the distribution of Wei, Qi, Ying, and Xue syndromes in patients with dengue hemorrhagic fever.

Keywords: *Dengue hemorrhagic fever, protective (wei), vital (qi), nutritive (ying), blood (xue), traditional medicine.*

1. INTRODUCTION

Dengue hemorrhagic fever (DHF) is an infectious disease caused by the Dengue virus, which spreads rapidly across many countries worldwide, including Vietnam. The Dengue virus is transmitted from infected individuals to healthy ones through the Aedes aegypti mosquito, which is the main vector of the disease.

Globally, it is estimated that approximately 390 million Dengue infections occur annually, of which 96 million present with clinical symptoms. More than 2.5 billion people are at risk of infection, and DHF is now endemic in over 129 countries, accounting for nearly 70% of the global disease burden [1]. According to the World Health Organization (WHO), the number of reported DHF cases increased more than tenfold over the past two decades, rising from 505,430 cases in 2000 to 5.2 million cases in 2019 [2].

In Vietnam, DHF has become a serious public health issue. According to the WHO, as of October 15, 2023, there have been 113,962 cases of DHF reported, including 31 deaths [3]. The epidemiology of DHF in Vietnam has undergone significant changes, with an increasing number of cases across various age groups, and the disease now appearing in both urban and rural areas, occurring year-round. All four Dengue serotypes (Dengue 1, Dengue 2, Dengue 3, and Dengue 4) are currently in circulation. Clinically, DHF is characterized by fever, hemorrhage, and plasma leakage, which may progress to shock, circulatory failure, coagulopathy, organ dysfunction, and potentially death [4].

According to Traditional Medicine (TM), Dengue fever is referred to as Rash-related Disease (疹病) classified as a type of epidemic disease. The primary cause is the invasion of pathogenic heat (such as wind-warm, summer-heat, damp-heat, dry-heat, and cold-heat) into the body, which affects the Wei, Qi, Ying, and Xue aspects of the body [5]. In the human body, Wei serves as the first defensive barrier against external pathogens. Qi functions as the vital driving force that coordinates the zang–fu organs and maintains systemic balance. Ying nourishes the body and facilitates smooth circulation within the vessels, while Xue circulates to nourish the body and is essential for sustaining life. When warm pathogens

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invade the body, mild invasion restricted to the Wei level results in fever with chills. If the pathogen reaches the Qi level, it leads to high fever accompanied by constipation or diarrhea. Involvement of the Ying level results in rashes due to internal heat and impaired regulation. When the pathogen penetrates the Xue level, manifestations such as high fever, delirium, incoherent speech, and bleeding may occur [6]. DHF is divided into five stages, ranging from mild to severe: the stage where heat and toxins affect the Wei and Qi aspects, the stage where heat and toxins affect the Ying and Xue aspects, the stage when the body's Qi is not yet depleted, but the Qi is impaired, causing fever and heat, the stage of significant xue loss leading to depletion of Qi, and the stage when both the Qi and the body's reserves are exhausted, or during recovery [5].

Several studies have examined the clinical characteristics of dengue fever. For example, the study by Bui VH et al. (2017) studied 2,922 adult dengue patients and reported fever (97%) and rash (70%) as the most common symptoms [7]. In another study conducted in Singapore involving 6,989 dengue patients from 2005 to 2008, Rowe et al. found that elderly patients (4.4% of cases) had a higher risk of severe dengue compared with younger adults (20.3% vs. 14.6%, $p < 0.05$) [8]. Chen Tengfei et al. (2016), in a study of 132 dengue patients at the Beijing Hospital of Traditional Chinese Medicine, reported that Ying-level and Blood-level syndromes accounted for 42.5% each, while Qi-level and Wei-level syndromes accounted for 12.7% and 2.3%, respectively [9].

However, currently, the classification and diagnosis of the Wei, Qi, Ying, Xue syndromes in DHF patients according to Traditional Medicine currently lack standardization. To contribute to establishing evidence-based TM diagnostic criteria, we conducted the present study entitled: "Investigation of Wei (protective), Qi (vital), Ying (nutritive), and Xue (blood) syndromes according to traditional medicine in patients with dengue hemorrhagic fever" with the following objectives:

1. To investigate Wei, Qi, Ying and Xue syndromes according to Traditional Medicine in patients with Dengue hemorrhagic fever.

2. To identify factors associated with Wei, Qi, Ying and Xue syndromes in patients with Dengue hemorrhagic fever.

2. RESEARCH SUBJECTS AND METHODS

2.1. Research subjects

The study included 123 patients diagnosed with Dengue hemorrhagic fever who were hospitalized at the Tropical Disease Department of Hue Central Hospital from June 2023 to December 2023.

2.1.1. Inclusion criteria

Patients were diagnosed with Dengue hemorrhagic fever according to the "Guidelines for Diagnosis and Treatment of Dengue Fever" issued by the Ministry of Health in July 2023, with Dengue Duo test (+): NS1 antigen (+) and/or IgM Dengue (+). [4]

Traditional Medicine syndromes (Wei, Qi, Ying, Xue)

+ Wei syndrome: Characterized by fever, mild aversion to wind, headache, cough, slight thirst, a thin white tongue coating, red tongue margins, and a floating rapid pulse.

+ Qi syndrome: high fever without aversion to cold but with aversion to heat, profuse sweating, intense thirst with a preference for cold drinks, a red tongue with a dry yellow coating, and a surging, forceful pulse. Local swelling and pain or skin eruptions may also be observed.

+ Ying syndrome: Manifested by high fever worsening at night, restlessness, insomnia, delirium, faint or indistinct rashes, a dark-red tongue, and a thin rapid pulse.

+ Blood syndrome: Marked by high fever, agitation, delirium or coma, and various hemorrhagic manifestations such as hematemesis, epistaxis, melena, or hematuria. Rashes are dense and dark red to purplish-black, with a dark-purple tongue and a thin rapid or deep rapid pulse. [5], [6]

Disease staging according to Traditional Medicine:

+ Toxic heat invading the Wei and Qi levels: Rapid onset of high fever, fatigue, myalgia, headache, ocular congestion, and gastrointestinal disturbances.

+ Toxic heat penetrating the Ying and Blood levels: High fever with rapid progression, fatigue, myalgia, headache, ocular congestion, and digestive symptoms. When heat enters the collaterals, subcutaneous bleeding (rash) may appear; when it invades the vessels, internal bleeding such as hematemesis or melena may occur.

+ Stage of Yin–Qi injury without collapse of Zheng Qi (Upright Qi): Body heat with cold extremities, restlessness (shock with narrow pulse pressure), often accompanied by constipation.

+ Stage of severe blood loss leading to Qi collapse, or exhaustion of both Zheng Qi and Yin resulting in Yang collapse: Cold extremities, a faint or nearly imperceptible pulse.

+ Recovery stage: Patients may present with

fatigue, cold limbs, poor appetite, spontaneous sweating, profuse clear urine, and loose stools. Others may exhibit poor appetite, thirst, dry lips, scanty urine, constipation, a red thin tongue body, and a weak, thin rapid pulse [5], [6].

2.1.2. Exclusion Criteria

- Patients who did not provide informed consent.
- Patients exhibiting signs of mental disorders.

2.2. Research Methods

- Study Design: Cross-sectional descriptive study.
- Sampling Method: Convenience sampling.
- Research instruments: A structured questionnaire, blood pressure monitor, thermometer, stopwatch, tongue depressor, and stethoscope for pulse assessment.

2.3. Research Procedure

Steps to be followed:

Step 1: Preparation for data collection: Conduct a pilot assessment on five patients diagnosed with Dengue hemorrhagic fever to identify potential issues, obtain feedback, and revise the questionnaire to ensure appropriateness for actual clinical conditions.

Step 2: Participant recruitment: Review medical records to select patients diagnosed with Dengue hemorrhagic fever, meet with them, explain the study, and select subjects according to the inclusion criteria.

Step 3: Data collection: Perform physical examinations and conduct interviews with the enrolled participants following the research protocol.

Step 4: Documentation: Record the clinical results.

Step 5: Data management: Clean, enter, and process the collected data.

Step 6: Data analysis: Analyze the research results and investigate the Ying, Wei, Qi and Xue syndromes according to Traditional Medicine in patients with Dengue hemorrhagic fever.

2.4. Data Processing Methods

- Data were cleaned, analyzed and processed using SPSS 20.0 software.
- For quantitative variables, the mean (X), standard deviation (SD), minimum and maximum values, and confidence intervals were calculated. For qualitative variables, descriptive analyses were performed to determine frequencies (n) and percentages (%). Pearson's Chi-Square (χ^2) test was used to compare proportions, Fisher's exact test was applied when any cell contained a zero frequency. A statistical significance level of $p < 0.05$ was adopted.

2.5. Research Ethics

- The study was conducted in accordance with the Decision on the assignment of the regular graduate thesis project for the academic year 2022–2023, No. 1654/QĐ-ĐHYD, issued by the Rector of Hue University of Medicine and Pharmacy on April 19, 2023.
- All participants were informed of the study objectives and voluntarily provided written informed consent prior to enrollment.

2.6. Research limitations

- The study duration was insufficient to capture the full variability of Wei, Qi, Ying, and Blood syndromes across all stages of dengue fever.
- The sample size was relatively small, which may affect statistical power and limit the generalizability of the results.

3. RESEARCH RESULTS

3.1. General Characteristics of the Study Subjects

- Age: The average age of the study population was 35.7 ± 15.3 years. The most common age group was 16 - 30 years, accounting for 43.1% of the participants.

- Gender: Males accounted for 53.7%, while females accounted for 46.3%.

- Place of residence within two weeks before disease onset: Rural areas accounted for 69.1%, while urban areas accounted for 30.9%.

- Reasons for hospitalization: The majority of patients were hospitalized due to fever (79.7%), followed by headache and fatigue. Other symptoms such as frequent vomiting and gum bleeding were reported less frequently.

3.2. Wei, Qi, Ying, and Xue Syndromes in the study subjects

3.2.1. Distribution of Wei, Qi, Ying, and Xue syndromes in the study subjects

Among the 123 participants included in the study, Wei syndrome was identified in 12 patients (9.8%), Qi syndrome in 19 patients (15.4%), Ying syndrome in 62 patients (50.4%), and Blood syndrome in 30 patients (24.4%).

3.2.2. Wei syndrome and some symptoms

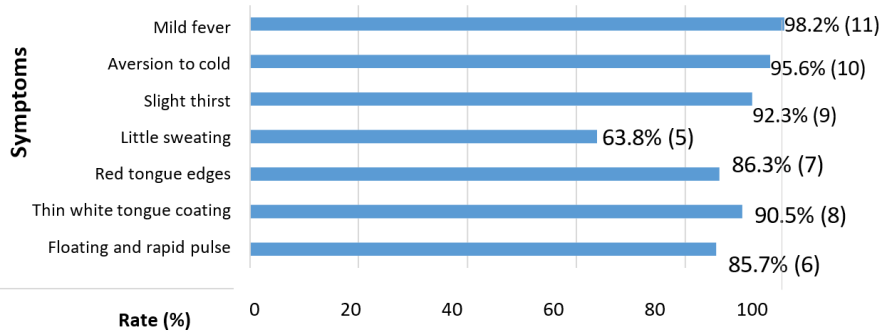

Chart 1. Symptoms in Dengue Fever Patients with Wei syndrome (N = 12)

In patients with dengue fever, Wei syndrome is predominantly characterized by mild fever (98.2%), aversion to cold (95.6%), slight thirst (92.3%), thin white tongue coating (90.5%), a floating and rapid pulse (85.7%), red tongue edges (86.3%), and reduced sweating (63.8%)

3.2.3. Qi syndrome and some symptoms

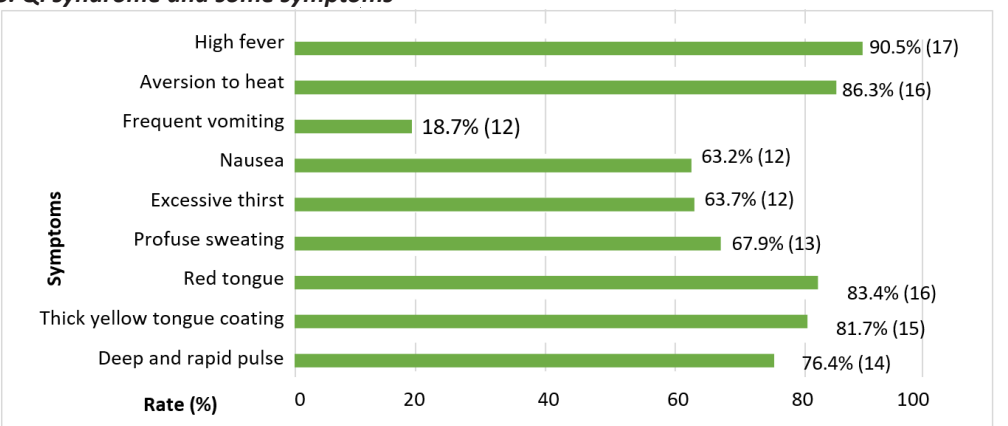

Chart 2. Symptoms in Dengue Fever Patients with Qi syndrome (N=19)

In dengue fever patients, Qi syndrome is characterized by a high prevalence of symptoms, including high fever (90.5%), aversion to heat (86.3%), and a red tongue (83.4%), whereas frequent vomiting shows the lowest occurrence (18.7%).

3.2.4. Ying syndrome and some symptoms

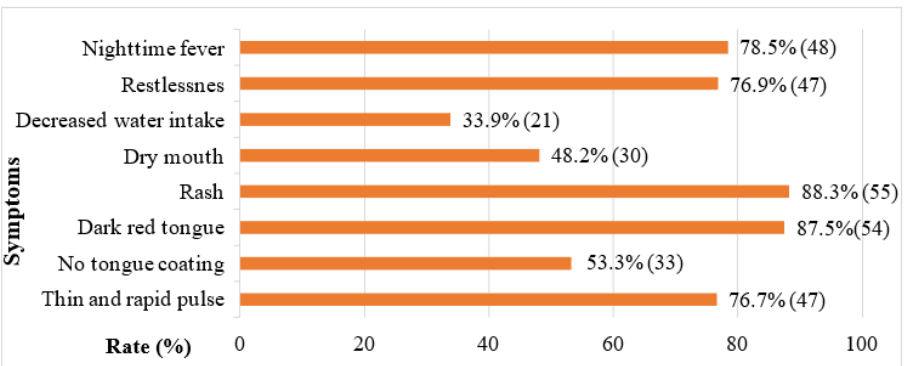

Chart 3. Symptoms in Dengue Fever Patients with Ying syndrome (N=62)

Among dengue fever patients, Ying syndrome is primarily associated with rash (88.3%), dark-red tongue (87.5%), nighttime fever (78.5%), and a thin, rapid pulse (76.7%), whereas decreased water intake exhibits the lowest occurrence (33.9%)

3.2.5. Xue syndrome and some symptoms

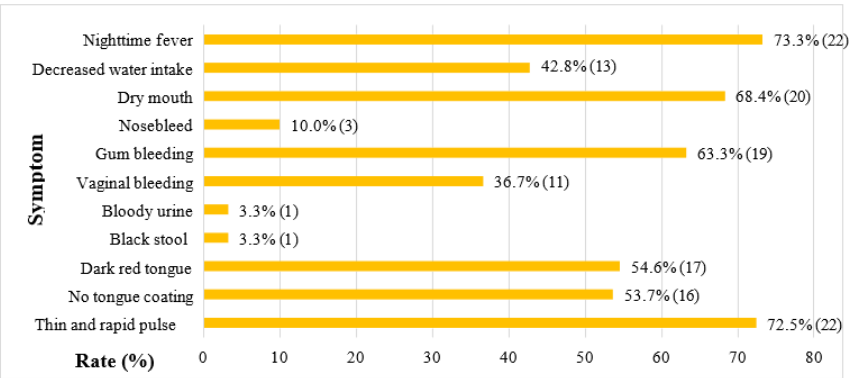

Chart 4. Symptoms in Dengue Fever Patients with Xue syndrome (N = 30)

In dengue fever patients, Xue syndrome is characterized by a high prevalence of nighttime fever (73.3%), a thin and rapid pulse (72.5%), dry mouth (68.4%), and gum bleeding (63.3%), whereas melena (black stool) and hematuria (bloody urine) show the lowest occurrence (3.3%)

3.2.6. Distribution of disease stages according to Traditional Medicine

Among the study subjects, the majority were classified into the stage of toxic heat invading the Ying and Xue levels, accounting for 74.8%. Meanwhile, 25.2% of patients were categorized into the stage of toxic heat invading the Wei and Qi levels. No cases were recorded in the following stages: Zheng Qi (Upright Qi) not yet deficient, Qi and Yin damage causing heat collapse, severe blood loss leading to Qi exhaustion, combined Zheng Qi and Qi–Yin depletion, or the recovery stage.

3.3. Factors related to Wei, Qi, Ying, and Xue syndromes in Dengue Fever patients according to Traditional Medicine

3.3.1. Relationship between hospital admission time and Wei, Qi, Ying, Xue syndromes

Table 1. Relationship between hospital admission time and Wei, Qi, Ying, Xue syndromes

	Wei Syndromes		Qi Syndromes		Ying Syndromes		Xue Syndromes		p
	n	%	n	%	n	%	n	%	
Day 1 - 3	10	83.3	17	89.5	30	48.3	13	43.3	< 0.05
Day 4 - 7	2	16.7	2	10.5	32	51.7	17	56.7	< 0.05

Patients presenting with Wei and Qi syndromes were more frequently admitted during days 1 - 3 of illness, with admission rates of 83.3% and 89.5%, respectively. In contrast, patients exhibiting Ying and Xue syndromes were more often admitted from day 4 onward, accounting for 51.7% and 56.7%, respectively. This distribution demonstrates a statistically significant association between the duration of fever prior to hospital admission and the classification of patients into Wei, Qi, Ying, and Xue syndromes ($p = 0.00129$, $p < 0.05$)

3.3.2. Relationship between Dengue Fever Stages in Traditional Medicine and Wei, Qi, Ying, Xue syndromes

Table 2. Relationship between Dengue Fever Stages in Traditional Medicine and Wei, Qi, Ying, Xue syndromes

	Wei Syndromes		Qi Syndromes		Ying Syndromes		Xue Syndromes		p
	n	%	n	%	n	%	n	%	
Stage of toxic heat invading the Wei and Qi levels	12	100	19	100	0	0	0	0	< 0.001
Stage of toxic heat invading the Ying and Xue levels	0	0	0	0	62	100	30	100	< 0.001

There was a statistically significant association between the Traditional Medicine stages of dengue fever progression and the corresponding Wei, Qi, Ying, and Xue syndromes ($p < 0.001$).

4. DISCUSSION

4.1. General Characteristics of the study subjects

The average age of the study group was 35.7 ± 15.3 years with the 16 - 30 age group representing the largest proportion (43.1%). Gender distribution was nearly balanced, with 53.7% male and 46.3% female. These findings are similar to the study by Le Vu Phong et al. (2013) on 1,305 dengue fever patients treated at Hue Central Hospital, which reported an average age of 27.7 ± 11.8 years, with 70.9% of cases aged 15 - 30 years, 14.2% over 40 years old, and a gender distribution of 48% male and 52% female [10], suggesting that dengue fever affects both genders almost equally.

Regarding the patients' place of residence in the two weeks before disease onset, 69.1% lived in rural areas, while 30.9% lived in urban areas. A study by Docum D (2019) in Thailand and Laos reported seroprevalence rates of 90.4% in rural areas and 93.8% in urban areas [11]. In comparison, the higher proportion of rural residents in our study indicates that dengue fever has now spread widely to both urban and rural settings.

Most patients (79.7%) were admitted due to fever, followed by headache and fatigue. Other symptoms, including frequent vomiting and gum bleeding, were less common. Similarly, Fujimoto (2014) reported that among 267 dengue fever patients in Brazil, 79.8% were hospitalized due to fever, followed by subcutaneous bleeding (14%) and gum bleeding (13%) [12].

4.2. Syndromes of Wei, Qi, Ying, and Xue in the study subjects

4.2.1. Distribution of Wei, Qi, Ying, and Xue syndromes in the study subjects

In our study, the majority of patients presented with Ying syndrome, accounting for 50.4%, followed by Xue syndrome at 24.4%, Qi syndrome at 15.4%, and Wei syndrome, which had the lowest proportion at 9.8%. In cotrast, a study by Ye Zhizhong, Liu Nan et al. (2014) involving 210 dengue fever patients in Guangzhou, China, reported a different distribution: Xue syndrome (46.7%), Ying syndrome (30.1%), Qi syndrome (15.3%), and Wei syndrome (7.9%) [13]. This discrepancy may be attributed to differences in study periods, geographical locations, and patient populations.

4.2.2. Wei syndrome and some symptoms

As shown in Chart 1, Wei syndrome in Dengue Fever patients is predominantly characterized by mild fever (98.2%), aversion to cold (95.6%), slight thirst (92.3%), thin white tongue coating (90.5%), floating and rapid pulse (85.7%). These findings are consistent with the study by Ye Zhizhong, Liu Nan, and colleagues (2014), which reported fever (99.7%), aversion to cold (90.8%), and slight thirst (89.7%) among patients with Wei syndrome [13].

The clinical manifestations of Wei syndrome can be explained by Traditional Medicine theory. When external pathogenic heat invades the body, it initially affects the Wei level, disrupting the regulation of heat and cold, which leads to fever and aversion to cold. Since the heat pathogen is confined to the Wei level, the pulse is floating and rapid. Additionally, because the pathogen has not yet penetrated the Qi level, the tongue coating remains thin and white... [14].

4.2.3. Qi syndrome and some symptoms

As shown in Chart 2, Qi syndrome in Dengue Fever patients is primarily characterized by high fever (90.5%), aversion to heat (86.3%), red tongue body (83.4%), and thick yellow tongue coating (81.7%). These findings are consistent with the study by Chen Tengfei and colleagues (2016), conducted on 132 dengue fever patients at the Beijing Traditional Chinese Medicine Hospital, China, which reported high fever (92.3%), aversion to heat (79.3%), and yellow tongue coating (82.4%) among patients with Qi syndrome [9].

In Traditional Medicine, the symptoms of Qi syndrome arise when warm pathogens invade the Qi level. At this stage, symptoms at the Wei level subside, so patients no longer exhibit aversion to cold. High fever develops due to the interaction between pathogenic heat and the body's vital Qi. The tongue coating changes from white (associated with the Lung metal element) to yellow (associated with the Spleen earth element)[14]

4.2.4. Ying syndrome and some symptoms

Based on Chart 3, Ying syndrome in Dengue Fever patients is predominantly characterized by petechial rash (88.3%), dark red tongue body (87.5%), night fever (78.5%), and thready rapid pulse (76.7%). These results are comparable to a study conducted in Guangdong, China (2013) on 257 dengue fever patients, which reported petechial rash (90.5%), thready rapid pulse (78.1%), and dry mouth (51.2%) as the main symptoms of Ying syndrome [15].

In Traditional Medicine, the symptoms of Ying syndrome occur when pathogenic heat enters the Ying level, scorching Ying Yin. This leads to fever that

worsens at night and a thready, rapid pulse. Since Ying is the precursor of blood, invasion of the Ying level also affects the blood level, resulting in a dark red tongue body and faint petechial rashes beneath the skin [14].

4.2.5. Xue syndrome and some symptoms

As shown in Chart 4, Xue syndrome in Dengue Fever patients presents is characterized by night fever (73.3%), thready rapid pulse (72.5%), dry mouth (68.4%), gum bleeding (63.3%), A study by Chen Tengfei et al. (2016) conducted on 132 Dengue fever patients at the Beijing Traditional Chinese Medicine Hospital, China, found that patients with Xue syndrome exhibited vaginal bleeding (45.8%), gum bleeding (72.5%), nosebleeds (17.3%), and hematuria (16.8%) [9].

Compared with previous research, the incidence rates of Xue syndrome symptoms such as gum bleeding, vaginal bleeding, nosebleeds, black stools, and hematuria in our study were lower. This difference may reflect increased public awareness of healthcare, as well as proactive public health campaigns on dengue fever.

In Traditional Medicin, Xue is formed from the transformation of Ying Qi and continuously circulates within the vessels. When pathogenic heat enter the Xue level, symptoms such as a dark red tongue and mental disturbances appear. Heat in the Xue can lead to bleeding manifestations including hematemesis, epistaxis, hematochezia, and hematuria. If pathogenic heat damages the true Yin, patients may exhibit body heat, flushed face, hot palms and soles, dry mouth and throat, mental fatigue, and exhaustion [14].

4.2.6. Distribution of disease stages according to Traditional Medicine

Our study found that Dengue Fever patients mainly fell into the stage of toxic heat invading the Ying and Xue levels, accounting for 74.8% of cases. This was followed by the stage of toxic heat invading the Wei and Qi levels, which accounted for 25.2%. In our study, no patients were classified under the following stages Yin–Qi injury without collapse of Zheng Qi, Severe blood loss leading to Qi exhaustion, Both Zheng Qi and Qi-Yin depletion, Recovery stage

This may be due to the healthcare sector's efforts in raising awareness about Dengue Fever, leading to increased patient awareness and earlier hospital admissions. Additionally, advancements in medical science and improvements in patient care have helped prevent the disease from progressing to more severe stages. Another possible reason could be the limited sample size and study duration, which may not have been sufficient to capture cases in the later stages of the disease.

4.3. Factors Related to Wei, Qi, Ying, and Xue Syndromes in Dengue Fever Patients According to Traditional Medicine

4.3.1. Relationship Between Hospital Admission Timing and Wei, Qi, Ying, and Xue Syndromes

The results presented in Table 1 indicate that patients admitted to the hospital between days 1 - 3 of the illness were significantly associated with Wei and Qi syndromes ($p < 0.05$). In contrast, patients admitted from day 4 onwards were significantly associated with Ying and Xue syndromes ($p < 0.05$). These findings are consistent with a study conducted by Han Yuan (2013) on 257 dengue fever cases in Guangdong, China, which reported that hospitalization occurred later for patients with Ying and Xue syndromes compared with those exhibiting Wei and Qi syndromes, with a statistically significant difference ($p < 0.05$) [15]. This pattern suggests that patients admitted during the early phase of the disease (days 1 - 3) tend to present with milder symptoms (Wei and Qi syndromes) as the disease has just begun. Advances in medical care and improvements in patient management may also prevent progression to severe conditions (Ying and Xue syndromes). Furthermore, these findings have implications for integrated treatment strategies combining modern medicine and Traditional Medicine. During the early phase (Wei and Qi syndromes), conventional interventions such as antipyretics and fluid replacement can be complemented with TM approaches aimed at clearing heat and detoxifying. In the later phase (Ying and Xue syndromes), modern interventions such as fluid resuscitation and hemorrhage control may be combined with TM therapies to clear heat, resolve toxins, cool the blood, and arrest bleeding.

4.3.2. Relationship between the stages of dengue fever according to traditional medicine and the Wei, Qi, Ying, and xue syndromes

As shown in Table 2, there is a significant relationship between the stages of Dengue Fever according to Traditional Medicine and Wei, Qi, Ying, and Xue syndromes ($p < 0.001$). In general, when a patient first contracts a warm disease, the pathogenic factor initially affects the Wei level before potentially progressing to the Qi, Ying, and Xue levels. However, in clinical practice, symptoms often appear in a mixed or overlapping manner, making differentiation challenging. In some cases, the pathogen has already reached the Qi level while still lingering in the Wei level. In other instances,

excessive lung heat spreads, leading to simultaneous heat in both the Qi and Xue levels. Especially when the disease progresses to the Xue levels, most cases still exhibit symptoms of the Ying levels [14]. Therefore, in clinical practice, the stages of heat toxin affecting the Wei and Qi levels, as well as the Ying and Xue levels, are used to detect Dengue Fever early, closely monitor clinical progression, and ensure timely and effective diagnosis and treatment. This approach helps patients recover quickly and minimizes complications.

5. CONCLUSION

- Among Dengue Fever patients, Ying syndrome has the highest prevalence, followed by Xue, Qi, and Wei syndromes.

- Both the time of hospital admission and the Traditional Medicine disease stage were significantly associated with the distribution of Ying, Wei, Qi, and Xue syndromes in patients with dengue hemorrhagic fever.

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