

# The paralytic arm of Kaiser Wilhelm B

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## ABSTRACT

Through exploring unknown aspects of history, we often discover details that are carefully hidden or written in the margins in fine print. In the context of research, the disability of Kaiser Wilhelm B could not go unnoticed. His paralyzed and atrophic left arm clearly defined his childhood, shaped his character and significantly affected his self-confidence, while providing an opportunity for parents and educators to channel their own obsessions. The decisions that Kaiser made in critical situations when he came of age, especially those that directed the destinies of the peoples of the world, were clearly affected by his physical deficit. Until recently, the medical view of Kaiser's disability pointed to traumatic paralysis of the brachial plexus during his birth. The diagnosis of obstetric palsy of the upper type (Erb's type) provided a complete explanation for the image we have of his left upper extremity, as depicted in paintings and portraits or assessed in the few videos and photographs of the time. However, a new point of view comes to shed light on the matter and orient the diagnosis in another direction.

**KEYWORDS:** obstetric; paralysis; brachial plexus; Kaiser Wilhelm B; First World War

### Introduction

Among the main causes that led to the outbreak of the First World War were the geopolitical circumstances of the time and the widespread nationalism that encouraged rampant and dangerous armaments. And at the same time, the course of events was influenced by the imperialism of the powerful which encouraged risky decisions, political rivalries and economic pursuits. The assassination of the heir to the throne of Serbia, Archduke Franz Ferdinand, in Sarajevo of Bosnia on 28 June 1914, served only as a trigger to generate procedures. The reasons for the

domino of events that would follow were deeper.

The millions of victims in the trenches of the rival factions, added to those of the Spanish flu, were merely the epilogue of a merciless universal confrontation. A confrontation that lasted four and a half bloody years and culminated in the collapse of powerful empires, the change of the world map and the humiliating defeat of Germany, events that paved the way for the outbreak of another Great War!

### Childhood and influences

Wilhelm B of Germany (his full name in German

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*Friedrich Wilhelm Viktor Albrecht*) was born on January 27, 1859 in Potsdam, near Berlin. Fate had planned for him to rule as emperor of the German state and, at the same time, as King of Prussia from 1888 until the end of the First World War. Origin, geopolitical circumstances and the warlike aspirations of his countrymen prescribed his course as a sequence of inescapable developments.

Wilhelm was the eldest child of Prince Frederick (later emperor Frederick III) and Victoria, eldest daughter of Queen Victoria of Great Britain. The father failed to instill in his tender soul virtues such as courage and determination. He was honest and intelligent, he had respect for others, but he was not distinguished by will and fortitude. In contrast, the mother was characterized by completely different qualities. She had inherited from her father, the royal husband Albert, determination and stubbornness in her pursuits and from her mother strong emotions and self-confidence. She often subordinated her intelligence to the dictates of her emotions.

Victoria had an additional problem to deal with, after the birth of Wilhelm. The little boy had a disability in his left arm, which remained forever atrophic. Photographs from the time and the few film records show Wilhelm at various stages of his political and military career holding his crippled left arm with his right or artificially hiding it in his coat (**Figure 1**). The mother tried to impose on her son the mentality of the "liberal 19th century British" and to raise him as an English nobleman. It escaped her that Wilhelm harbored negative feelings for the British, because in the person of the British obstetrician who had brought him to life, he saw the only person responsible for his disability. Victoria made him turn more towards those who represented the *Prussian ideal*, seeking that her son should adopt the virtues of a ruler, become brave, fair and resolute, and imbued with feelings of self-sacrifice, self-reliance and independence [1].

The relations between mother and son, under these circumstances, were constantly stumbling upon obstacles. Her influence on him was deep and continuous. He himself never managed to shake it off, nor to shed the vaunted respect for liberal val-

ues and way of life. His temperament did not conform to the tough warrior-king type, and he quickly realized that this was the only role he had to live up to with every sacrifice. He was constantly weak in controlling his actions, often drifting into excesses.

A constant struggle was going on in young Wilhelm's soul. On the one hand his inner inclinations, and on the other the sense of duty instilled in him by his Calvinist tutor, exerted countervailing forces as they alternated within him constantly, neutralizing each other. The tension between them, combined with his physical disability, generally explains his nervous, irritable and indecisive character [2].

In 1881, Wilhelm married Princess Augusta Victoria of Schleswig-Holstein, a woman who was unimaginative, without spiritual interests, untalented, a listless creature who made him bored and encouraged his reactionary tendencies. But she was the partner who represented stability in his life. And she was the wife who gave birth to six sons and one daughter. Their daughter Victoria Louise (1892-1980) married Ernest Augustus, Duke of Brunswick. Through their marriage, their daughter Frederica was born, later Queen of Greece and mother of the heir to the Greek throne Constantine, in the years preceding the dictatorship of the colonels [3].

### **Brachial plexus paralysis**

The brachial plexus in the human body is a network of spinal nerve fibers, formed by the anterior branches of the four lower cervical roots (C5-C8) and the upper thoracic root (T1). It develops through the neck and axilla, ending in the upper extremity with peripheral nerves (mainly the axillary, musculocutaneous, radial, median and ulnar) which are responsible for the functionality, sensation and movement of the various joints. In other words, the brachial plexus is responsible for the proper functioning of the upper limb, with two exceptions: the trapezius muscle, which is innervated by the accessory nerve, and an area of skin adjacent to the axilla that is innervated by the intercostobrachial nerve.

During delivery, brachial plexus may be injured (**Figure 2**). We don't know what was going on in the mid-19th century, but today's statistics put the



Figure 1. Wilhelm as a child, October 1863.

incidence of obstetric paralysis at rates ranging from 0.63 to 2.6 (and sometimes up to 5) cases per 1,000 live births. The incidence remains constant nowadays, despite the improvement of obstetric techniques.

Predisposing factors are considered: macrosomia, multiple pregnancies, a previous similar development, heredity, diabetes mellitus, overweight of the newborn, as well as the projection with which the fetus descends into the uterus shortly before delivery.

We do not know exactly the way the British obstetrician chose to bring about the birth of young Wilhelm. However, we are convinced that the mechanism of injury to the brachial plexus can occur either by violent abduction and external rotation of the upper limb, or by a strong downward push of the shoulder, or by a combination of these during childbirth (Figure 3). When the damage concerns the upper roots (C5 and C6) it is called *Erb type palsy* and is sometimes combined with an injury of the C7 root.

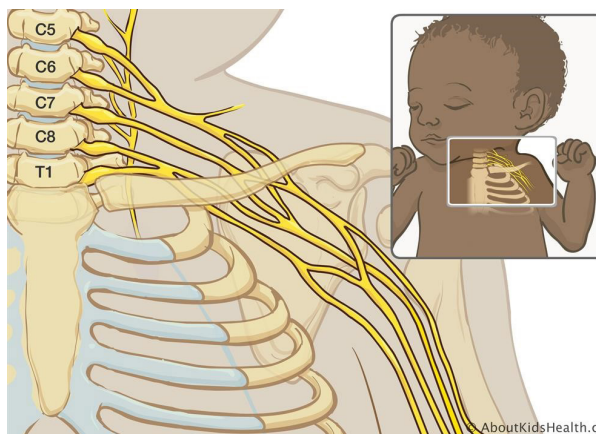


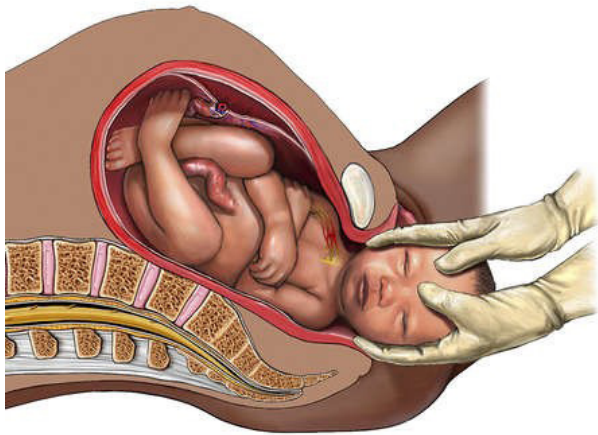
Figure 2. Schematically, the brachial plexus and its branches in the upper limb.

More rarely, when the damage affects all the roots (C5-T1) there is *total palsy*, while when it affects only the lower roots (C8 and T1) it is called *Klumpke type palsy*.

The brachial plexus palsy in Wilhelm's case was of the upper type (Erb) and this explains his inability to raise the shoulder or bend the elbow or turn the palm upwards. However, he was able to hold objects with the fingers of his left hand, such as his sword in official ceremonies. We must point out that -as then, so now- the mother is not responsible for the palsy. Likewise, the obstetrician and nursing staff are also not liable. And sometimes the severity of the damage is small (neuroapraxia), self-healing in 3-4 weeks, while sometimes it is severe (detachment of the roots in the spinal cord), where no automatic recovery is expected [4].

Kaiser Wilhelm B was unlucky because he was born at a time when electrophysiological testing, computed tomographic and magnetic myelography, i.e. the modern diagnostic methods that clearly approach the damage, had not yet been put to the service of Medical Science. Nor could, with the data of that time, his parents trust any of the surgical techniques that are currently applied with optimistic results. Tendon transfers have been replaced by brachial plexus repair, identification of the lesion, and repair with nerve grafts. Microsurgery techniques, in the hands of specialized surgeons, can now yield amazing results. Kaiser was not treated. Growth of





**Figure 3.** During normal childbirth, the brachial plexus is injured.

the left upper limb was delayed, remained short and progressively showed deformities and stiffness, both at the shoulder and at the elbow [5].

A relatively recent publication sheds new light on this issue, orienting the diagnosis in another direction. The study comes from Canada's *Lois Hole Hospital for Women* and is signed by Indian-origin Professor of Gynecology and Obstetrics Venu Jain and his colleagues. The authors evaluate a drop of Wilhelm's mother in the fourth month of pregnancy and note the deficit weight of the newborn. They claim that, on the occasion of the fall of the Empress Victoria, there was an arrest of the development of the fetus, due to detachment of the placenta. Then, relying on ultrasound measurements, they experimentally demonstrated that placental abruption usually impedes the blood flow directed to the left upper limb, and not to the right. They went even further, when they called the emperor's disability "Kaiser Wilhelm syndrome", replacing the older term, Erb's obstetric paralysis [6].

### The role of Wilhelm in affairs

After Ferdinand's assassination, Austria-Hungary ordered general mobilization, declaring war on Serbia and bombarding Belgrade on 28 July. Russia attacked on July 30, in response to Serbia's request to stand by as an ally and helper. The Kaiser's Germany was waiting for this occasion and not only proposed to Austria-Hungary its participation in



**Figure 4.** Kaiser and his generals, at the start of the Great War.

military operations for alleged revenge against Serbia, but had also promised full support. Then, with Russia's involvement, Germany responded by mobilizing against it without qualms. By intending to invade France, violated the neutrality of Belgium.

General mobilization caused the contending forces to be in a frenzy of excitement, ready to teach each other a lesson, hoping for a happy outcome and an end to the war before Christmas of that year. The illusions of a bohemian life promised by the carelessness of the *Belle Époque*, together with the leaps in science and technology that gave the assurance of a lasting peaceful future, removed the possibility of imminent struggle. And yet, a veritable domino of development eventually led to global conflict.

After all, things showed from before, the prevailing generalized instability. After Wilhelm assumed power, certain movements marked his pursuits, setting the stage for the upcoming events. When he took over the administration of his country, he was only 29 years old, and everyone in Germany believed that he would amend the Constitution and make the chancellor responsible to the Reichstag. The events belied the hopes. In March 1890, Wilhelm forced Bismarck to resign as chancellor. It is true that Bismarck was no longer the right man to solve the problems he had caused by the creation of the German Empire. The Kaiser's action would be justified if he had a concrete solution ready. His unstable temperament, however, soon led him to



Figure 5. Kaiser Wilhelm B between officers Hindenburg and Ludendorff.

abandon his vague plans for aid to the working classes, as soon as he met the first reactions of the Court. This event caused the displeasure of Russia, which hastened to ally with France in 1891.

The consecutive successions to the position of chancellor that followed, were aimed at drawing up a policy acceptable to both the Reichstag and the ruling classes, which ultimately was not achieved. The political changes required by the rapid industrialization of Germany were hardly promoted. When Bernhard von Bülow was sworn in as chancellor in 1900, he managed to divert attention elsewhere by crafting a truly fascinating foreign policy.

Great Britain was the country that first showed its anti-German sentiments. And was not wrong! Wilhelm sent a telegram in 1896 to South African Democracy president Paul Kruger to congratulate him on the crushing of the English-led Jameson Raid. The German Naval Acts passed in 1897 and 1900 challenged Great Britain's maritime empire. When, in 1904, the British Empire settled its differences with France, the Kaiser -at the suggestion of Bülow- challenged the following year in Tangier the position of France in Morocco, declaring Germany's support for the independence of this French colony.

In 1908, after a visit to England, Wilhelm caused a stir in Germany when he gave an interview to the newspaper "The Daily Telegraph", where he said that a large part of the German people harbored anti-British feelings! There were rumors that he had previously sent the text of the interview to Bülow



Figure 6. Kaiser Wilhelm B in his military uniform and medals.

for approval, but he had neglected to read it. This event reduced the Kaiser's role in public affairs and resulted in Bülow being replaced by Theobald von Bethmann Hollweg. Bethmann's efforts to come to an agreement with Great Britain failed. Great Britain would not promise neutrality in a war between Germany and France, except on the condition that Germany would limit her fleet. However, Wilhelm reacted (Figure 4).

In other cases again, he proved more prudent and less intransigent. In the Moroccan Crisis of 1911, Germany retreated on its own initiative. If he did the opposite and turned against France to support Morocco, France-German conflict would be inevitable. The foreign policy signed by Wilhelm also contributed to the partnership of the triple alliance between England, France and Russia, the famous *Entente Cordiale*, which he would find in front of him



*Figure 7. Wilhelm self-exiled in Holland.*

at the outbreak of the Great War in 1914.

### Events of Great War

The outbreak of the First World War found Germany ready for war and this was evident from the very first days of the fighting, especially on the West Front. German forces were confronted with those of France, Britain, Belgium and later the USA. The German war machine had enormous advantages. In 1915 it had superior firepower, particularly in howitzer and machine gun fire. The defensive positions were stronger and the army better trained. It even still possessed a large part of Belgium and the industrial regions of France, along with almost all the sources of iron and steel (**Figure 5**).

Germany missed its only chance of total victory in September 1914. The result was to engage in an unprecedented massacre. During the alternating phases of this devastation, the successes of one side or the other were the occupation of a few meters of ground, excavated from the craters of the eruptions. The trench warfare that followed, went down in history as a sad experience that everyone struggled to forget [7].

During 1916, the great battle of Verdun was raging and, for much of 1917, the British Army was hemorrhaging itself, aiming to demoralize the German army [8]. In 1917, the war with Russia ended with the capitulation of Tsar Nicholas II, which cost him his abdication in March and his assassination, along with his family, in November of the same year. But for the Germans, the main effect was that they were

able to throw into the West Front many of the divisions they had used on the East Front in yet another attempt to break through the English-French lines and capture Paris [9].

By the beginning of 1918, it was obvious that the German army was exhausted and the morale of the people had been undermined by the economic blockade. In the course of the war operations, the invention of new methods of exterminating the enemy was developed by both sides. Tanks were perfected. The plane, which the Wright brothers had built only a few years earlier, was first used as a reconnaissance and then to bomb the enemy. Naval aviation turned the navy into a fighting machine, with the construction of the first aircraft carriers and the first seaplanes. German submarines won the battle of the oceans by adopting unorthodox methods as they did not hesitate to torpedo merchant and passenger ships, which enraged the President of USA Woodrow Wilson. Poisonous gases also made their appearance in this war, to justify the immorality of human cruelty [10, 11].

For a few days in the spring of 1918, the easily impressed Kaiser thought that victory was near and triumph was approaching. But the allies had now recovered their courage. While supplies continued to arrive from the USA and the American divisions had already landed on European soil, the end was fast approaching and their victory was beginning to appear.

During the war, although he was nominally commander-in-chief, Wilhelm did not attempt to oppose his generals when they took over the conduct of it themselves. Instead of opposing, he encouraged the grandiose bloodthirsty aims of generals and politicians that precluded any possibility of compromise and peace. When in the fall of 1918 he realized that Germany had lost the war, he did not consider the loss of his throne as a possibility. Despite his initial refusal, he was finally forced to resign on 9 November when he was persuaded to seek asylum in Holland.

Events developed rapidly. At 11 am on the 11th of the 11th month (November) 1918, a ceasefire was ordered on the West Front, for the first time since 1914. Meanwhile, the Ottoman Empire, Austria-Hungary



and Bulgaria had collapsed, while Germany was left alone on the battlefield. Immediately after Wilhelm's departure for Holland, a democratic government was established in Germany with the socialist Friedrich Ebert as president. Ebert was supported by the military, who needed the socialists to deal with communist uprisings. In the end, the Germans accepted the armistice. They were obliged to surrender all their guns, planes and fleet, and withdraw to their borders (**Figure 6**).

The toll of the war was 8 million dead on the battlefields, while many more succumbed to their injuries, starvation and epidemics. When the German army returned home, President Ebert proclaimed that they had never been defeated. Thus was created, from the very beginning, the myth that Germany had been betrayed by its politicians and that its army was invincible. This was of course a myth, which would soon cause incalculable damage.

In the Hall of Mirrors at Versailles, the leaders of the victorious Entente Cordiale and the defeated Germany signed the famous treaty on June 28, 1919, exactly five full years after Ferdinand's assassination. Wilhelm was absent. According to the *Treaty of Versailles*, Germany was obliged to pay reparations of 226 billion gold marks for the damages it caused, reduce the strength of its army to 100,000 men and its fleet to 108,000 tons. Germany was also obliged to make large territorial concessions. In other words, lost nearly 75,000 square kilometers of its territory, translating to 7 million inhabitants, along with all its colonies. The country's rivers were internationalized, the Rhineland region was demilitarized for the next 15 years, German assets abroad were confiscated, and 90% of the German merchant fleet was handed over to the Allies in return for the damage done to Allied merchant ships during war. In conclusion, Germany was severely limited, both in matters of trade and in military forces and organization. We should not miss the fact that this treaty was one of the causes for the outbreak of the Second


World War, exactly twenty years later.

Wilhelm died in exile in 1941, after spending the last years of his life, as a peaceful landowner, in Doorn, Holland (**Figure 7**).

## Conclusions

The outbreak of the First World War was an initiative dictated by petty rivalries, the arrogance of military leaders and the delusions of an easy handling of political and economic disputes in the theater of operations. At the same time, it was signed by Wilhelm, a man with feelings of inferiority, which he struggled to compensate with decisions of greatness and universal supremacy. And while the war began as an attempt to save Austria-Hungary from collapse, it later turned into a world conflict with the blessings of the Kaiser's Germany. Wilhelm, having encouraged the Austrians to pursue an intransigent policy, was afraid when he foresaw the impending war, but he could not stop the mobilization which he had ordered his generals to prepare.

Kaiser often bluntly proclaimed that he was the man who made the decisions. The truth is that the German Constitution of 1871 gave some powers to the Kaiser. This explains the attitude of publicists and British journalists of that time who insisted on presenting him as the man who, more than anyone else, had decided to carry out the war. Nevertheless, over time, historians see Wilhelm as an accomplice rather than the main culprit.

Wilhelm, instead of foreseeing the danger of the inevitable conflicts and using his influence to restrain these appetites, strengthened them himself. Especially with his decision to create a battle-worthy German fleet that would make his homeland proud! Although nimble, well-intentioned and visionary, Wilhelm had the defect of going along with the general stream, rather than resisting and displaying insight and power of judgment [12]. 

## Conflict of interest

*The authors declared no conflicts of interest.*

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