

World leaders and Aphasia and Dysarthria following Cerebral Vascular Accident

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Abstract

We reported difficulty with encoding and decoding information, language/cognitive difficulties and speech difficulties, dysarthria, to examine whether this impacted components of political and policy context. Bibliographical and biographical review is used to determine neurological conditions and resulting aphasia as well as dysarthria. Five cases of brain damage were reported; Wilson, Churchill, Lenin, Engle, and Eisenhower. Aphasia and/or dysarthria were speculated in these leaders, but in varying degrees of severities. This evidence provides historic information focusing on communication impairment following focal brain damage, and can be used as a resource for further investigations. It is interesting that, in some cases, a person closest to the leaders served as stand-ins. This need for a proxy implied severe difficulty conveying the intended message. Further studies about the political figures' conditions and subsequent impairments could shed more light on an important aspect of the leaders' lives and provide direct links between their conditions and the sequence of historical events.

Keywords: political leaders, aphasia, dysarthria, political ramifications, stroke.

Introduction

Communication in politics is an important part of in creating social movements and achieving political goals. Diplomacy, debate and public speaking is crucial for a public figure, and so is the ability to express, comprehend and convey information. Basic communication and social skills play a crucial role in leader effectiveness and popularity (Riggio, Riggio, Salinas, & Cole, 2003). The importance of leaders sharing evaluations of data, actions and goals is vital to the job description (Tardan, Bourgeon, & Darses, 2016).

On the other hand, verbal communication following specific brain lesions can have important impact on speech expression, comprehension, memory or clarity, and attention. Hemispheric deficits are not only linked to communication impairments, but also directly affect cognitive styles including thought process disorders as well as implications for personality deficits (Mohr, Krummenacher, Landis, Sandor, Fathi, & Krugger, 2005). The most common verbal communication deficits following a neurological condition are aphasia and dysarthria. Aphasia includes disturbances in speech comprehension or production, as well as writing and reading impairment. On the other hand, dysarthria results from paralysis of the musculature mouth and face, which manifests itself as problems in speech intelligibility, but does not include language disorder. However, comorbidity of the two disorders is commonly reported (Kolb & Whishaw, 2009).

Both disorders create tremendous barriers to effective communication: people with aphasia encounter serious difficulties in conveying a message. Errors of global coherence make their discourse vague and ambiguous. In addition, narrative samples of individuals with aphasia are less informative than those of control participants (Galletto, Andreetta, Zettin, & Marini, 2013). Dysarthria severity can negatively influence the person's social participation, which may be due to the increased discomfort of the listener: reports of the listeners' comfort can be predicted by the severity of dysarthria, with moderate dysarthria causing significantly low comfort. However, in contrast to aphasia, the severity of dysarthria

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does not always affect the way information is exchanged (Guo & Togher, 2008).

In this paper, we examined aphasia and/or dysarthria following stroke for leaders and historical personalities. Historical trivia is important in that it asks the question: could history have been written differently if these leaders were not affected during their term in office by neurological problems? In retrospect, historical literature makes mention of these impairments and so in this article we collect any relevant mention of this symptomatology. Although the neurological impairment affects small number of leaders, the problem does exist, and in this work we try to untangle and define aphasia and/or dysarthria of a few historical public figures. It is likely that social ramifications following the impairment may be immense and hardly reversible, since leaders are still expected, but unable to tackle nation-wide and/or international problems. Although the article does not purport to examine the issue in a conclusive manner, it identifies the existence of the problem, in order to stimulate further research and discussion.

Methods

For the purposes of the study, bibliographic citations (starting from 1998 to 2015) were reviewed. Inclusion criteria included only political leaders, neurological impairment during time in office (e.g., stroke or brain tumor) and well documented speech (dysarthria) and language impairment (aphasia). We studied six biographies, and searched 16 medical historical studies. We came up with 26 cases, of which twenty-one were excluded, because neurological disease and or aphasia/dysarthric symptoms occurred at the end of or after their term in office (i.e., Ronald Reagan, whose symptoms of Alzheimer's disease were only obvious after his time in office as the 40th President of the United States). Military personalities (i.e., Mikhail Kutuzov, who had survived two head injuries, while serving as a Field Marshal of the Russian Empire, from 1759 to 1813) were excluded.

Thomas Woodrow Wilson

Thomas Woodrow Wilson served as the 28th President of the United States of America. He suffered four cerebrovascular accidents, and was diagnosed with atherosclerosis in 1915. Although he fully recovered from his first stroke in 1896, the second stroke in 1906 left him partially blinded in the left eye. Seven years later, he suffered a third embolic cerebrovascular accident that resulted in left arm weakness. Finally, he suffered a fourth embolic stroke in the right hemisphere after becoming president, in 1919, and days later, he developed

left hemiplegia (Owen, 2008; Menger, Storey, Guthikonda, Missios, Nanda, & Coper, 2015). It is said that he also developed left visual hemispatial neglect, anosognosia, and his speech became weak and blurred (Owen, 2008). Additionally, the last stroke altered his personality, resulting in paranoid symptoms. He became self-centered, suspicious, and judgmental (Davidson, Conor, & Schwartz, 2006; Owen, 2008). He died on February 3rd, 1924.

Winston Churchill

Winston Churchill was Prime Minister of the United Kingdom for the second time from 1951 to 1955. He had already suffered 2 cerebrovascular accidents before his time in office, and a third one in 1953. After the last cerebrovascular event, his speech became blurred, he demonstrated left arm weakness, and developed instability. In the next five days, his articulation deteriorated (Owen, 2008), which implies that there was a possibility of Churchill suffering from dysarthria. However, Addison (2005) does not refer to any communication disorder at all, and only reports that left hemiplegia was present.

Dwight Eisenhower

Dwight Eisenhower was the 34th President of the United States of America, from 1953 to 1961. He suffered a heart attack during his first period in office on 24th September, 1955, from which he recovered fully. Despite his condition, he announced that he would be running for President for a second time, and won the elections. During his second time in office, he suffered a mild ischemic cerebrovascular accident, which occurred on November 25th, 1957. The main symptoms included vertigo and right arm weakness. He also encountered difficulties speaking and finding the right words (Owen, 2008). Stephen Ambrose (1991, p.455) reports that when Eisenhower tried to speak, "words came out, but not the ones he wanted to say. Nor were they in any order that made sense". His speech problems were present throughout his life. Paraphasias were frequent when Eisenhower tried to pronounce long words, and his awareness about his speech deficits often frustrated him (Ambrose, 1991). According to these reports, it is most likely that expressive aphasia might have been present, since phonemic paraphasias and naming problems are commonly reported in expressive aphasia (Kurowski & Blumstein, 2016). Dwight Eisenhower suffered a series of heart attacks, and he succumbed to the last one in March, 1969 (Owen, 2008).

Vladimir Ilyich Ulyanov (alias Lenin)

Vladimir Lenin was Head of the Russian Government and the Soviet Union from 1917 to 1924. He suffered a series of strokes, with the first stroke occurring in May, 1922, and the other two occurring within a nine-month period. The etiology of the strokes is cerebral ischemia, due to extremely severe atherosclerosis. The strokes left him paralyzed and speech impaired, and he was severely incapacitated (Vinters, Lurie, & Mackowiak, 2013). More specifically, Lenin lost his ability to read and speak and also suffered right hemiparesis. His communication skills were limited to unintelligible sounds, and monosyllabic speech (e.g., "Here, here, here"), and the listeners were rarely able to understand what he was referring to. Even his public speeches became incoherent; he would repeat reading whole passages of texts without being aware of it (Service, 2000). Such reports are indicative of severe language impairment. Lenin's general incapacitation deteriorated over time. He died in January, 1924.

Clair Engle

Clair Engle was a senator for the state of California and the United States of America from 1958 to 1964, when Eisenhower, Kennedy and Johnson were President of the United States. Engle had no history of cerebrovascular disease. However, he was diagnosed in 1963 with a malignant brain tumor in the left hemisphere. He developed right hemiparesis and expressive aphasia. No report of dysarthric speech is mentioned; however, he was reported to be attending speech language therapy sessions during his time in office. The tumor was removed with a craniotomy, but his deficits remained (Son, 2015). He died on July 30th, 1964.

Discussion

With regard to communication impairments, as they reflect on world leaders who suffered neurological diseases during their time in office, evidence supports that President Wilson presented signs of neurocognitive and communication impairment. That was evident during World War I, when he was unable to convince Congress to ratify the League of Nations Covenant. A League of Nations, led by the United States, would have been a more effective organization, and would have done more to prevent World War II (Owen, 2008). His last stroke (which happened in 1919) incapacitated him so severely, that he isolated himself from the world, and his second wife, Edith Wilson, advocated for him. She was the only person that was allowed to see and speak to him besides his physicians. Although his wife Edith had

tried to speak on his behalf and help the United States during difficult times, she did not succeed in convincing the Senate that joining the League of Nations was important at the time. It was not until the end of World War II, that the United States joined the United Nations, the League of Nations' successor organization.

After Churchill's cerebrovascular accident, his life expectancy was short, and, although he eventually survived the stroke, he was unable to return in office for several weeks. His son-in-law, Christopher Soames, replaced him in secret. The concealment of his illness was carried out by R.A. Butler, who was then Chancellor of the Exchequer, and Lord Salisbury, who was then Lord President of the Council. The latter led the press to believe that the Prime Minister only needed some time to rest. Churchill did return in office, though, in the autumn of 1953 (Addison, 2005). He resigned on April 6th, 1955 and was succeeded by Anthony Eden, who was previously his Secretary of State for Foreign Affairs (Owen, 2008).

After his first craniotomy, Engle made no public appearances until November 1963. During that period, he underwent speech and physical therapy. In April 1964, he attempted to speak from the Senate floor, despite the severity of his language impairment. According to Son (2015), he merely uttered a vague sound, after a minute of silence. This incident underlines the serious impact of expressive aphasia on his term in office. However, despite his communication deficits, it was his vote that determined the Civil Rights Act of 1964, an important piece of legislation concerning equal rights for African Americans. After his second craniotomy in April 1964, he only appeared twice in the Senate and was confined to a wheelchair, yet he was present in the cloture¹ vote. Once the clerk called Engle's name, he lifted his crippled arm and pointed at his eye, implying "aye". This gesture was interpreted by the Senate as a yes vote. Indeed, Engle used gestures to make his vote count, an endeavor of historic significance, since the Civil Rights Act marginally passed by three votes (Son, 2015).

Eisenhower suffered a heart attack which later led to a stroke and subsequent language-related naming impairments. His ill health had considerable political repercussions, in that communication deficits created significant barriers in his public appearances and his efficient handling of national affairs. In the early period of his recovery from the cerebrovascular accident, Vice President Richard Nixon substituted Eisenhower in public appearances. Eisenhower gradually became short-tempered and tired, and gave people the impression that he was too old and sick to be the President of the United States (Ambrose, 1991).

¹ A procedure in the U.S. Senate to end debate and take a vote.

Cognizant of his health problems, he was concerned about who was to substitute him, if he became unable to complete his term in office. In 1957, he suggested the formation of a special committee that would examine the passing of the authority of the presidency to another individual, if the president was incapacitated and could not execute his duties. Eventually in 1967, the 25th Amendment was adopted, stipulating that the Vice President can replace the President, in case the latter is no longer able to stay in charge (Owen, 2008).

The strokes left Lenin severely incapacitated, and his speech restricted him from frequent public appearances. He was present, however, in the 4th Comintern Congress, on 13th November, 1922, and gave a speech that contained many incoherent passages and left him exhausted. After that speech, it was evident that Lenin needed to reduce his political activities for the sake of his health. Thus, Joseph Stalin, who was then General Secretary of the All-Russia Communist Party, took advantage of Lenin's incapacitation and continuously increased withdrawal from leadership, consolidated his position, and from 1927 on, handled national affairs as he pleased (Service, 2000). Had it not been for the rapid deterioration of his health, an entirely different, less totalitarian future might have been possible for the Soviets (Vinters, Lurie, & Mackowiak, 2013).

Conclusion

The overview of these cases demonstrates that aphasia and dysarthria were evident although they scarcely ever were cited explicitly in bibliographies. This evidence provides important historical information, in that it brings into focus the resulting communication impairment following strokes, and can be used as a resource for further investigations. It is interesting that in the case of Presidents Wilson and Eisenhower, as well as Prime Minister Churchill, a person close to the leaders was chosen to substitute them in public appearances and advocate for them. In these cases, difficulty conveying the intended message was evident through the leaders' need for proxies.

It is a subject open to discussion whether it was the impact of communication disorders alone, or if other co-existing neurological symptoms also affected leaders' decision making and their public image. In addition, there are few historical sources documenting leaders' communication and cognitive impairment. It is of great interest, nonetheless, to further investigate how these impairments affected leaders' careers. Concealing the leaders' condition was a common solution to prevent their public image from falling apart. Studies about the political figures' conditions and subsequent impairments

could shed more light on an important aspect of historical figures' lives and create a clearer notion about the sequence of historical events. Finally, another advantage of this overview is the gathering of various cases that differ in many ways from each other, but share an underlying neurological etiology, as well as resulting communication impairment. We suggest that further comparison could provide information on how leaders handled their impairment, and on the political consequences of the latter. It must be stated that the presented results stem from initial investigation of a particular sample of leaders. The wealth of historical biographies, articles, and books is an indication of the complexity of this field of work.

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