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## Do We Owe Our Life Expectancy To Dental Care (or To Dentistry)? Certainly-To Some Extent

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**Corresponding Author:**

Dr. Deepak Gupta,  
Anesthesiologist, Wayne State University, 48201 - United States of America

**Submitting Author:**

Dr. Deepak Gupta,  
Anesthesiologist, Wayne State University, 48201 - United States of America

**Other Authors:**

Dr. Anam Umar,  
Research Volunteer, Detroit Medical Center, Anesthesiology - United States of America  
Dr. Sarwan Kumar,  
Assistant Professor, Wayne State University, Internal Medicine - United States of America  
Dr. Shushovan Chakraborty,  
Assistant Professor, Wayne State University, Anesthesiology - United States of America

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# Do We Owe Our Life Expectancy To Dental Care (or To Dentistry)? Certainly-To Some Extent

**Author(s):** Gupta D, Umar A, Kumar S, Chakraborty S

## Abstract

Even in the 21st century, the United States (U.S.) health care law continues to endorse dental insurance coverage only as an option for adults and children, despite making health insurance coverage almost mandatory with provisions for penalty (fee) on the non-compliant. Our perspective's write-up wants to make the case why it may be the time for the U.S. health care lawmakers to seek inspirations from Japan, wherein the Japanese focus on the dental care might have contributed to why Japan consistently leads the world in regards to human life expectancy. Healthy natural dentition is directly related to the sustenance of healthier and longer lives, and this impact on human longevity may NOT have been highlighted often in the health promotion strategies for the dental care. It is never too late to initiate the dental health promotion campaigns which can highlight the importance of maintaining better tooth numbers as well as food mastication power (with natural teeth and/or well-fitted dental replacements) for our constant pursuit to live longer and healthier despite the constantly evolving dynamic milieu of our co-morbidities. In the end, although most of the times we do NOT realize, the undeniable contributions of dental care on our ever-increasing life-expectancy (and corresponding life-span) as a species, cannot be overlooked. At least, Japan as the world leader in human life-expectancy, is showing the way for other countries to follow.

## Perspective

The television series, *John Adams* (2008)<sup>[1]</sup>, can make you wonder how the United States (U.S.) Presidents' teeth have evolved over the last two hundred years or so from President George Washington's teeth troubles<sup>[2]</sup> being part of the 18th century American folklore as well as history, to the 21st century U.S. Presidential candidates' teeth analyses<sup>[3]</sup>. The timeline of dentistry's evolution<sup>[4]</sup> is correspondingly fascinating to read and ponder; however, even in the 21st century, the U.S. health care law continues to endorse dental insurance coverage only as an option for adults and children, despite making health insurance coverage almost mandatory with provisions for penalty (fee) on the

non-compliant<sup>[5]</sup>. It is interesting to understand the hesitation to mandate universal dental insurance coverage, wherein the dilemma among the policy-makers would be whether to mandate dental insurance coverage for all population and for everything, or to just ensure dental insurance coverage for all population without covering for everything (an interpretation of John Reid's words)<sup>[6]</sup>. Here forth, our perspective's write-up wants to make the case why it may be the time for the U.S. health care lawmakers to possibly seek inspirations from Japan, wherein the Japanese focus on the dental care<sup>[7]</sup> might have contributed to why Japan consistently leads the world in regards to human life expectancy<sup>[8]</sup>.

The explorations by the U.S. health care lawmakers shouldn't only be about the consistent accessibility to affordable dentistry that is only one specific avenue under the broader umbrella of dental care. Rather, the simplistic health promotion strategies that focus on the dental care behaviors (brushing)<sup>[9]</sup>, leisure habits (smoking-cessation)<sup>[9]</sup> and eating norms (high-quality diet)<sup>[9]</sup> with their corresponding positive effects on human life longevity (due to prevention of tooth loss) should also be prioritized among the mass awareness campaigns. The general population should be made aware about the evolving medical literature, wherein the stature of dental care is going beyond its intertwined patho-physiology with diabetes, respiratory diseases, cancer, cardiovascular diseases, metabolic syndrome and cerebro-vascular diseases, because the improved dental care is NOT limiting itself to the preventative-prognostic effects and quality-of-life outcomes among the patients suffering from the common, chronic and debilitating diseases<sup>[9]</sup>.

With the advances in dentistry, the natural teeth may seem replaceable and care for natural teeth may appear to be for "cosmetic" reasons only. However, healthy natural dentition is directly related to the sustenance of healthier and longer lives<sup>[9]</sup>, and this impact on human longevity may NOT have been highlighted often in the health promotion strategies for the dental care in the U.S. mass media. Comparatively, dental health promotion campaigns seem commonplace in Japan who themselves may NOT have realized at the conception and pioneering of 8020 campaign<sup>[7]</sup> that sustaining 20+ natural teeth till 80 years of age would NOT only make the ageing

populations' remaining lives healthier BUT also longer. It is never too late to initiate the dental health promotion campaigns based on the scientific evidence<sup>[9]</sup> which can highlight the importance of maintaining better tooth numbers as well as food mastication power (with natural teeth and/or well-fitted dental replacements) for our constant pursuit to live longer and healthier despite the constantly evolving dynamic milieu of our co-morbidities.

Coming back to the U.S. Presidents' dental health, sixty-eight percent of the U.S. Presidents whose deaths were due to the natural causes, had longer life spans than their retroactively estimated life spans, based on the general population data around their U.S. Presidency times<sup>[10]</sup>. This was in spite of the presumed stress related to the U.S. Presidency as "The Leader of The Free World", although this term was ONLY coined in the second-half of 20th century<sup>[11]</sup>. However, it is NOT clear whether the improvements in dental care (including dentistry) over the changed times have had any contributions to make longer life expectancies possible for the U.S. Presidents.

Delving further, into the evolution of life itself, the undeniable effects of dentition on the life expectancy may NOT only be limited to the human beings<sup>[12]</sup>. Arguably, the underexplored veterinary dental prostheses, with logical feasibility only for permanent dental implants as compared to poorly-fitting dentures with their probable potential for poorer mastication power, may open up the avenues for prolonging lives of even the wild animals. Who knows what the future holds in-store for the life itself in the "altruistic" human societies<sup>[13-14]</sup>, wherein the care for the extant or endangered species (domesticated and/or wild) may inspire further advancements in the veterinary dentistry<sup>[15-17]</sup> to improve the life expectancies of extant species and enhance the safety of endangered species.

In the end, although most of the times we do NOT realize, the undeniable contributions of dental care on our ever-increasing life-expectancy (and corresponding life-span) as a species, cannot be overlooked. At least, Japan as the world leader in human life-expectancy, is showing the way<sup>[18]</sup> for other countries to follow.

## References

1. IMDb.com John Adams  
<http://www.imdb.com/title/tt0472027/> Last accessed on September 10, 2016.
2. MountVernon.org The trouble with teeth  
<http://www.mountvernon.org/george-washington/the-man-the-myth/the-trouble-with-teeth/> Last accessed on September 10, 2016.
3. Upnewsy.com This Dentist Analyzed The Teeth Of The 2016 Presidential Candidates  
<http://upnewsy.com/dentist-analyzes-presidential-candidates-teeth> Last accessed on September 10, 2016.
4. ADA.org History of dentistry timeline  
<http://www.ada.org/en/about-the-ada/ada-history-and-presidents-of-the-ada/ada-history-of-dentistry-timeline> Last accessed on September 10, 2016.
5. HealthCare.gov Dental coverage in the Marketplace  
<https://www.healthcare.gov/coverage/dental-coverage/> Last accessed on September 10, 2016.
6. ColdRead.WordPress.com The healing of American by T.R. Reid  
<https://coldread.wordpress.com/2011/02/13/the-healing-of-american-by-t-r-reid/> Last accessed on September 10, 2016.
7. 8020zaidan.or.jp 8020 Promotion Foundation - Outline of its objective and Operations  
<http://8020zaidan.or.jp/english/index.html> Last accessed on September 10, 2016.
8. Wikipedia.org List of countries by life expectancy  
[https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_life\\_expectancy](https://en.wikipedia.org/wiki/List_of_countries_by_life_expectancy) Last accessed on September 10, 2016.
9. JDA.or.jp The current evidence of dental care and oral health for achieving healthy longevity in an aging society-2015  
<https://www.jda.or.jp/pdf/ebm2015En.pdf> Last accessed on September 10, 2016.
10. HealthLand.TIME.com Why American Presidents (and some Oscar winners) live longer  
<http://healthland.time.com/2011/12/07/why-american-presidents-and-some-oscar-winners-live-longer/> Last accessed on September 10, 2016.
11. Quora.com Why is the President of the United States of America sometimes referred to as the leader of the free world?  
<https://www.quora.com/Why-is-the-President-of-the-United-States-of-America-sometimes-referred-to-as-the-leader-of-the-free-world> Last accessed on September 10, 2016.
12. Quora.com How do animals maintain healthy teeth while never brushing them?  
<https://www.quora.com/How-do-animals-maintain-healthy-teeth-while-never-brushing-them> Last accessed on September 10, 2016.
13. FWS.gov Why do we care about endangered species in North Carolina?  
<https://www.fws.gov/nc-es/es/whocares.html> Last accessed on September 10, 2016.
14. BBC.com What is the point of saving endangered species?  
<http://www.bbc.com/earth/story/20150715-why-save-an-endangered-species> Last accessed on September 10, 2016.
15. TheVeterinaryDentist.com Zoo and Wildlife Animals also suffer from dental disease  
<http://www.theveterinarydentist.com/zoo-and-wildlife-dentistry.php> Last accessed on September 10, 2016.
16. PeterEmilyFoundation.org Welcome to The Peter

Emily International Veterinary Dental Foundation (PEIVDF) <http://www.peteremilyfoundation.org/>  
Last accessed on September 10, 2016.

17. NewYorker.com The Lion Dentist  
<http://www.newyorker.com/business/currency/the-lion-dentist> Last accessed on September 10, 2016.
18. WHO.int Tokyo Declaration on Dental Care and Oral Health for Healthy Longevity  
[http://www.who.int/oral\\_health/tokyodeclaration\\_final.pdf](http://www.who.int/oral_health/tokyodeclaration_final.pdf) Last accessed on September 10, 2016.