

# Japanese Medical and Nursing Students Ponder on Kissing: Post Publication Impressions of a 2014 Review

Sachi Sri Kantha<sup>1)</sup>, Yuri Matsui<sup>2)</sup>

## ABSTRACT

**Objective:** To find what freshman medical and nursing students in Japan, think about kissing behavior as practiced in Japan.

**Methods:** Freshman students who entered the medical and nursing curriculum (N = 37, with 12 men and 25 women) at a national university in 2015 were asked the question: 'Write your impressions and criticism to a published editorial 'Kissing behavior among Japanese' (*Internat Med J.*, 2014; 21: 374-375)

**Results:** Obtained results are summarized in two tables. Majority of the students expressed that kissing practices in Europe or America differs from the kissing behavior in Japan. Whereas kissing in public places are more common in Europe or America as a form of greeting, this is hardly seen in Japan because kissing is mainly considered as a gesture/signal of erotic love in Japan. Two female students raised a question and a concern related to kissing as a mode of transmission of AIDS disease. Another male student had humorously asked, "Aren't fellatio or cunnilingus, a kind of kissing?"

**Conclusion:** Among the 37 responses on kissing behavior of Japanese, we highlight two; (1) More researchers should research about kissing, not independently but collaboratively; (2) The risk of infections caused by kissing behavior has to be investigated. These suggestions have high relevance now due to the coronavirus disease – 2019 (COVID-19) lockdown experienced in Japan in 2020 and 2021.

## KEY WORDS

AIDS, HIV, love, movies, sex behavior, university students

## INTRODUCTION

*You must remember this, a kiss is still a kiss.  
A sigh is just a sigh; The fundamental things apply  
As time goes by.*

- Herman Hupfeld (1894-1931)

Kissing behavior presented in a Shochiku company movie *Hatachino Seishun* [Spring time at Twenty] for the first time in a Japanese movie 75 years ago (released on May 23, 1946) caused considerable sensation among the public. (Fig. 1) As Dower<sup>1)</sup> had recorded the impressions of the two actors who had participated in that scene, "What the actor Osaka Shiro mainly recalled of the great event was the taste of disinfectant, whereas the actress Ikuno Michiko staunchly proclaimed that she had simply closed her eyes and done her job." According to Kamei's description<sup>2)</sup>, there were conflicting views on how this kissing scene was shot in camera. It was either, Ikuno covered her lips with a piece of cellophane paper before kissing, or the two participants (Osaka and Ikuno) kissed through a sanitized piece of gauze soaked in hydrogen peroxide inconspicuously placed between their lips. Richie, a historian of Japanese movies, commented on this so-called 'first kiss' as, 'The press wrote nothing else. Was this kiss 'merely commercial or was it

'artistically motivated?' was this kiss 'hygienic'? Did it have a sexual motive/ and, was it 'Japanese or not?' No agreement was possible but a majority decided against its being hygienic."<sup>3)</sup>

Five decades later, when internet revolution (the physical network that spans the globe now)<sup>4)</sup> occurred in 1995, public kissing behavior in Japan raised a generational controversy<sup>5)</sup>. To chronicle this development, a short review on the kissing behavior of Japanese was published by the first author in 2014<sup>6)</sup>. As a sequel, we also published a study on humorous definitions on kissing by Japanese university students<sup>7)</sup>.

Between 2014 and now, few more studies on the kissing behavior of Japanese had appeared<sup>8,9)</sup>. Primary deficits in studies reporting sexuality surveys in Japan are anonymity and the adopted method of soliciting answers to a formal 'yes/no' question, without allowing the respondents to express their individual thoughts, doubts and intentions. To minimize this methodological deficits, we elicited written responses to the 2014 review<sup>6)</sup> from the university youths whose identities were known to the first author.

The objective of this study was to find what freshman medical and nursing students in Japan, think about kissing behavior as currently prevailing in Japan.

Received on May 27, 2021 and accepted on June 4, 2021

1) 2-2-8 Toyotama Kita, Nerima ku, Tokyo 176-0012, Japan

2) Toushin-cho 1 chome, 226, Obu City, Aichi ken 474-0073, Japan

Correspondence to: Sachi Sri Kantha

(e-mail: sachisrikantha53@gmail.com)

**Table 1: Impressions and/or Criticism of Men Students (N = 12)**

Student Code	Impressions and/or Criticism
015MM01	The keywords are very useful. The custom of kissing is not prevailing in Japan.
015MM02	This editorial says basically Japanese kissing behavior is different from foreign one. The reason of this difference is that kissing is not prevalent in Japanese culture. 'Seppun' is a word for kissing in Japanese but this term began to be used in the end of Edo period or Meiji period. Japanese are not accustomed to kissing behavior. We can notice the difference of kissing pattern in movies. In Japanese films, kissing behavior is shown when the story reached its climax, as a sign of love. But in foreign films, quantitatively more kissing behavior prevails. Japanese are not used to such kissing behavior; they are too shy to kiss others in daily life. This means that kissing is a very important thing for Japanese. The less they kiss, the more impressive the kiss become for them.
015MM03	First, I was surprised at the fact that there were no customs about kissing in Japan before Taisho period. Now, kissing is a widely known custom among Japanese. It did prevail during Heian era. During the Silent Movie era, kiss scenes were absent in Japanese movies, while foreign movies had. This indicates the custom and attitude of Japanese. Many Japanese thought that kissing was bad action or special action in that era. Such attitude still exist in Japan now, but the former (i.e., bad action) had disappeared now, as we infer from Asayama's survey results. The relationship between kissing and allergies is also noticed. But I can't believe this easily.
015MM04	Japanese are very shy about kissing. Compared to non-Japanese, they are more intend to think that kissing is bad. More researchers should study kissing behavior, not independently but collaboratively.
015MM05	I couldn't believe that those who lived in Showa period didn't have a general idea of kissing. I'm interested in how the idea of kissing spread in Japan. Now, many people consider kissing as the behavior of showing love, but I want to know what people thought when the idea of kissing had just entered into Japan.
015MM06	Focus of this review is very interesting. We usually think about kiss only in relation to make love. But in this review, the focus is different. I also think it is important to investigate the influence of kissing on disease. These days, kissing behavior is more common among young folks. Youth are influenced by movies, manga and other media. So, kissing behavior becomes a less important behavior compared to the past, and kissing frequency may increase. With this milieu, medical researchers should study the influence of kissing and if there are any harmful effects, must give warning. Kimata's studies need confirmation too.
015MM07	Kiss for Japanese is one of the endearments. For Europeans, kiss is a type of greeting. It is done among a family and the friends, and it's done willingly. But, for Japanese, kiss has deep meanings and it is often done by lovers. In Japan, people think that kiss shouldn't be done in public and kissing in public is not accepted, in front of surrounding people. So we can't see kissing in the street, but in Europe kissing on street is natural. It may be that Japanese mind the feeling of neighbors too much.
015MM08	Kissing was not unusual in Japan. I have heard that fellatio or cunnilingus are used by prostitutes, especially for elderly customers. Aren't fellatio or cunnilingus, a kind of kissing? The book ' <i>Edo no kahanshinjijou</i> ' 江戸の下半身事情, authored by Nagai Yoshio 永井義男 gives good information.
015MM09	The kissing culture existed in Japan before. It became increased due to prominence of importing. The bias cannot be eliminated from collected data. Information on sexuality behavior collected by others aren't always precise. As such, I also think the consideration of bias is necessary.
015MM10	First, I haven't thought that kissing behavior is important for medicine. Based on scientific reports, this editorial seems more accurate. But, your editorial is based on scientific reports or web. Secondly, it may be good to plan a minor study. Thirdly, if Japanese cultural history reports are included, this review would have been more attractive.
015MM11	I was surprised to learn that in old days, even if a man had coitus with a woman, they didn't kiss. But now, it is natural that kiss is considered the means of love or liking. Japanese have to consider the merits and demerits of kiss. However, Japanese people didn't have such a custom. In old days, the administrators never understood the importance of sexuality. They simply ignored. Belatedly, The tide is changing now; for example, lesson about AIDS is introduced in school recently. This is good progress.
015MN01	Kissing behavior is very important. Kissing behavior is more and more formal among Japanese. It may increase disease. We should think of its importance. I can't kiss in public, though I feel it is very exciting.

## PARTICIPANTS AND METHODS

Freshman students to the medical and nursing curriculum (N = 37, with 12 men and 25 women, age range 18-19 yr.) at a national university of Japan were given a home work question: 'Write your impressions and criticism to a published editorial 'Kissing behavior among Japanese'.<sup>6)</sup> The composition of the study population was Japanese natives. Solicited answers were analyzed for expressed views. Subscribing to the precedence set for ethnographic and qualitative studies on sexuality themes<sup>10-13)</sup>, statistical analysis was avoided.

## RESULTS

Majority of the students expressed that kissing practices in Europe or America differs from the kissing behavior in Japan. Whereas kissing in public places are more common in Europe or America as a form of

greeting, this is hardly seen in Japan because kissing is mainly considered as a gesture or signal of erotic love in Japan. Other points specifically mentioned by few include, (1) Japanese are shy, and many consider public exhibition of kissing as shameful behavior. (2) But, such old fashioned beliefs are changing currently, due to the influence of 'foreign' movies and international travel of younger generation of Japanese. (3) Though foreign observers had recorded the absence of kissing among Japanese natives, this may be misleading. The existence of Japanese word *seppun* (接吻) was cited and it's prevalence in the Heian period 11th century novel of *Genji Monogatari* (源氏物語) by a court lady in waiting Murasaki Shikibu. Abridged responses of men and women students are presented in Tables 1 and 2 respectively.

Two female students raised either a question or a concern related to kissing as a mode of transmission of AIDS disease. The question raised by student [015MF01] was, "Is AIDS a kissing disease? I've read that AIDS is not infectious by kissing." (Table 2). The concern of student [015NF16] was, "Mononucleosis and AIDS will spread certainly, if kiss becomes one of the routes of transmission." (Table 2)

A necessity to confirm Kimata's studies<sup>14,15)</sup> on the merit of kissing in

**Table 2: Impressions and/or Criticism of Women Students (N = 25)**

Student Code	Impressions and/or Criticism
015MF01	It was impressive for me that kissing behavior among Japanese has a short history. We can see kissing on TV between a mother and her child or lovers, and don't feel unpleasant about this now. Although almost all Japanese don't kiss in public, as kissing had become established firmly in our society, we have to know about the risk of infection caused by kissing behavior. We also need to do more to teach teenagers about this. Additionally, people allergic to food must know about kiss-induced allergy. It is very dangerous for a girl with nuts-allergy to kiss with a guy who eats bread with peanut butter. Now, a question — is AIDS a kissing disease? I've read that AIDS is not infectious by kissing.
015MF02	Kissing behavior shows love. The 2 <sup>nd</sup> World War affected the thinking of Japanese about kissing behavior. The experience of kissing express sexual love among Japanese in many cases. What Japanese think about expression of love is different from what Americans or Europeans think about it. Japanese need not change their thought. If they like kissing behavior, they may do it.
015MF03	I'm surprised that kissing scenes in Japanese movies were introduced only after the 2 <sup>nd</sup> World War. 'Seppun', the Japanese word of kiss, prevails in love stories such as <i>Genji Monogatari</i> written in the Heian period.
015NF01	It is love. When man and woman love each other, they kiss. Kiss is proof of the love.
015NF02	Kissing is very important to communicate affection directly. However Japanese are more shy than other foreigners. And Japanese are very serious. So, kissing behavior didn't spread in Japan. These days, thanks to movies and primary experience of younger Japanese traveling abroad for studies, new Japanese behavior is being established. This is a good thing. Kimata had reported that kissing behavior effective some disease. If this is true, I wish kissing behavior to spread more.
015NF03	Kissing behavior among Japanese is a special thing. Because Japanese don't have a custom to kiss by greetings in everyday life. Japanese have a feeling of resistance or the feeling being embarrassed. I have hardly seen that people kiss other than television or movie. Therefore lovers and parents to young child perform the kiss for a Japanese; I think that is special thing.
015NF04	Japanese don't want to kiss in front of someone, because they are shy and not used to kiss. If someone kiss in public, we feel surprised at this expressed behavior and many think 'Are they foreigners?' When I visited Hawaii, I saw foreigners kissing, but I wasn't surprised. It looked common. So, it depend on country environment.
015NF05	People [still] don't have correct knowledge. Kissing is an action by lovers. In Japan, public kissing is a shameful act; but in foreign countries, they kiss too much. Kiss may cure allergy, but permits exchange of bacteria in mouth. Sanitary wise, kiss may be bad.
015NF06	Many Japanese are shy. So, they hate kissing in public.
015NF07	People in foreign countries use kiss as not only as a love expression, but also for greeting. But Japanese think it only as a love expression. Kissing behavior is not a daily habit for Japanese. They should become generous with kissing behavior, because it's an effective means to build friendship. It's useful to convey one's feelings.
015NF08	Among Japanese kissing behavior expresses love. However, kissing behavior among foreigners express greeting. As such, Japanese can't almost kiss on the streets.
015NF09	Kissing behavior among Japanese is very modest. Kissing is treated as a greeting in foreign countries, but it differs in Japan. A kissing act is an expression of affection among couples in Japan. Two persons kissing at public is rare in Japan. I like the modesty of Japanese for kisses.
015NF10	Kissing behavior among Japanese is more modest than that among America. A kiss is a greeting in America. But, a kiss in Japan is generally shared between lovers and thought as embarrassing in public. It is not good to be too embarrassed.
015NF11	Kissing behavior among Japanese is love expression. Japanese don't kiss family members or friends. Rather they kiss their boyfriends or girlfriends. Kissing behavior for foreigners include, both greeting and expression of love. Japanese are very shy. So they don't kiss in public. If I see a couple who kiss in public, I come to think they are not shy.
015NF12	Kissing behavior is good thing as part of greeting. It gives physical contact with other party. Then it becomes easier to approach. But I'm puzzled if kissing behavior is adopted by Japanese, it may conflict with Japanese lifestyle.
015NF13	Kiss is proof of love. Love gives reassurance to me. When I'm depressed, if someone hugs me and hear my thoughts, I'm relieved. When I feel that someone thinks of me, I think that I've been loved.
015NF14	Japanese do not have the habit of kissing, as a greeting. When we talk with others, we keep a certain distance. We permit only lover to be closer to our face. Conversely, if his face is tilted downwards, I feel unpleasant.
015NF15	Japanese have shy character. So they can't express their affection by means of action. Kissing behavior tends to be misunderstood by Japanese. But globally people accept kissing behavior in various places, because they don't think kissing behavior is anything to be ashamed of. So, I seldom criticize it.
015NF16	I didn't know that there is no concept of kissing in Japan before Meiji era. 'Seppun' is one of the Japanese words for kissing. I had expected that 'seppun' was used hundreds years ago. Mononucleosis and AIDS will spread certainly, if kiss becomes one of the routes of transmission.
015NF17	Japanese are reluctant to kiss. However, recently Japanese culture has been westernized. Now, some kiss friends. I have not kissed a friend. It is said that kissing behavior has positive effect of pain relief, like morphine. But I don't know the truth.
015NF18	Kiss is surely an important means to express love. My impression of Japanese kissing behavior is it's moderation. We may kiss less number of times, than in a foreign country. There are persons who kiss a lot, and persons who don't kiss. I have heard that a kiss has relaxation effect. However, I don't think that it is bad if we have few kisses.
015NF19	Most Japanese don't want to kiss in public. We think that it is embarrassing to kiss. But those in other countries are not ashamed to kiss in public. This cultural difference is not strange, but natural. Japanese should kiss in public too. Kissing is love affection. So it's not embarrassing. Generally, Japanese are not good in expressing love. But it's very difficult for many, because we are too concerned about what people think of us. That the day Japanese kiss in public will not be so far.

Table 2 (contd.)

015NF20	I understand Japanese don't kiss compared to foreigners. I think Japanese don't have culture of kissing in public for a long time. But recently, young people tend to prefer foreign cultures. So, for young people there is no resistance to kiss, compared with adults.
015NF21	Kissing behavior is an important action to indicate love. I was surprised that Japanese in the past didn't know the meaning of kissing.
015NF22	Kiss is good thing. Foreigners kiss beautifully, when I watch in movies. But I hardly see Japanese kissing in the street. Japanese think that kiss is embarrassing. For foreigners, kiss is a greeting.

**Table 3: HIV transmission by oral sex in a cohort of seronegative Homosexual Men\***

Patient	Insertive Fellatio	Receptive fellatio	Swallowing sperm	"Deep kissing"
1	+	+	-	+
2	+	+	+	+
3	+	-	-	-
4	+	+	+	+
5	+	-	-	-

\*adopted from Rozenbaum *et al.*<sup>25</sup>

preventing allergic conditions was also observed by a male student [015MM06]. However a female student [015NF02] naively assumed the validity of Kimata's finding by noting, "Kimata had reported that kissing behavior is effective in preventing some disease. If this is true, I wish kissing behavior to spread more. A quirky question of another male student [015MM08] was, "Aren't fellatio or cunnilingus, a kind of kissing?" (Table 1)

## DISCUSSION

By happenstance, among the student sample studied, we had a 1:2 ratio between males and females. This was related to the prevailing enrollment pattern seen in Japanese universities, where those in the nursing curriculum were predominantly women and those chosen for medical studies were vice versa. Almost one third among the women students expressed the identical view that 'Kiss is proof of love' or its variants like 'a kissing act is an expression of affection among couples'. As we had inferred in our previous study<sup>7)</sup> on the humorous definitions on kissing, one can assert that Peder Syv (1631-1702), a Danish poet and philologist, might have anticipated the transformation of kiss in Japan into an invitation for coitus with his quip, "*she who permits a kiss also permits more; and he who has access to kisses also access to more.*"<sup>16)</sup>

Overall, from the positive responses made by the students on the contents of the review, we were encouraged that it had served its primary goal as an educational document on the history of kissing behavior in Japan. Among the 37 responses collected, we endorse three expressed views by the students;

- (1) Compared to foreigners, kissing is a very important thing for Japanese. The less they kiss, the more impressive the kiss become (Table 1 – 015MM02)
- (2) More researchers should research about kissing, not independently but collaboratively. (Table 1 – 015MM04)
- (3) The risk of infections caused by kissing behavior has to be investigated. (Table 2 – 015MF01)

Especially, views 2 and 3 mentioned above have relevancy due to the coronavirus disease 2019 (COVID-19) lockdown experienced in Japan in 2020 and 2021.

It has been reported that transmission of human immunodeficiency virus (HIV) by kissing do not occur<sup>17-20)</sup>. Though conclusive evidence is conflicting, Habte *et al.*<sup>21)</sup> had shown that carbohydrate moieties of the salivary mucins may trap or aggregate the virus and prevent host cell entry. While infectivity of saliva for HIV may be negative, the infectivity of blood is not in doubt<sup>22-29)</sup>, and it is theoretically possible for transmission of HIV during deep kissing and oral sex. Table 3 presents the



**Figure 1: First Japanese movie *Hatachino Seishun* (1946), which showed a kissing scene of a couple.**

findings of a study in a cohort of seronegative homosexual men reported by Rozenbaum *et al.*<sup>25)</sup> from the Infectious and Tropical Unit of Claude Bernard Hospital, Paris, France. Three among the 5 patients who practiced 'deep kissing' had HIV transmitted via oral route. Khajotia and Lee<sup>29)</sup> reported a case of a 20 year old man who indulged in deep kissing with a nightclub prostitute and having HIV transmitted through saliva via lip bite. As such, caution expressed by Kay for open-mouth kissing deserves emphasis. To quote,

*"During open mouthed kissing the juxtaposition of teeth and delicate vascular oral and glossal mucous membranes carries the risk of mucosal injury and bleeding for both partners. In addition, oral lesions, such as herpes labialis, aphthous ulcers, gingivitis, and even tooth brush abrasions, must expose capillaries and are all very common. It there seems likely that open mouthed kissing may transmit HIV."*<sup>24)</sup>

The difficulty lies in defining scientifically, what is 'deep kissing/ open mouthed kissing' or 'passionate kissing'.<sup>9)</sup>

Limitations of this study include, (1) convenience sampling with limited number of subjects, (2) cross sectional design with single time frame for sample collection. (3) Lack of statistical analysis. Nevertheless, based on the common sense dictum that 'one doesn't have to drink a bucket to check whether sea water is salty; a sip would suffice.' we infer that the findings of this study may be generalized for this age cohort of young Japanese.

## CONCLUSION

Among 37 responses on kissing behavior of Japanese, we highlight two; (1) More researchers should research about kissing, not independently but collaboratively; (2) The risk of infections caused by kissing behavior has to be investigated. These suggestions have high relevance now due to the coronavirus disease – 2019 (COVID-19) lockdown experienced in Japan in 2020 and 2021<sup>30)</sup>.

## ACKNOWLEDGMENTS

This study was conducted when both authors were affiliated to the Gifu University, Gifu City; first author as an associate professor and second author as a student. We thank the 2015 entrants to the Faculty of Medicine of this university for their participation.

## REFERENCES

- Dower JW. *Embracing Defeat: Japan in the Wake of World War II*, W.W. Norton & Co, New York, 1999, pp. 150-151.
- Kamei S. The kiss and Japanese culture after World War II. *Comp Literature Stud.*, 1981; 18(2): 114-123.
- Richie D. *A Lateral View: Essays on Contemporary Japan*, Japan Times Ltd., Tokyo, 1987, pp. 190-194.
- Goldsmith M, Jackson T. *Eyewitness Computer*, Dorling Kindersley Ltd., London, 2011, p. 45.
- Tanikawa M. Japan's young couples discover the kiss. *New York Times*, May 25, 1995. p. 39. *Japan's Young Couples Discover the Kiss - The New York Times (nytimes.com)* [accessed May 12, 2021]
- Sri Kantha S. Kissing behavior among Japanese. *Internat Med J.*, 2014; 21(4): 374-375.
- Sri Kantha S, Matsui Y. 'Kiss is magic medicine': A study on humorous definitions on kissing by Japanese university students. *Internat Med J.*, 2020; 27(4): 454-458.
- Kobayashi J. Have Japanese people become asexual? Love in Japan. *Internat J Jpn Sociol.*, 2017; 26(1): 13-22.
- Hirayama M. Developments in information technology and the sexual depression of Japanese youth since 2000. *Internat J Sociol Leisure*, 2019; 2: 95-119.
- Meischke H. Implicit sexual portrayals in the movies: Interpretations of young women. *J Sex Res.*, 1995; 32(1): 29-36.
- Hofberg K, Brockington I. Tokophobia: an unreasoning dread of childbirth – a series of 26 cases. *Brit J Psychiat.*, 2000; 176: 83-85.
- Farrer J, Tsuchiya H, Bagrowicz B. Emotional expression of tsukiau dating relationships in Japan. *J Soc Personal Relationships*, 2008; 25(1): 169-188.
- Castro-Vazquez G. Assisted reproductive technologies in contemporary Japan: Experiences and perceptions of some Japanese mothers. *Gender Technol. Devt.*, 2015; 19(3): 271-291.
- Kimata H. Kissing reduces allergic wheat responses and plasma neurotrophin levels. *Physiol Behav.*, 2003; 80: 395-398.
- Kimata H. Kissing selectively decreased allergen specific IgE production in atopic patients. *J Psychosomat Res.*, 2006; 60: 545-547.
- Nyrop C. *The Kiss and Its History*, translated from Danish by W.F. Harvey, Singing Tree Press, Detroit, 1968 (originally published by Sands & Co, London, 1901).
- Smith JWG. HIV transmitted by sexual intercourse but not by kissing. *Brit Med J.*, 1987; 294: 446-447.
- Woolley RJ. The biologic possibility of HIV transmission during passionate kissing. *J Amer Med Assoc.*, 1989; 262: 2230.
- Marzill TJ. The biologic possibility of HIV transmission during passionate kissing. *J Amer Med Assoc.*, 1989; 262: 2230.
- Duteil C, de La Rocherbrochard E, Piron P, Segouin C, Troude P. What do patients consulting in a free sexual health center know about HIV transmission and post-exposure prophylaxis? *BMC Public Health*, 2021; 21: 494. <https://doi.org/10.1186/s12889-021-10547-9>.
- Habte HH, Mall AS, de Beer C, Lotz ZE, Kahn D. The role of crude human saliva and purified salivary MUC5B and MUC7 mucins in the inhibition of human deficiency virus type I in an inhibition assay. *Virology J.*, 2006; 3: 99.
- Seale J. HIV transmitted by kissing. *Brit Med J.*, 1987; 294: 705-706.
- Monckton C. HIV transmitted by kissing. *Brit Med J.*, 1987; 294: 706.
- Kay LA. HIV transmitted by kissing. *Brit Med J.*, 1987; 294: 706.
- Rosenbaum W, Gharakhanian S, Cardon B, Duval E, Couland JP. HIV transmission by oral sex. *Lancet*, 1988; 1: 1395.
- Spitzer PG, Weiner NJ. Transmission of HIV infection from a woman to a man by oral sex. *New Engl J Med.*, 1989; 320: 251.
- Piazza M, Chirianni A, Picciotto L, Guadagnino V, Orlando R, Cataldo T. Passionate kissing and microlesions of the oral mucosa: possible role in AIDS transmission. *J Amer Med Assoc.*, 1989; 261: 244-245.
- Piazza M, Chirianni A, Picciotto L, Guadagnino V, Orlando R, Cataldo T. The biologic possibility of HIV transmission during passionate kissing - reply. *J Amer Med Assoc.*, 1989; 262: 2231.
- Khajotia RR, Lee E. Transmission of human immunodeficiency virus through saliva after a lip bite. *Arch Intern Med.*, 1997; 157: 1901.
- Suppasri A, Kitamura M, Tsukada H, Boret SP, Pescaroli G, Onoda Y, Imamura F, Alexander D, Leelavat N, Syamsidik. Perceptions of the COVID-19 pandemic in Japan with respect to cultural, information, disaster and social issues. *Prog Disaster Sci.*, 2021; 10: 100158. <http://dx.doi.org/10.1016/j.pdisas.2021.100158>.