

Selfies: A boon or bane?

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ABSTRACT

Background: Selfie deaths have become an emerging problem and we performed this study to assess the epidemiology of selfie-related deaths across the globe. **Subject and Methods:** We performed a comprehensive search for keywords such as “selfie deaths; selfie accidents; selfie mortality; self photography deaths; koolfie deaths; mobile death/accidents” from news reports to gather information regarding selfie deaths. **Results:** From October 2011 to November 2017, there have been 259 deaths while clicking selfies in 137 incidents. The mean age was 22.94 years. About 72.5% of the total deaths occurred in males and 27.5% in females. The highest number of incidents and selfie-deaths has been reported in India followed by Russia, United States, and Pakistan. Drowning, transport, and fall form the topmost reasons for deaths caused by selfies. We also classified reasons for deaths due to selfie as risky behavior or non-risky behavior. Risky behavior caused more deaths and incidents due to selfies than non-risky behavior. The number of deaths in females is less due to risky behavior than non-risky behavior while it is approximately three times in males. **Conclusion:** “No selfie zones” areas should be declared across tourist areas especially places such as water bodies, mountain peaks, and over tall buildings to decrease the incidence of selfie-related deaths.

Keywords: Mortality, no selfie zone, risky, selfie

Introduction

Selfie is a recent phenomenon and was named as the word of the year 2013 by Oxford Dictionary.^[1] It is described as a photograph that a person takes of himself (or group) typically using a smartphone likely for the purpose of sharing in social media. Google estimated that 24 billion selfies were uploaded to Google photos in 2015.^[2] About 1 million selfies are clicked per day in 18- to 24-year-old demographic. Pew research centers have found that around 55% of millennials have posted a selfie on social media services.^[3]

Technology has also promoted the phenomenon of “selfie.” There are sites sharing information on “how to have a perfect selfie” and “different poses for selfie.” New terms have been introduced such as koolfie, restaurantfie, musciefie, dentisfie, and

many more. Introduction of “selfie sticks” and “selfie shoe” have enhanced obsession among people for selfies.^[4] These days the choice of smart phones is based on their selfie picture quality. In addition, there are certain events held at school or college level that promotes “selfies” like the “best selfie” prize.

Clicking selfies and sharing them on social media has become a mode of self-expression. People sometimes portray themselves amidst dangerous settings^[5,6] so as to gain attention on social media sites. In some cases, this has had fatal consequences. The first time Google search engine got a request for “selfie deaths” in January 2014, when the death of a Lebanese became the tragic viral sensation after being killed by a car bomb moments after posing for a selfie.^[7] Selfies are never reported as an official cause of death. It is believed that selfie deaths are underreported and the true problem needs to be addressed. For example, certain road accidents while posing for selfies are reported as death due to Road Traffic Accident. Thus, the true magnitude of problem is underestimated. It is therefore important to assess the true burden, causes, and reasons for selfie deaths so that appropriate interventions can be made.

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Previous studies have taken data from Wikipedia and Twitter images, which may underestimate the true number of selfie deaths. Our study incorporates the records from news reports, thus we were able to get a wider range of information related to selfie deaths.

Objectives

The objective of this article is to study the epidemiology of selfie-related deaths across the globe.

Methodology

Selfie-related death was defined as any accidental death that occurs while doing self-photography or clicking selfies. Initially, we made an exhaustive list of the English newspapers of various countries using Wikipedia or Ministry of broadcasting of respective countries. We performed a Google search for keywords such as “selfie deaths; selfie accidents; selfie mortality; self photography deaths; koofie deaths; mobile death/accidents.” The web link addresses of the news from search results were cross-matched with the web links of list of prepared English newspapers of various countries. The results that did not match were excluded from the study.

Inclusion criteria

1. Incidents of selfie-related deaths reported in news in English Language
2. The news report links that matched with the list of prepared English newspapers.

Exclusion criteria

1. Selfie deaths/mortality was differentiated from deaths due to mobile phones. For example, if a person died while using mobile phone, he was excluded from study. Only deaths while clicking selfies have been considered
2. The news reports in language other than English
3. Duplicates were identified based on date and time of event, location of event, age, and gender of victim. The duplicates identified were removed from the study
4. The news reports that contained statistical articles regarding selfies, opinions regarding selfie deaths, or further research on selfie deaths were excluded from the study.

Results

We report a comprehensive analysis of selfie-related deaths. From October 2011 to November 2017, there have been 259 deaths while clicking selfies in 137 incidents. There have been 3 selfie-related deaths reported in 2011; 2 in 2013; 13 in 2014; 50 in 2015; 98 and 93, respectively, in 2016 and 2017. In one incident with 48 casualties, we were unable to obtain data regarding their age and gender. The mean age was 22.94 years with range from 10 to 68 years. About 72.5% (153) of the total deaths occurred in males and 27.5% in females. Considering agewise distribution, about 50% (106) of total selfie deaths occurred in 20–29 year age group followed by 36% deaths in 10–19 year age group [Figure 1].

Highest number of incidents and selfie-deaths has been reported in India accounting for approximately 50% of total reported followed by Russia, the United States, and Pakistan [Figure 2]. Except India, the ratio of casualties to incidents is approximately 1, whereas it is double in India.

The causes of selfie deaths along with the respective deaths and incident cases have been elicited in Table 1. Drowning, transport, and fall form the topmost three reasons for deaths caused by selfies. The most common drowning incidents include washed away by waves on beach, capsizing of boats while rowing, clicking selfies on shore while not knowing how to swim, or ignoring warnings. Similarly, for transport, it is majorly the accidents due to clicking in front of a running train. Among all the reasons for death, drowning and fire have the highest deaths/incident ratio. Also, most of the selfie-related deaths because of firearms occurred in the United States.

We also classified reasons for deaths due to selfie as risky behavior or non-risky behavior [Figure 3]. The incident where it is quite evident that the person took risk to click selfie and lost her life has been classified as risky. For example, getting to a slippery edge of a cliff to click selfie has been marked risky while getting hit by a sea wave on a calm sea and drowning has been marked non-risky. In case of ambiguity (for example, slipping from stairs and getting injured and finally succumbing), a survey was conducted with 15 respondents and majority vote was taken to classify into one of the classes. Risky behavior caused more deaths and incidents due to selfies than non-risky behavior. Our study has shown that the number of deaths in females is less due to risky behavior than non-risky behavior while it is approximately three times in males. Figure 4 is a tree map demonstrating the risky and non-risky behavior in males and females.

Discussion

Taking selfies is considered to be a mode of self-expression in today’s generation like looking in a mirror. Selfies are well popular among Facebook, Twitter, Instagram, and Pinterest users. It is rewarding for individuals seeing the number of likes and positive comments and this further influences them to post unique pictures which may also involve indulging in risky behavior to click selfies.^[8]

Our study reports 259 deaths due to selfie deaths in 137 incidents. A significant number of cases are not reported

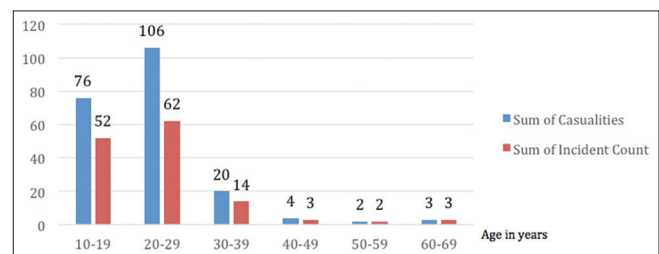


Figure 1: Age wise distribution of selfie deaths

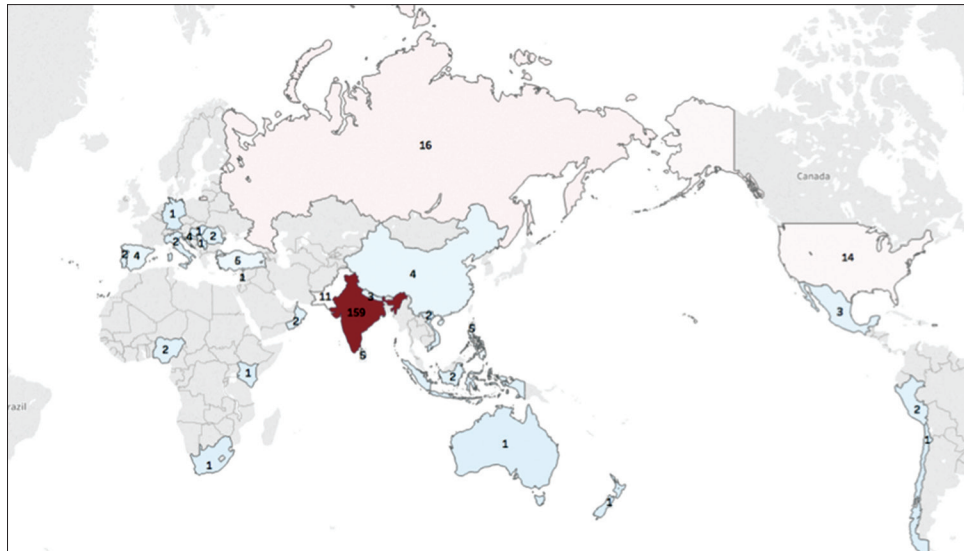


Figure 2: Distribution of selfie deaths country wise

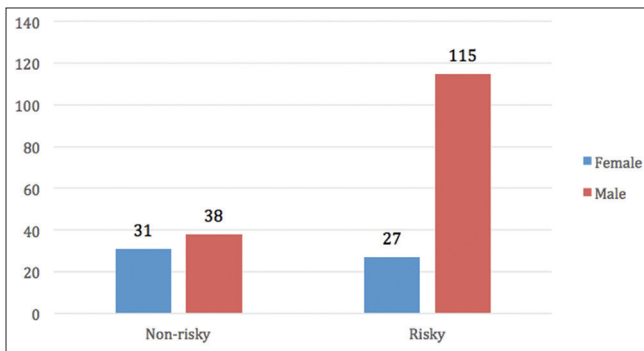


Figure 3: Risky and non-risky distribution of selfie deaths gender wise

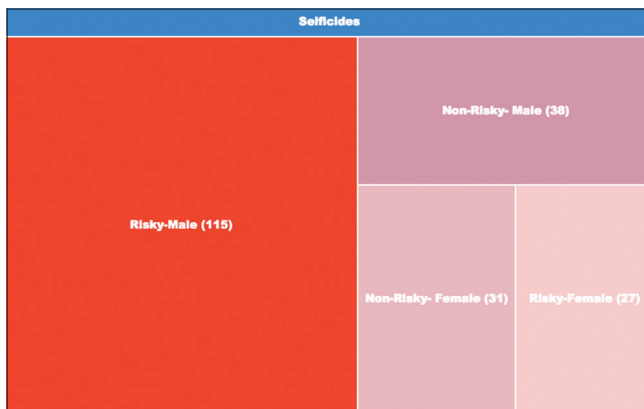


Figure 4: Tree map showing selficides in males and females

in developing countries, which will also trickle down to selfie-related deaths since these countries grab a major chunk in overall numbers.

There has been an exponential increase in the number of selfie deaths from 2014–2015 to 2016–2017. This is because of increased usage of mobile phones, enhanced selfie features on mobile phones, increased availability of selfie sticks, and also

Table 1: Causes of selfie-related death

| Cause of selfie death | Sum of mortality | Sum of incident count |
|-----------------------|------------------|-----------------------|
| Animal | 8 | 7 |
| Drowned | 70 | 32 |
| Electrocution | 16 | 13 |
| Fall | 48 | 41 |
| Fire | 48 | 1 |
| Firearm | 11 | 11 |
| Other | 7 | 4 |
| Transport | 51 | 28 |
| Total | 259 | 137 |

promotion of the phenomenon of selfies through events like “best selfie prize.”

About three-fourth of selfie deaths occurred in males. A project called selficity^[9] has established that women take more selfies as compared to men. But because men are more likely to take risk to click selfie as compared to women, it justifies the higher number of deaths and incidents for men.

Overall, the total number of casualties and incidents is high for 10–19 and 20–29 age group, highest for latter. Then, it decreases as the age range goes up. It is expected because people tend to be less adventurous as they age. This is evident from the fact that the reasons for casualties in higher age range are animal/fall unlike electrocution/drowning/firearms and so on in younger age group.

Drowning and fire have the highest deaths/incidents ratio among all reasons because most of the times the other person who dies in incident is the one who actually got into trouble while clicking selfies. Interestingly, most of the selfie deaths due to firearms occurred in the United States, which could be due to less restrictive gun laws in the region.

India has the highest number of selfie-related deaths. One reason that partially accounts for such high share is the world's largest young (age ≤ 30 years) population residing in India, the age group that has the highest number of deaths due to selfies. Also, our study has shown that the ratio of deaths to incidents is almost double in India, whereas in other countries incidents approximate the number of deaths. This unique feature could be attributed to the reason that trend of group selfies is more prevalent in India as compared to other countries.

Selfies take a toll on a large number of adolescents.^[7] There have been certain measures taken to reduce selfie deaths such as declaration of certain areas as “No selfie zones.” In Mumbai, 16 areas have been declared as “no selfie zones.”^[10] In Indonesia, administrative officials are preparing a safe selfie spot for foreigners and tourists at Mt. Merapi taking into consideration the risk of selfie deaths.^[11] In Russia, there are boards and slogans displaying not to take selfies in particular risky condition that could endanger life.^[12] Lamba *et al.*^[13] are working on developing an application that will be able to identify when someone is taking a selfie at dangerous situation and thus alert him or her to the possible risk to life. This is based on analyzing the location service and identifying a risky and unsafe location.

Although our study has enlisted the largest number of selfie deaths and incidents till date, this is just the tip of iceberg. Many cases are not reported. The limitation of our study was that we included news reports only in English language. Therefore, news reports in local language have been missed. There is no reporting of cases as selfie-related deaths in India. Thus, certain deaths due to selfies may be reported as road traffic accidents or others, which leads to underreporting of a large number of cases.

Large-scale use of phone and time-to-time up gradation of phone features have led to increased selfie deaths. Usually the youth and tourists are frequently affected because of the desire of “being cool,” posting photos on social media, and getting rewards in forms of likes and comments. Selfies are themselves not harmful, but the human behavior that accompanies selfies is dangerous. Individuals need to be educated regarding certain risky behaviors and risky places where selfies should not be taken. “No selfie zones” areas should be declared across many tourist areas specially places such as water bodies, mountain peaks, and over tall buildings to decrease the incidence of selfie-related deaths.

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Conflicts of interest

There are no conflicts of interest.

References

1. Word of the Year 2013 | Oxford Dictionaries. Oxford Dictionaries | English. Available from: <https://www.en.oxforddictionaries.com/word-of-the-year/word-of-the-year-2013>. [Last accessed on 2018 Jan 28].
2. Google Photos: One year, 200 million users, and a whole lot of selfies. Google. 2016. Available from: <http://www.blog.google:443/products/photos/google-photos-one-year-200-million/>. [Last cited on 2017 Dec 23].
3. Taylor P. More than half of Millennials have shared a “selfie”. Pew Research Center. 2014. Available from: <http://www.pewresearch.org/fact-tank/2014/03/04/more-than-half-of-millennials-have-shared-a-selfie/>. [Last cited on 2018 Jan 28].
4. Che J. “Selfie Shoes” are exactly what they sound like. Huffington Post [Internet]. 2015 Apr 1. Available from: https://www.huffingtonpost.com/2015/04/01/selfie-shoe-arent-real-but-wow_n_6979478.html. [Last cited on 2018 Jan 18].
5. Bhogesh S, John JR, Tripathy S. Death in a flash: Selfie and the lack of self-awareness. *J Travel Med* 2016;23.
6. Flaherty GT, Choi J. The “selfie” phenomenon: Reducing the risk of harm while using smartphones during international travel. *J Travel Med* 2016;23.
7. Selfie-related deaths on the rise | Time. Available from: <http://www.time.com/4257429/selfie-deaths/>. [Last Cited on 2018 Jan 28].
8. selficity. selficity. Available from: <http://www.selficity.net/>. [Last Cited on 2018 Jan 28].
9. Kim E, Lee J-A, Sung Y, Choi SM. Predicting selfie-posting behavior on social networking sites: An extension of theory of planned behavior. *Comput Hum Behav* 2016;62:116-23.
10. Mumbai police identify 16 no-selfie zones after drowning | World news | The Guardian. . Available from: <https://www.theguardian.com/world/2016/jan/12/mumbai-police-identify-16-no-selfie-zones-after-drowning>. [Last Cited on 2018 Jan 18]
11. Mt. Merapi to prepare selfie spot for visitors - National - The Jakarta Post. Available from: <http://www.thejakartapost.com/news/2015/06/18/mt-merapi-prepare-selfie-spot-visitors.html>. [Last Cited on 2018 Jan 28].
12. “A selfie with a weapon kills”: Russia launches campaign urging photo safety | World news | The Guardian. Available from: <https://www.theguardian.com/world/2015/jul/07/a-selfie-with-a-weapon-kills-russia-launches-safe-selfie-campaign>. [Last Cited on 2018 Jan 28].
13. Lamba H, Bharadhwaj V, Vachher M, Agarwal D, Arora M, Kumaraguru P. Me, myself and my killfie: Characterizing and preventing selfie deaths. arXiv: 161101911 [cs]. 2016 Nov 7 Available from: <http://www.arxiv.org/abs/1611.01911>. [Last cited on 2018 Jan 28].