

SUICIDE RATE AMONG THE COUNTRIES FROM 1985-2015

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ABSTRACT

The objective of this paper is to present the time trend of suicide rate among people aged from 15 to 54 among all countries over the period 1985–2015. Data on suicide rate in 1985–2015 were provided by the World Health Organization (WHO). The trends of population, gender and age specific suicide rates were examined using a Naïve Bayes model. The mean number of completed suicides for each country during 1985–2015 was calculated. Findings the overall suicide rate decreased significantly over the past decade, but rates in young males and older adults did not reduce and in fact increased among older adults in both men and women towards the end of the study period. For 1985–2015, 34 % of all suicides occurred between 35-54 years aged people due to various reasons such as serious health issues and economic consequences. The estimated mean national suicide rate was slightly higher for males than females.

Keywords: suicide rate, WHO, Naive Bayes.

1. INTRODUCTION

It is simple for an efficient nation to gauge mortality, including injury mortality, however diagnosing suicide additionally incorporates deciding the segment of expectation, which makes it progressively hard to have unequivocal statistical data. Given the size suicide mortality and the long periods of potential life lost, it is unquestionably worth to find out however much about it as could be expected attempting to defeat the requirements. Suicide is an individual demonstration however once information are amassed on a nation level the progressions from year-to-year are genuinely little, there are generally no extraordinary changes. It is enticing to express that the best indicator of the suicide rate in the present moment is simply the past suicide rate. Notwithstanding, in the more extended run huge changes can occur and in reality have occurred. There are not that numerous distributions that endeavor to break down the measurements of finished suicides in the entire world. The principle purposes behind that are presumably the lacks in the accessibility and unwavering quality of information. In 1989 Diekstra [1] distributed suicide rates in 62 nations regarding breaking down socio-segment patterns proposing logical hypotheses for global contrasts. Because of political changes during the previous 20 years the quantity of nations answering to the European area of the WHO has developed almost considerably. In 1999 Schmidtke et al. [2] gave an update about suicide rates on the planet and mirrored this change. The principle improvement in information had been in Europe. In 2002 Bertolote and Fleischmann [3] included improved material from the WHO to make forecasts about points of view of discoveries in an article about the worldwide viewpoint of suicide mortality in 2009 [4]. Looking back it appears that endeavors to give information about injury mortality were ventured up impressively from 1985. Injury mortality incorporates mishaps, suicides, murders, passings of unsure expectation and war-related passings. Reza et al. distribution [5] and Krug's report about brutality and wellbeing on the planet [6] archived the new methodology. While a great deal of information about injury mortality on the planet is as yet

missing or is of sketchy quality and as indicated by Rao of the WHO in 2005 just 33% of the world's nations have total common enlistment frameworks that yield sufficient reason explicit mortality information for wellbeing policymaking and observing [7], the enhancements for a long time back have been obvious—more nations report information and overall assessments are routinely made. The point of the investigation is to give a review about the current status of suicidemortality on the planet by sexual orientation and age, to gauge its extent among passing from all causes and wounds, and feature the most significant patterns over recent decades.

2. METHOD

The WHO incorporates practically all nations that are represented to in the United Nations however there are numerous that don't report the injury mortality insights. Current information were accessible for 145 nations, which was simply above portion of all. Mathers, himself of the WHO, has in 2005 condemned nations for ordering poor crucial enrollment insights [8]. In any case, there was no better overall database for dissecting suicide and in this way this was picked as the main source. The WHO utilizes definitions in understanding to ICD-10 part XX to quantify injury mortality, including suicide as a different analytic classification. While it was compensating to utilize national level sources to pick up understanding into some extraordinary cases, it was considered out of the extent of this article to research explanations behind contrasts between different sources and perhaps at the same time deluding to introduce various arrangements of information for a similar timespans. All things considered, two datasets were associated with the investigation. The first was set up by the WHO to cover all reasons for death and augment consideration of nations. Information were assessed by a comparable procedure expanding on populace and all-cause mortality evaluates, and is portrayed at [9]. The WHO part nations are assembled into six geographic areas: Africa, Americas, Eastern Mediterranean, Europe (counting Russia), South-East Asia, and Western Pacific (counting China, Japan). Total numbers were accessible in the WHO database. Extents of suicides among all injury passings and suicide paces of various age-bunches were registered just as the male-female rate proportions. The second dataset was gathered by the WHO from singular nations into the WHO Mortality Database to augment exactness of really estimated suicide mortality information and attempt to accomplish similarity across nations. A review of most recent accessible information is introduced at [10] The WHO information about sexual orientation explicit suicide rates and complete numbers, which were accessible nation by-nation, were arranged into a general table where nations were positioned by the most recent absolute suicide rate. Male-female suicide rate proportions were figured. Pattern investigation was led for all nations.

3. AGE GROUP COMPARISON FOR BOTH MALE AND FEMALE(1985)

From the below analysis, in the year 1985, it was stated that Australia engaged 1st place in suicide rate among all groups of people. comparatively, 40% of Male(35-54) attempted suicide due to various reasons and Belgium occupied 1st place in Female suicide(21%).In Belgium, compare to all other ages 25-34 years Female attempted suicide. In Singapore, 13% of the youth attained suicide and in Thailand suicide rate among 35-54 was 11%.

Table 1:1985-suicide/100k population (Male/Female)

country	1985-suicides/ 100k pop(Male&Female)					
	15-24	25-34	35-54	15-24	25-34	35-54
Australia	23.23	27.48	40.15	5.02	7.8	5.29
Republic of Korea	15.36	18.11	39.04	6.39	6.14	7.14
Ireland	15.27	18.73	21.71	4.43	6.8	0.99
Belgium	14.06	31.6	21.55	10.48	20.72	4.43
Japan	13.05	23.41	21.07	9.82	14.38	5.87
Ecuador	11.36	11.46	16.75	5.16	2.17	6.46
Chile	10.73	12.67	14.48	1.98	3.19	2.22
Thailand	10.1	11.04	13.89	6	4.79	10.67
Singapore	10.07	18.54	12.41	13.12	9.47	9.87
Puerto Rico	8.71	18.24	12.37	2.99	2.21	0.89
Argentina	6.46	7.92	11.12	2.97	4.23	2.93
Spain	5.28	8.07	10.34	2.2	3.83	1.35
Italy	5.22	9.08	9.43	2.69	5.11	1.3
Israel	5.16	8.33	8.43	3.39	4.6	2.02
Brazil	4.78	7.35	8.23	2.49	2.43	2.04
Greece	4.51	5.86	7.37	2.65	2.64	1.8
Panama	4.29	8.93	6.57	1.88	0.55	1.75
Malta	4.13	0	6.04	0	0	0
Bahrain	0	10.36	0	0	3.72	0
Grenada	0	0	0	0	0	0

4. AGE GROUP COMPARISON FOR BOTH MALE AND FEMALE(2015)

Following 20 years, the examination has been taken since 1985 and it was expressed that Republic of Korea drew in 1st place in suicide rate among all gatherings of people(both male and female). Contrast with adolescents 17% of female(25-34 and 35-54) endeavored suicide because of different reasons and Japan involved 1st place in male suicide(23%). In Argentina, 13% of the young accomplished suicide.

5. ANALYSIS OF MALE SUICIDE RATE (1985-2015)

In 1985, Australia possesses 1st place among all age group of male individuals, yet following 20 years after the fact, Argentina involves 1st place among youngsters(19%), Japan involves the equivalent among 25-34 years male(28%) and Republic of Korea involves the same among 35-54 years male (49%) and the percentage of rate has been widely reduced.

Table 1:1985-suicide/100k population (Male/Female)

1985-2015-suicides/100k pop(Male)						
country	15-24	25-34	35-54	15-24	25-34	35-54
Australia	23.23	27.48	40.15	17.46	24	29.97
Republic of Korea	15.36	18.11	39.04	11.76	27.65	42.8
Belgium	14.06	31.6	21.55	13.84	22.09	33.74
Japan	13.05	23.41	21.07	17.92	28.38	31.54
Ecuador	11.36	11.46	16.75	15.68	14.31	11.18
Chile	10.73	12.67	14.48	15.99	21.04	21.14
Thailand	10.1	11.04	13.89	6.54	13.6	14.67
Singapore	10.07	18.54	12.41	7.37	11.1	13.03
Puerto Rico	8.71	18.24	12.37	3.18	10	15.97
Argentina	6.46	7.92	11.12	18.74	14.31	12.25
Spain	5.28	8.07	10.34	4.77	8.32	13.44
Italy	5.22	9.08	9.43	5.27	7.85	11.5
Israel	5.16	8.33	8.43	5.43	7.68	9.74
Brazil	4.78	7.35	8.23	7.91	10.76	6.23
Greece	4.51	5.86	7.37	3.56	6.87	9.43
Panama	4.29	8.93	6.57	4.73	8.48	5.24
Malta	4.13	0	6.04	7.2	24.11	15.62
Bahrain	0	10.36	0	0	0	0
Grenada	0	0	0	0	0	0

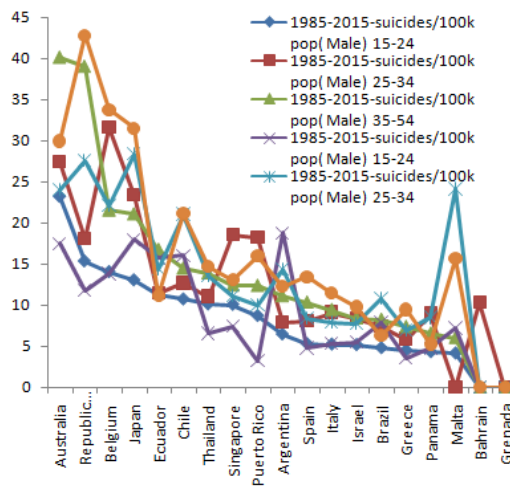


Figure 1:1985-2015-suicide/100k population(Male)

6. ANALYSIS OF FEMALE SUICIDE RATE (1985-2015)

From 1985-2015, it has been seen that the suicide rate in Australia expanded to 2% (15-24)years youth, 4% among 35-54 years female and diminished to 1% among 25-34 years female. Be that as it may, in Korea the pace of self destruction expanded to multiple times among 25-34 years and multiple times among 35-54 years male .Singapore had 13% among 15-24 years yet after 20years it has been diminished to 6%.

Table 1:1985-suicide/100k population(Male/Female)

1985-2015-suicides/100k pop(Female)						
country	15-24	25-34	35-54	15-24	25-34	35-54
Australia	5.02	7.8	5.29	7.21	6.81	9.18
Republic of Korea	6.39	6.14	7.14	7.97	17.06	16.46
Belgium	10.48	20.72	0.99	3.23	6.2	14.4
Japan	9.82	14.38	4.43	7.07	10.36	11.91
Ecuador	5.16	2.17	5.87	7.6	4.36	2.45
Chile	1.98	3.19	6.46	4.76	4.85	5.59
Thailand	6	4.79	2.22	1.19	2.01	3.41
Singapore	13.12	9.47	10.67	6.02	6.18	5.71
Puerto Rico	2.99	2.21	9.87	0.73	1.89	1.36
Argentina	2.97	4.23	0.89	4.51	3.52	3.13
Spain	2.2	3.83	2.93	2.16	2.29	4.87
Italy	2.69	5.11	1.35	1.18	1.89	3.41
Israel	3.39	4.6	1.3	1.3	2.23	2.07
Brazil	2.49	2.43	2.02	2.33	2.66	3.2
Greece	2.65	2.64	2.04	0.55	2.56	2.21
Panama	1.88	0.55	1.8	2.44	1.33	0.8
Malta	0	0	1.75	3.91	3.27	5.44
Bahrain	0	3.72	0	0	0	0
Grenada	0	0	0	0	0	0

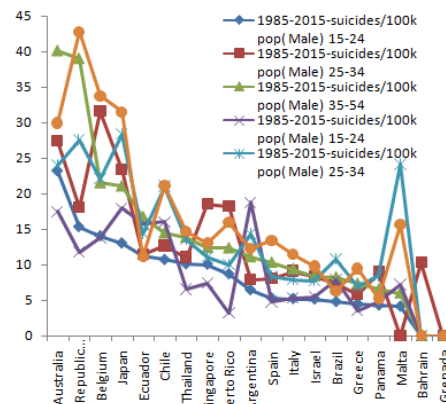


Figure 2: 1985-2015-suicide/100k population(Female)

7. CONCLUSION

The WHO has put forth courageous attempts to improve the revealing of injury mortality and subsequently information about suicide from more than 145 nations are presently accessible just as current assessments for the entire world. Examination shows that during the most recent 20 years the core of the issue of suicide mortality has moved from Western Europe to Eastern Europe and now is by all accounts moving to Asia. Japan and Belgium are the greatest supporters to the quantity of suicides in the world, while South Korea has encountered enormous development of the suicide rate during the past decade.

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