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HSCI 190

19TH of October 2022

Observing Data Assignment

Strategy for Obtaining Data/Intro:

This study illustrates Covid-19 deaths counts per week during a 20-week period - from the weeks of July 25, 2021, to July 23, 2022, in Ontario, Canada. This data was obtained from Public Health Ontario website1 – COVID-19 weekly death counts with corresponding week frame in Ontario were collected and analyzed using SPSS output.

The level of measurement is scale (interval) data seen the number of deaths and weeks are presented numerically (they are numerical measurements) and there is a true 0. The sampling strategy was non-random as samples specifically from Ontario, Canada from the weeks of July 25, 2021, to July 23, 2022, were selected. This was due to personal interest as I live in this province, and this was a period of time where Covid was prevalent within this city.

Website: <https://www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-data-tool?tab=trends>

|  |  |
| --- | --- |
| **Week of Death** | **Number of Deaths** |
| 1 | 36 |
| 2 | 26 |
| 3 | 39 |
| 4 | 49 |
| 5 | 43 |
| 6 | 53 |
| 7 | 84 |
| 8 | 178 |
| 9 | 330 |
| 10 | 437 |
| 11 | 423 |
| 12 | 347 |
| 13 | 215 |
| 14 | 164 |
| 15 | 118 |
| 16 | 84 |
| 17 | 60 |
| 18 | 60 |
| 19 | 54 |
| 20 | 57 |

*Table 1: Covid-19 deaths counts per week for a 20-week period - from the week* July 25, 2021, to July 23, 2022*, in Ontario, Canada.*

*Figure 1: A line graph illustrating Covid-19 deaths counts per week for a 52-week period - from the weeks of November 14th, 2021, to April 02, 2022, in Ontario, Canada.*

Explain the findings:

|  |  |  |
| --- | --- | --- |
|  | Weak of Death | Number of Deaths |
| Mean | 26.5 | 83.56 |
| Median | 26.5 | 48.50 |
| Mode | 1 | 60.00 |
| Standard Deviation | 15.15 | 98.31 |
| Range | 51.00 | 426.00 |
| Interquartile Range | 26.5 | 59 |

This study explored covid-19 deaths during a 52-week period from the week of July 25, 2021, to July 23, 2022, in Ontario, Canada; there were 52 observations included in this study.

The average number of deaths (illustrated by the mean) throughout the 52-week period was 84 deaths with a standard deviation of 98 deaths (mean = 83.56; SD = 98.31).

The average number of deaths (illustrated by the median) throughout the 52-week period was 49 deaths with an interquartile range of 59 deaths (median = 49; IQR = 59).

The median number of weeks was 26.5 (median = 26.5; IQR = 26.5) and the median number of deaths was 49 (median = 48.50; IQR = 59).

A line graph was chosen as it can adequately represent the relationship between the two scale variables: weeks and number of deaths. Each point on the x-axis, has a corresponding y-axis and each point represents an observation.

Outliers Section

* [Put in work and show there was no outliers]