Analysis

2025-03-20

R Markdown

```
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
  [1] "Income Data Columns:"
   [1] "Neighb ID"
##
##
   [2] "Neighbourhood Name"
##
   [3] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) Total - Population
    [4] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT"
   [5] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT (%)"
##
   [6] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) Total - Population
##
   [7] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(0-17
    [8] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(0-17
   [9] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) Total - Population
## [10] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(0-5)
## [11] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(0-5)
  [12] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) Total - Population
  [13] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(18-6-
  [14] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(18-6-
  [15] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) Total - Population
## [16] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(65+
## [17] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME CUT-OFFS - AFTER-TAX (LICO-AT) In LICO-AT \n(65+)
## [18] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) Total - Population t
## [19] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT"
## [20] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT (%)"
  [21] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) Total - Population t
## [22] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(0-17 yr
## [23] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(0-17 yr
  [24] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) Total - Population t
## [25] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(0-5 yrs
## [26] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(0-5 yrs
  [27] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) Total - Population t
  [28] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(18-64 y)
  [29] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(18-64 y.
## [30] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) Total - Population t
## [31] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(65+ yrs
```

[32] "POPULATION IN LOW-INCOME BASED ON LOW-INCOME MEASURE - AFTER-TAX (LIM-AT) In LIM-AT \n(65+ yrs

```
## [1] "Diabetes Data Columns:"
    [1] "Neighb ID"
    [2] "Neighbourhood Name"
##
    [3] "# of people with Diabetes 2021/22 ±, All Ages 20+ Male"
##
    [4] "# of people with Diabetes 2021/22 ±, All Ages 20+ Female"
##
    [5] "# of people with Diabetes 2021/22 ±, All Ages 20+ Total"
##
    [6] "Total Population 2023 (RPDB) a, All Ages 20+ Male"
    [7] "Total Population 2023 (RPDB) a, All Ages 20+ Female"
##
   [8] "Total Population 2023 (RPDB) a, All Ages 20+ Total"
##
  [9] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ Male"
## [10] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ Female"
## [11] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ Total"
       "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ Rate Ratio**, Total"
## [12]
\#\# [13] "Age-Standardized \dag rate (/100) of Diabetes 2021/22, All Ages 20+ H/ L/ NS, Total"
## [14] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Male"
## [15] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Male"
## [16] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Female"
## [17] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Female"
## [18] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Total"
## [19] "Age-Standardized † rate (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Total"
## [20] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ Male"
## [21] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ Female"
## [22] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ Total"
## [23] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ Rate Ratio**, Total"
## [24] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ H/ L/ NS, Total"
## [25] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Male"
## [26] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Male"
## [27] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Female"
## [28] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Female"
## [29] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) LL, Total"
## [30] "Prevalence (/100) of Diabetes 2021/22, All Ages 20+ (95% CI) UL, Total"
## [31] "# of people with Diabetes 2021/22 \pm, Age 20-44 Male"
## [32] "# of people with Diabetes 2021/22 ±, Age 20-44 Female"
## [33] "# of people with Diabetes 2021/22 ±, Age 20-44 Total"
## [34] "Total Population 2023 (RPDB) ^{\rm a}, Age 20-44 Male"
## [35] "Total Population 2023 (RPDB) a, Age 20-44 Female"
## [36] "Total Population 2023 (RPDB) a, Age 20-44 Total"
## [37] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 Male"
## [38] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 Female"
## [39] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 Total"
## [40] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 Rate Ratio**, Total"
## [41] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 H/ L/ NS, Total"
## [42] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) LL, Male"
## [43] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) UL, Male"
## [44] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) LL, Female"
## [45] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) UL, Female"
## [46] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) LL, Total"
## [47] "Prevalence (/100) of Diabetes 2021/22, Age 20-44 (95% CI) UL, Total"
## [48] "# of people with Diabetes 2021/22 \pm, Age 45-64 Male"
## [49] "# of people with Diabetes 2021/22 ±, Age 45-64 Female"
## [50] "# of people with Diabetes 2021/22 \pm, Age 45-64 Total"
## [51] "Total Population 2023 (RPDB) a, Age 45-64 Male"
## [52] "Total Population 2023 (RPDB) a, Age 45-64 Female"
```

```
## [53] "Total Population 2023 (RPDB) a, Age 45-64 Total"
## [54] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 Male"
## [55] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 Female"
## [56] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 Total"
## [57] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 Rate Ratio**, Total"
## [58] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 H/ L/ NS, Total"
## [59] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) LL, Male"
## [60] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) UL, Male"
## [61] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) LL, Female"
## [62] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) UL, Female"
## [63] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) LL, Total"
## [64] "Prevalence (/100) of Diabetes 2021/22, Age 45-64 (95% CI) UL, Total"
## [65] "# of people with Diabetes 2021/22 \pm, Age 65+ Male"
## [66] "# of people with Diabetes 2021/22 ±, Age 65+ Female"
## [67] "# of people with Diabetes 2021/22 \pm, Age 65+ Total"
## [68] "Total Population 2023 (RPDB) a, Age 65+ Male"
## [69] "Total Population 2023 (RPDB) a, Age 65+ Female"
## [70] "Total Population 2023 (RPDB) a, Age 65+ Total"
## [71] "Prevalence (/100) of Diabetes 2021/22, Age 65+ Male"
## [72] "Prevalence (/100) of Diabetes 2021/22, Age 65+ Female"
## [73] "Prevalence (/100) of Diabetes 2021/22, Age 65+ Total"
## [74] "Prevalence (/100) of Diabetes 2021/22, Age 65+ Rate Ratio**, Total"
## [75] "Prevalence (/100) of Diabetes 2021/22, Age 65+ H/ L/ NS, Total"
## [76] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) LL, Male"
## [77] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) UL, Male"
## [78] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) LL, Female"
## [79] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) UL, Female"
## [80] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) LL, Total"
## [81] "Prevalence (/100) of Diabetes 2021/22, Age 65+ (95% CI) UL, Total"
## Warning: Using an external vector in selections was deprecated in tidyselect 1.1.0.
## i Please use `all_of()` or `any_of()` instead.
##
     # Was:
     data %>% select(neighbourhood_column_income)
##
##
##
     # Now:
     data %>% select(all_of(neighbourhood_column_income))
##
## See <https://tidyselect.r-lib.org/reference/faq-external-vector.html>.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last lifecycle warnings()` to see where this warning was
## generated.
## Warning: Using an external vector in selections was deprecated in tidyselect 1.1.0.
## i Please use `all_of()` or `any_of()` instead.
##
     data %>% select(low_income_column)
##
##
     # Now:
##
     data %>% select(all_of(low_income_column))
## See <a href="https://tidyselect.r-lib.org/reference/faq-external-vector.html">https://tidyselect.r-lib.org/reference/faq-external-vector.html>.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

```
## Warning: Using an external vector in selections was deprecated in tidyselect 1.1.0.
## i Please use `all_of()` or `any_of()` instead.
##
##
     data %>% select(neighbourhood_column_diabetes)
##
##
     # Now:
##
     data %>% select(all of(neighbourhood column diabetes))
##
## See <https://tidyselect.r-lib.org/reference/faq-external-vector.html>.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
## Warning: Using an external vector in selections was deprecated in tidyselect 1.1.0.
## i Please use `all_of()` or `any_of()` instead.
##
     data %>% select(diabetes_rate_column)
##
##
##
     # Now:
     data %>% select(all_of(diabetes_rate_column))
##
## See <https://tidyselect.r-lib.org/reference/faq-external-vector.html>.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
## [1] "Total missing values: 0"
## `geom_smooth()` using formula = 'y ~ x'
```

Income Level vs. Diabetes Rate

lation between neighborhood income and diabetes prevalence

