Confounding Potential Plot

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Very Low Birth Weight Infants dataset¹ 32 Variables 644 Observations

birth missing distinct Info Gmd $.95 \\ 87.19$ Mean 644 82.05 82.45 83.5184.90 86.90 lowest : 81.511 81.514 81.552 81.558 81.593, highest: 87.455 87.466 87.469 87.472 87.483 exit missing distinct 535 Mean 84.85 $_{1.922}^{\mathrm{Gmd}}$ $\begin{array}{c} .05 \\ 82.19 \end{array}$ $\begin{array}{r}
 .25 \\
 83.59
 \end{array}$ Info $\begin{array}{r}
.10 \\
82.56
\end{array}$ $\begin{array}{c}
 .50 \\
 84.96
 \end{array}$ $.75 \\ 86.17$.90 87.01 636 ${\tt lowest: 68.526\ 81.046\ 81.169\ 81.539\ 81.552,\ highest:\ 87.718\ 87.721\ 87.800\ 87.838\ 96.871}$ Value 68.5 81.0 81.5 82.0 82.5 83.0 83.5 84.0 84.5 85.0 85.5 86.0 86.5 87.0 Frequency 1 2 9 25 42 46 60 42 62 72 70 57 58 52 Proportion 0.002 0.003 0.014 0.039 0.066 0.072 0.094 0.066 0.097 0.113 0.110 0.090 0.091 0.082 Value 87.5 88.0 97.0 Frequency 35 2 1 Proportion 0.055 0.003 0.002 hospstay missing distinct Info Mean 40.21 Gmd lowest : -6574 -295 -293 -291 -288, highest: 276 300 442797 3668 $\begin{array}{l} -6600 \; (1,\, 0.002), \; -300 \; (4,\, 0.006), \; -200 \; (2,\, 0.003), \; 0 \; (412,\, 0.648), \; 100 \; (193,\, 0.303), \; 200 \; (18,\, 0.028), \; 300 \; (3,\, 0.005), \; 400 \; (1,\, 0.002), \; 800 \; (1,\, 0.002), \; 3700 \; (1,\, 0.002) \end{array}$ lowph $_{73}^{\rm distinct}$ $\underset{40}{\operatorname{missing}}$ $^{\rm Mean}_{7.202}$ $05 \\ 6.94$ Info Gmd 604 0.999 0.157lowest: 6.529999 6.699997 6.719997 6.739998 6.759998 highest: 7.480000 7.489998 7.500000 7.519997 7.549999 pltct : platelet count distinct Gmd missing 47 Info Mean 69.6 97.2 143.0202.0 252.0304.8 lowest: 16 24 28 34 38, highest: 399 416 418 462 571 distinct missing 639 white (255, 0.399), black (364, 0.570), native American (16, 0.025), oriental (4, 0.006) $\mathbf{bwt}: \mathbf{birth} \ \mathbf{weight} \ [\mathbf{g}]$ missing distinct Info $^{\rm Mean}_{1104}$ 0.25 0.0 $^{\rm n}_{644}$ 05641.5 $\frac{.10}{741.5}$ 1135.0.95 1480.0 1320.0 1440.0 lowest: 400 430 460 480 500, highest: 1475 1480 1490 1500 1580 $\mathbf{gest}:\,\mathbf{gestational}\,\,\mathbf{age}\,\,[\mathbf{weeks}]$ missing distinct Info Mean Gmd 0.987 28.98 lowest : 22.0 23.0 24.0 25.0 25.5, highest: 34.0 35.0 36.0 38.0 40.0 inout missing distinct 644 born at Duke (528, 0.82), transported (116, 0.18) \mathbf{twn} distinct missing FALSE (509, 0.79), TRUE (135, 0.21)

 $^{^1\}mathrm{See}$ O'Shea M, Savitz DA, Hage ML, Feinstein KA: Prenatal events and the risk of subependymal / intraventricular haemorrhage in very low birth weight neonates. Paediatric and Perinatal Epdiemiology 1992;6:352-362. See also, http://biostat.mc.vanderbilt.edu/wiki/pub/Main/DataSets/vlbw.html.

```
lol
                                                                Mean
8.497
                 missing
356
                                 distinct
40
                                                   ^{\rm Info}_{0.958}
                                                                                          0.05 \\ 0.00
                                                                                                    0.00
                                                                                                               0.00
                                                                                                                          \frac{.50}{4.00}
                                                                                                                                     0.75
0.00
                                                                                                                                                 0.90
0.00
                                                                                                                                                             \frac{.95}{26.65}
         _{288}^{\mathrm{n}}
lowest: 0 1 2 3 4, highest: 72 102 104 174 192
magsulf
                    missing 224
                                     distinct
                                                        Info
                                                                                                  Gmd
                                                                    Sum
                                                                                  Mean
         420
meth
                   missing
81
                                     distinct
                                                        Info
                                                                    \mathop{\mathrm{Sum}}_{246}
                                                                                _{0.4369}^{\rm Mean}
         563
                                                                                                0.\overline{4929}
\mathbf{toc} \colon to
colysis - mother treated with \beta\text{-adrenergic} drug
                   missing
81
                                     \operatorname*{distinct}_{2}
                                                      ^{\rm Info}_{0.524}
                                                                    \frac{\mathrm{Sum}}{127}
                                                                                Mean
0.2256
                                                                                                Gmd
         563
delivery
                   missing
                                     distinct
         ^{\rm n}_{644}
abdominal (312, 0.484), vaginal (332, 0.516)
apg1
                                                      Info
0.985
                                                                    Mean
                                                                                  _{\rm 3.01}^{\rm Gmd}
                                                                                               ^{.05}_{1}
                                                                                                                                                          .95
         ^{\mathrm{n}}_{631}
                                     distinct
                                                                     4.903
lowest : 0 1 2 3 4, highest: 5 6 7 8 9
0 (5, 0.008), 1 (91, 0.144), 2 (68, 0.108), 3 (57, 0.090), 4 (45, 0.071), 5 (68, 0.108), 6 (79, 0.125), 7 (79, 0.125), 8 (102, 0.162), 9 (37, 0.059)
vent
                   missing
                                                      _{0.731}^{\rm Info}
                                                                                                  Gmd
                                     distinct
                                                                    Sum
                                                                                _{0.5795}^{\rm Mean}
        ^{
m n}_{635}
pneumo
                   missing 4
                                    \operatorname*{distinct}_{2}
                                                      _{0.477}^{\rm Info}
                                                                                _{0.1984}^{\mathrm{Mean}}
         ^{\rm n}_{640}
                                                                                                0.3186
pda
                    missing
                                     distinct
                                                                    Sum
                                                                                                  Gmd
        637
                                                       0.498
                                                                                0.2104
                                                                                                0.3327
\mathbf{cld}
                   missing
46
                                                      _{0.588}^{\rm Info}
                                                                    _{160}^{\mathrm{Sum}}
                                                                                _{0.2676}^{\rm Mean}
        n
598
                                     distinct
                                                                                                0.3926
\mathbf{pvh}
                                     distinct 3
         ^{\rm n}_{513}
                   missing
131
absent (349, 0.68), possible (41, 0.08), definite (123, 0.24)
ivh
                   missing
130
                                     distinct
         514
absent (430, 0.837), possible (10, 0.019), definite (74, 0.144)
                   missing
130
                                     distinct
         _{514}^{\mathrm{n}}
absent (461, 0.897), possible (17, 0.033), definite (36, 0.070)
year
                   missing
0
                                     _{537}^{\rm distinct}
                                                                  Mean
84.75
                                                                                Gmd
1.838
                                                                                             \begin{array}{r} .05 \\ 82.06 \end{array}

  \begin{array}{c}
    .10 \\
    82.45
  \end{array}

                                                      Info

  \begin{array}{r}
    .25 \\
    83.52
  \end{array}

  \begin{array}{c}
    .50 \\
    84.90
  \end{array}

                                                                                                                                                                 .90
86.90
        ^{\rm n}_{644}
                                                                                                                                                    .75
86.07
lowest : 81.51196 81.51471 81.55304 81.55847 81.59406
highest: 87.45721 87.46814 87.47089 87.47363 87.48456
sex
                   missing
                                   distinct
         643
```

female (317, 0.493), male (326, 0.507)

dead $\begin{array}{cc} \text{missing} & \text{distinct} \\ 0 & 2 \end{array}$ n 644 $_{0.466}^{\rm Info}$ $\mathop{\mathrm{Sum}}_{124}$ $_{0.1925}^{\rm Mean}$ $_{0.3114}^{\mathrm{Gmd}}$ cesarean $_{0}^{\mathrm{missing}}$ distinct 2 644 FALSE (332, 0.516), TRUE (312, 0.484) definite.ivh n missing distinct 514 130 2 FALSE (440, 0.856), TRUE (74, 0.144) white missing distinct 639 FALSE (384, 0.601), TRUE (255, 0.399) $_{\mathrm{male}}$ missing distinct 643 FALSE (317, 0.493), TRUE (326, 0.507) txported n missing distinct 644 0 2 FALSE (528, 0.82), TRUE (116, 0.18) $\begin{array}{cc} \text{missing} & \text{distinct} \\ 0 & 7 \end{array}$ lowest : 1981 1982 1983 1984 1985, highest: 1983 1984 1985 1986 1987 1981 (29, 0.045), 1982 (83, 0.129), 1983 (107, 0.166), 1984 (122, 0.189), 1985 (130, 0.202), 1986 (119, 0.185), 1987 (54, 0.084)

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Table 1: Descriptive Statistics by delivery

| | N | abdominal | vaginal |
|-----------------------|-----|-----------|---------|
| | | N = 312 | N = 332 |
| gestational age weeks | 643 | 29 | 29 |
| birth weight g | 644 | 1172 | 1100 |
| twn | 644 | 28% | 14% |
| white | 639 | 46% | 34% |
| inout: transported | 644 | 11% | 24% |
| male | 643 | 50% | 52% |
| yyyy : 1981 | 644 | 4% | 5% |
| 1982 | | 12% | 13% |
| 1983 | | 18% | 15% |
| 1984 | | 16% | 22% |
| 1985 | | 21% | 20% |
| 1986 | | 19% | 18% |
| 1987 | | 10% | 7% |

 $a\ b\ c$ represent the lower quartile a, the median b, and the upper quartile c for continuous variables. N is the number of non–missing values.

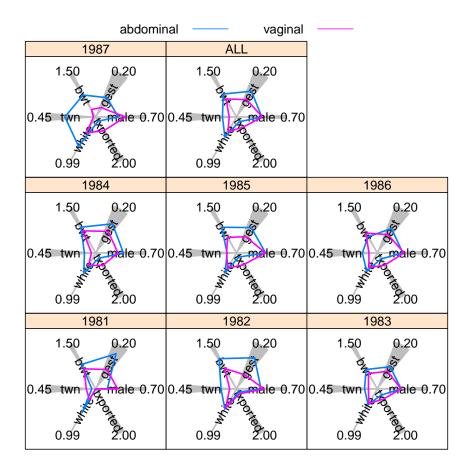


Figure 1: **Trellised radar plot.** The ALL panel can be seen to correspond to the 'standard Table 1' shown in Table 1 above. The trellis can be seen therefore to produce a disaggregated 'Table 1', in this case exploring the possibility of a secular trend in potential confounding.