Data

Economic, **health** and **demographic factors** that can influence **life expectancy**.

Data obtained from *Global Health Observatory* and *United Nations* websites.

After exploratory analysis: **2980 rows** and **7 variables**.

Name	Type	% Range
Life expectancy	continous	36.30 - 84.17
Adult Mortality	continous	49.2 - 696.6
Infant Mortality	continous	0.00 - 0.16
Alcohol	continous	0.00 - 20.18
BMI	continous	19.80 - 32.20
Polio	continous	8.00 - 99.00
Domestic GGHE	continous	0.06 - 12.06

Network

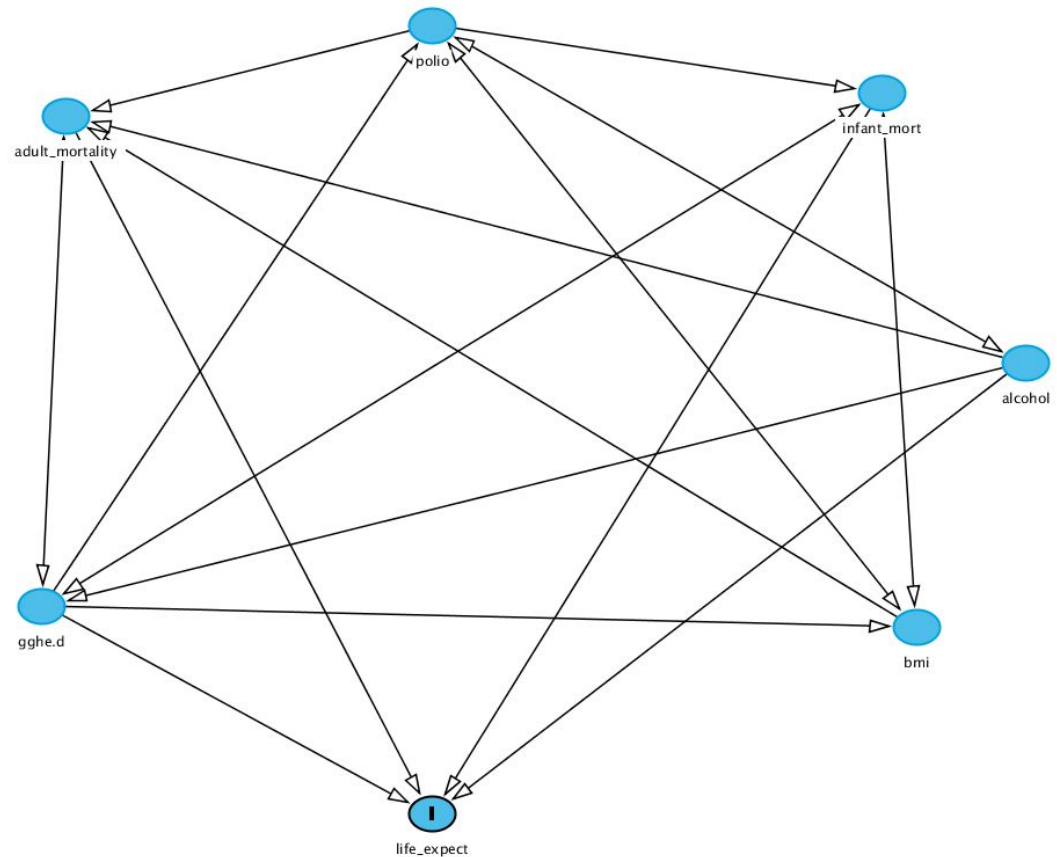**3** networks **tested**, changes:

1. latent variable alcohol↔polio
2. remove bmi→alcohol

3 significant conditional independencies obtained.

Model **fitting** conclusions:

1. **BMI, Polio > Alcohol.** influencing **Adult Mort.**
2. **Adult Mort. most** influence **Life Exp.**


```
                                                    estimate      p.value          2.5%         97.5%
alch _||_ bmi | ggh.                              0.03377041   0.06533356  -0.002144621   0.069598546
bmi _||_ lf_x | adl_, alch, ggh., inf_           -0.03924450   0.03228090  -0.075069341  -0.003318651
lf_x _||_ poli | adl_, alch, ggh., inf_           0.02765999   0.13141339  -0.008278774   0.063527450
```

Conclusions

Problems:

- Life expectancy is influenced by a **lot of variables**, **related** between them
- **Small sample** of variables.

Leading to a **high number** of **latent variables** and a **low number** of **independencies**.

Future work:

- Consider **more variables**.
- **Explicit** some of the **latent** ones.

Even with these improvements, we think it's **difficult** to **obtain a high number** of **independencies**.