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The Maternal Health Behaviours of Non-Irish Nationals During Pregnancy & the Effect of Acculturation

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BACKGROUND



Background

- Well known that maternal health behaviours can impact on pregnancy outcomes.
- Several studies worldwide have found that health behaviours differ between nationalities.
- 2016 Irish Census → 535,475 Non-Irish nationals (11.6% of the population)¹.



MATERNAL HEALTH BEHAVIOURS



Alcohol Consumption During Pregnancy

- Increases the risk of miscarriage, still birth, low birth weight, foetal alcohol syndrome.
- Current Irish recommendations → Abstain from alcohol consumption during pregnancy (Health Service Executive)².



Smoking During Pregnancy

- Increases the risk of ectopic pregnancy, spontaneous abortion, foetal growth restriction, pre-term birth, still birth, oral facial clefts, sudden infant death syndrome (SIDS) and behavioural issues.
- Current Irish Recommendations → Smoking cessation advised during pregnancy (Health Service Executive)³.



Folic Acid Supplementation

- Key role in the closure of the neural tube, reducing the risk of neural tube defects (NTDs).
- Current Irish Recommendations → Pregnant women and women of child-bearing age should take a 400µg folic acid supplement daily for a minimum of 12 weeks pre-conception and for the first 12 weeks of pregnancy. Also advised that these women consume a diet rich in folate⁴.



CURRENT RESEARCH



Current Irish Research

- **Limited Irish research** relating to the differences in maternal health behaviours during pregnancy between nationalities.
- **No Irish research** relating to the effect of acculturation on maternal health behaviours during pregnancy.



Research at an International Level

- Maternal health behaviours differ depending on a number of variables.
- Example: Non-US nationals were **less likely to smoke during pregnancy** and were **more likely to breastfeed** their offspring than US nationals (Merewood et al 2006)⁵.
- Example: Hawkins et al (2008) found that ethnic minority groups were **less likely to consume alcohol (15% v 37%) and smoke (14% v 37%) during pregnancy** compared to British/Irish white women⁶.



AIMS

Aims

To determine the differences in maternal health behaviours between Irish and non-Irish nationals during pregnancy.

To investigate the effect of acculturation on maternal health behaviours during pregnancy.



METHODS



Subjects

- Growing Up in Ireland Infant Cohort Wave One.
- 11,134 primary caregivers - Interviewed when the study infant was 9 months of age.
- 84.7% Irish & 15.3% Non-Irish primary caregivers.



Methods

- Cross-sectional analysis of the GUI Infant Cohort Wave One.
- All statistical analysis completed using SPSS statistical software package version 24.0.
- Independent variables considered as risk factors for poor maternal health behaviours were selected (e.g. education status, ethnicity, family social class).
- The data extracted was analysed using cross tabulations, the Pearson chi square statistical test and binary logistic regression analysis.



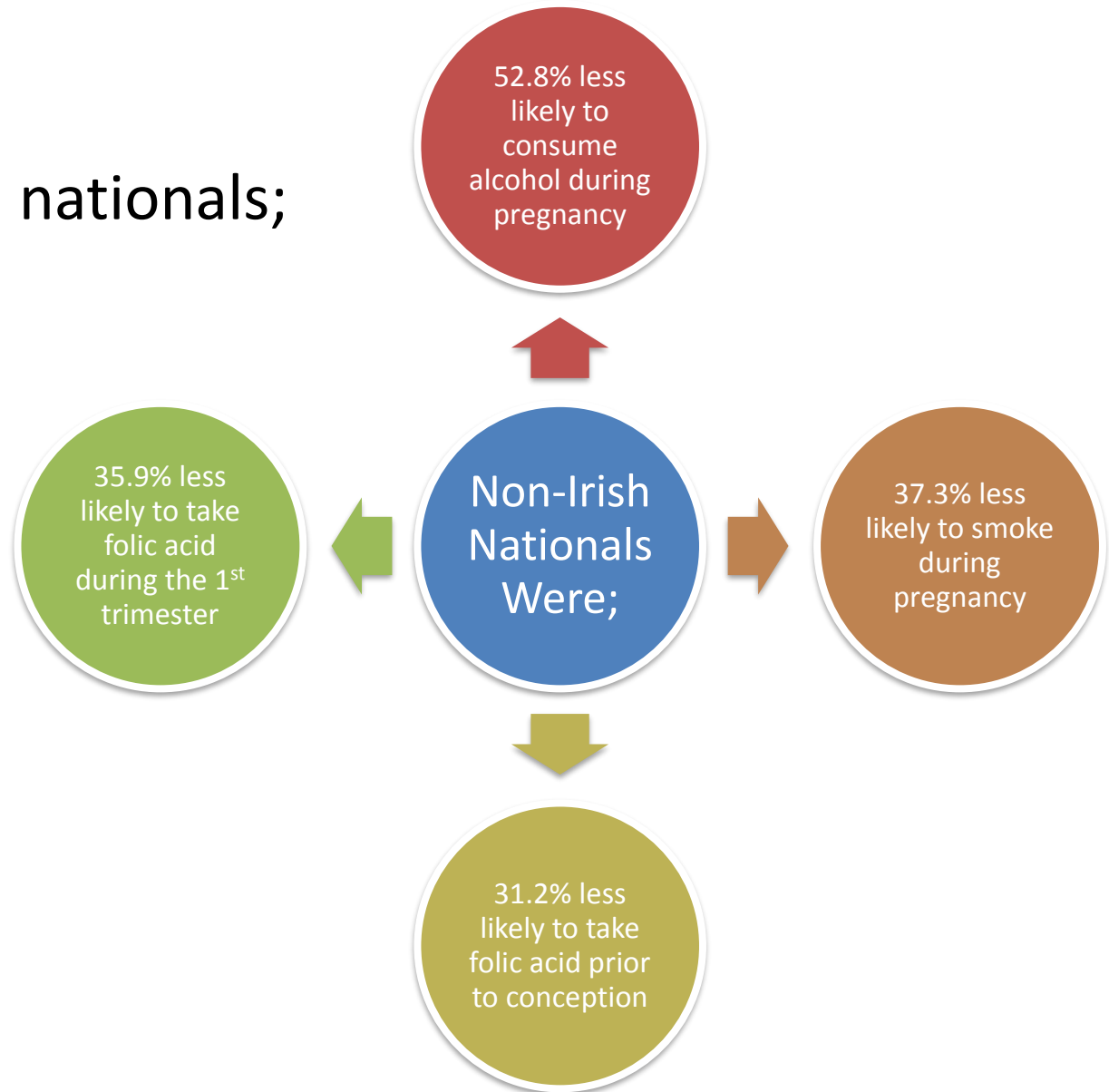
RESULTS

Maternal Health Behaviours – Irish vs Non-Irish Nationals:

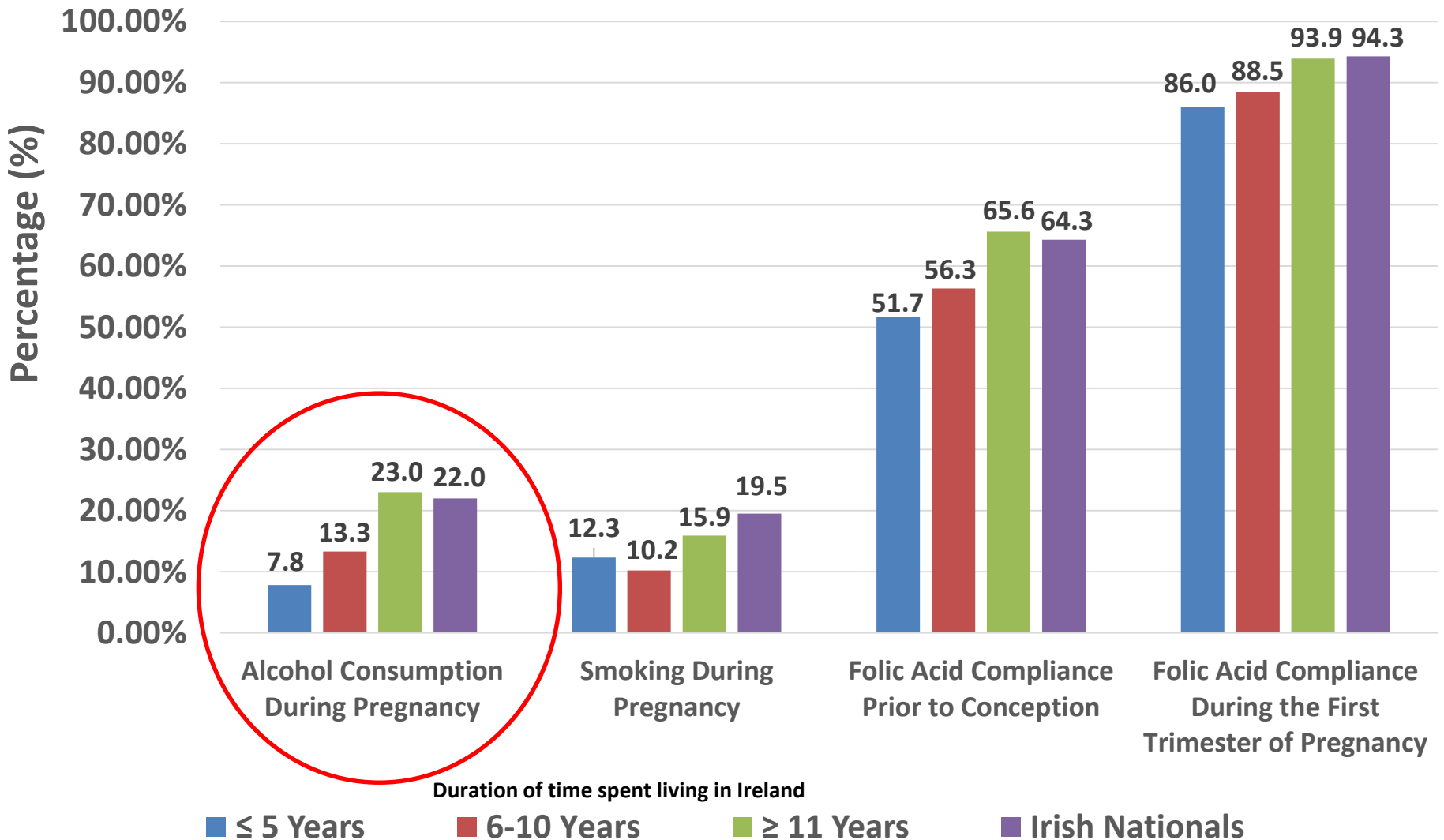
Health Behaviour:	Irish Nationals (%):	Non-Irish Nationals (%):	P
Alcohol Consumption During Pregnancy	22.0	9.6	0.000
Smoking During Pregnancy	19.5	11.5	0.000
Folic Acid Compliance Prior to Conception	64.3	52.9	0.000
Folic Acid Compliance During the 1 st Trimester	94.3	87.4	0.000

Results

Compared to Irish nationals;



Maternal Health Behaviours & Acculturation:





DISCUSSION



Discussion

Alcohol:

- Non-Irish nationals were 52.8% less likely to consume alcohol during pregnancy.
- Pregnancy Risk Assessment System (PRAMS) & Screening for Pregnancy Endpoints (SCOPE) are both Irish studies which examine alcohol consumption during pregnancy⁷.
- Positive linear increase in alcohol consumption with duration of time living in Ireland.

Smoking:

- Non-Irish nationals had a lower prevalence of smoking during pregnancy.
- A study in the Coombe Women & Infants University Hospital found that 23.2% of Irish vs 2% of non-Irish nationals smoked during pregnancy⁸.
- Found that there was no significant association between smoking and acculturation.
- A U.K. study found that every additional 5 years spent living in the U.K. led to a 31% increase in the likelihood of smoking during pregnancy⁶.



Discussion

Folic Acid Supplementation:

- Non-Irish nationals had poorer folic acid compliance than that of Irish nationals.
- Previous Irish study found no difference in folic acid compliance between Irish and non-Irish nationals ⁸.
- Folic acid campaigns in Ireland improving compliance?



CONCLUSIONS



Conclusion

- Higher prevalence of alcohol consumption and smoking during pregnancy among Irish nationals.
- Higher prevalence of folic acid supplement compliance both prior to and during pregnancy among Irish nationals compared to that of Non-Irish nationals.
- Association between maternal health behaviours and acculturation.



Conclusion

- Efforts to improve the maternal health behaviours of Irish nationals needed.
- Folic acid supplementation compliance requires some attention as the prevalence of neural tube defects in Ireland is particularly high compared to other European countries.



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