

# Sociodemographic variation in prescriptions dispensed in early pregnancy in Northern Ireland 2010-2016

## Introduction

- Pregnant women take medications to manage acute or chronic illnesses
- Use of prescription drugs during pregnancy varies widely across countries
- Impact of maternal age and socioeconomic status on medication use during pregnancy in Northern Ireland (NI) is unknown

## Objective

- To establish the prevalence of prescriptions dispensed in early pregnancy by maternal age and area deprivation, for women who gave birth in NI, 2011-2016

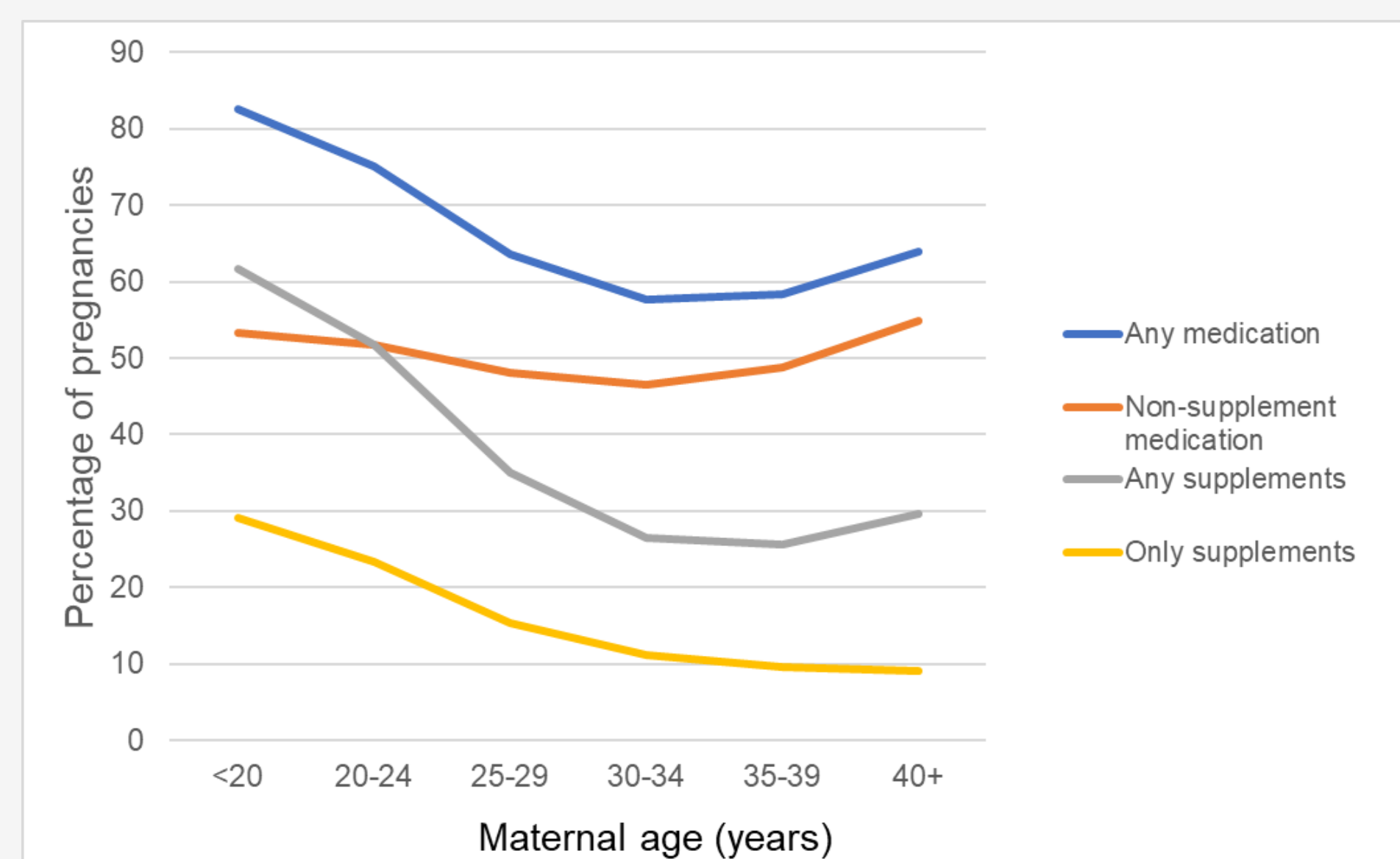
## Methods

- Births between 2011 and 2016 were identified in the NI Maternity System (NIMATS) database
- Prescriptions were extracted from the Enhanced Prescribing Database (EPD)
- Exposure period of interest: between the last menstrual period (LMP) and the first antenatal care visit
- For births in 2011, data were extracted from NIMATS and EPD from 01/04/2010 to cover exposure in early pregnancy
- For births at the end of 2016, information was extracted up to 30th June 2016 to cover the exposure period
- EPD data were linked to NIMATS data using the mother's Health and Care Number
- Maternal deprivation based on the NI Multiple Deprivation Measure 2017 was also linked

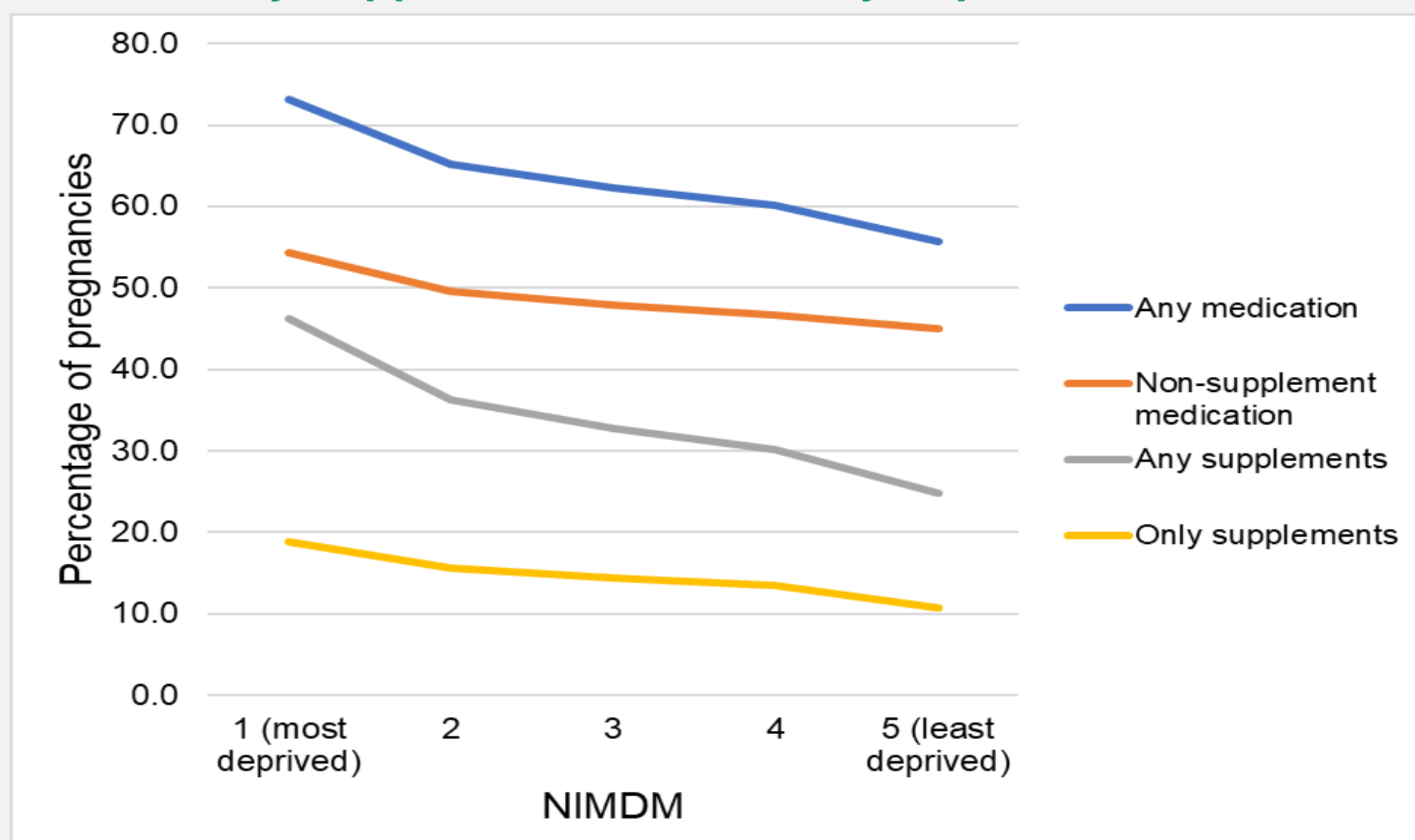
## Results

- Between 2010 and 2016, n=139,687 pregnancies in n=106,206 women
- Mean gestational age at booking was 10.7 weeks
- 86.3% of pregnancies booked by 12 gestational weeks
- Mean maternal age was 29.3 years
- 71.1% of pregnancies were planned
- A higher proportion of planned pregnancies were in mothers  $\geq 35$  years
- Planned pregnancies were lowest in most deprived areas
- 63.5% of pregnancies had a medication recorded in EPD
- Excluding supplements, 48.7% of pregnancies had a medication recorded

### Pregnancies with any medication, non-supplement medication, any supplements (vitamins, iron or folic acid) and only supplements recorded by maternal age



### Pregnancies with any medication, non-supplement medication, any supplements (vitamins, iron or folic acid) and only supplements recorded by deprivation area



## Results for specific medications

- Younger pregnant women had more folic acid recorded compared to older pregnant women
- Among the non-supplement medications, younger pregnant women had more antibiotics recorded compared to older pregnant women
- Older pregnant women had more antidepressants, cardiovascular, thyroxine, antihypertensive, and anticoagulant medications recorded
- Proportion of pregnant women on antidepressants in the most deprived areas is double that of women in the least deprived areas

## Conclusions

- Half of all women had a non-supplement medication between LMP and the first antenatal care visit
- Pregnant women <25 years old, and those aged 40+ years were most likely to have medication dispensed
- Pregnant women living in the most deprived areas were most likely to have medication dispensed
- The rate of dispensed antidepressants was high in areas of social deprivation.