

Who Can Take Advantage of Assisted Reproductive Technologies in Germany?

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Background

Introduction



- Ongoing postponement of age at first birth and at the same time rather restrictive access to **Assisted Reproductive Technologies (ART)**
- Access is restricted via guidelines, legislation, and insurance coverage → in Germany, couples are expected to be married, at a certain age range, and heterosexual
- Treatments are relatively expensive and insurance reimbursement has been reduced since 2004
- Lack of appropriate data: little is known about the actual utilization of ART in Germany and its social selectivity

Research question

- Who can take advantage of assisted reproductive technologies in Germany?
- **Hypotheses:** We expect a pattern of cumulative advantage: particularly being married, having a solid financial background, and being highly educated govern access to ART.

Data & Method

- **Data:** German Family Panel *pairfam*, waves 1-9 (2008/09-2016/17)
- **Method:** Pooled logit model with robust clustered standard errors
- **Sample selection:** Men and women in a marital or non-marital union who are at least 25 years old and are either pregnant or have tried to get pregnant since the last interview → n=2.738 with 5.154 person-years (52% women)

Dependent Variable

- Have you or your partner used any of the following methods to induce a pregnancy since the last interview?
 - 0= no (none or medication or methods to determine the ovulation date),
 - 1=yes (In-Vitro-Fertilization (IVF) or Micro-Fertilization (ICSI) or Intrauterine Insemination (IUI) or surgery or other treatment)
- **Key independent variables:** union status, education (measured as schooling and university degree), household net equivalence income
- **Controls:** age, gender, self-assessed infertility (able to conceive/procreate?), number of children, migration status, bad health status (over-/underweight or subjective health rated as bad or any kind of disability), region, duration until pregnancy/duration of trial time (in months)

Results

Table 1: Share of all respondents in the sample: a) that perceive themselves as infertile and have used ART, b) that have used ART and perceive themselves as infertile

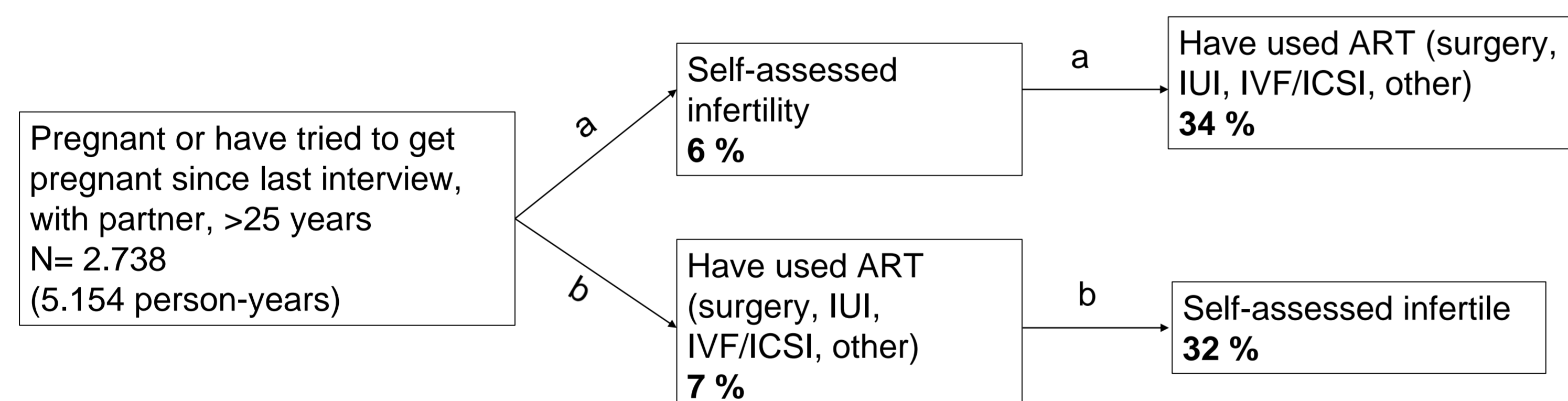
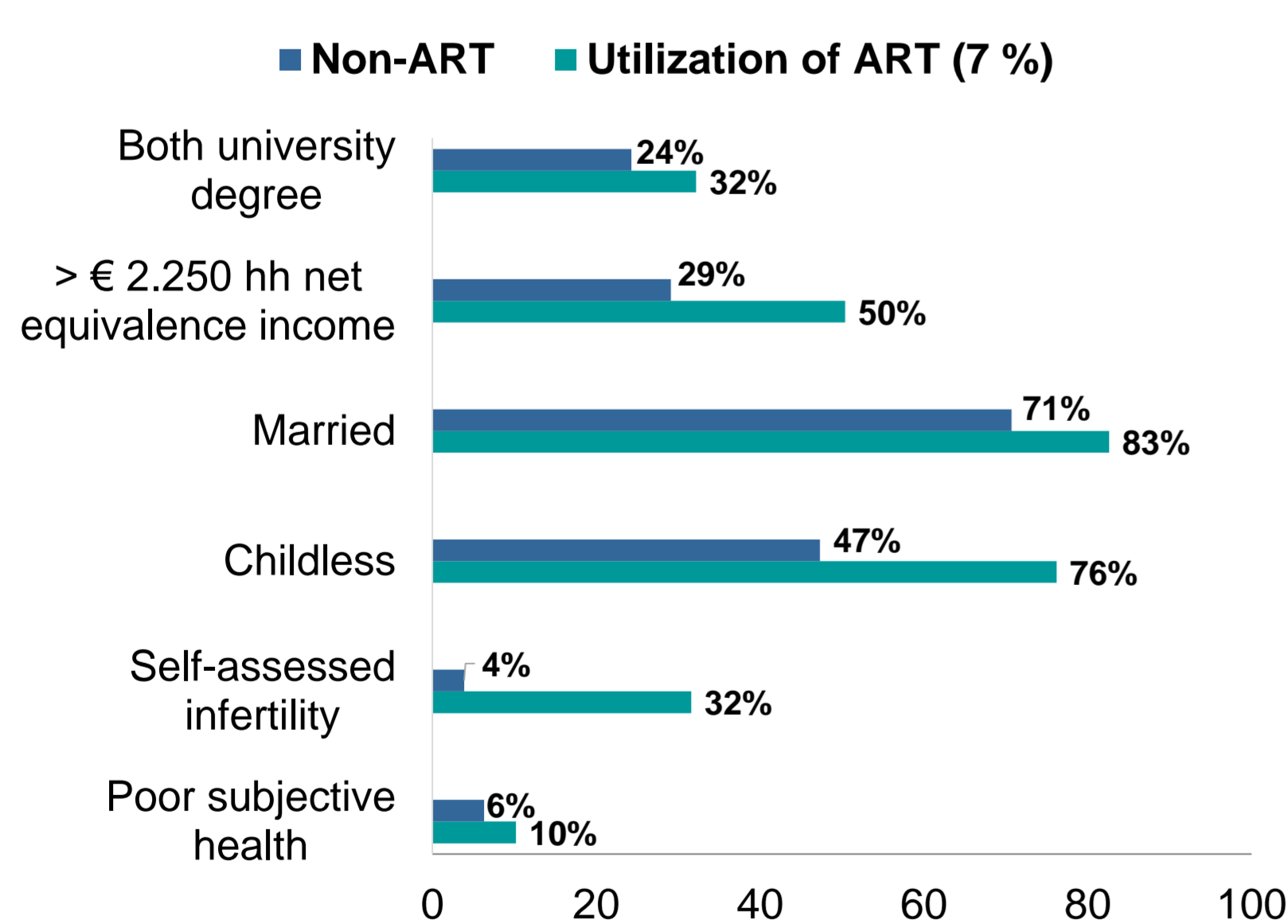
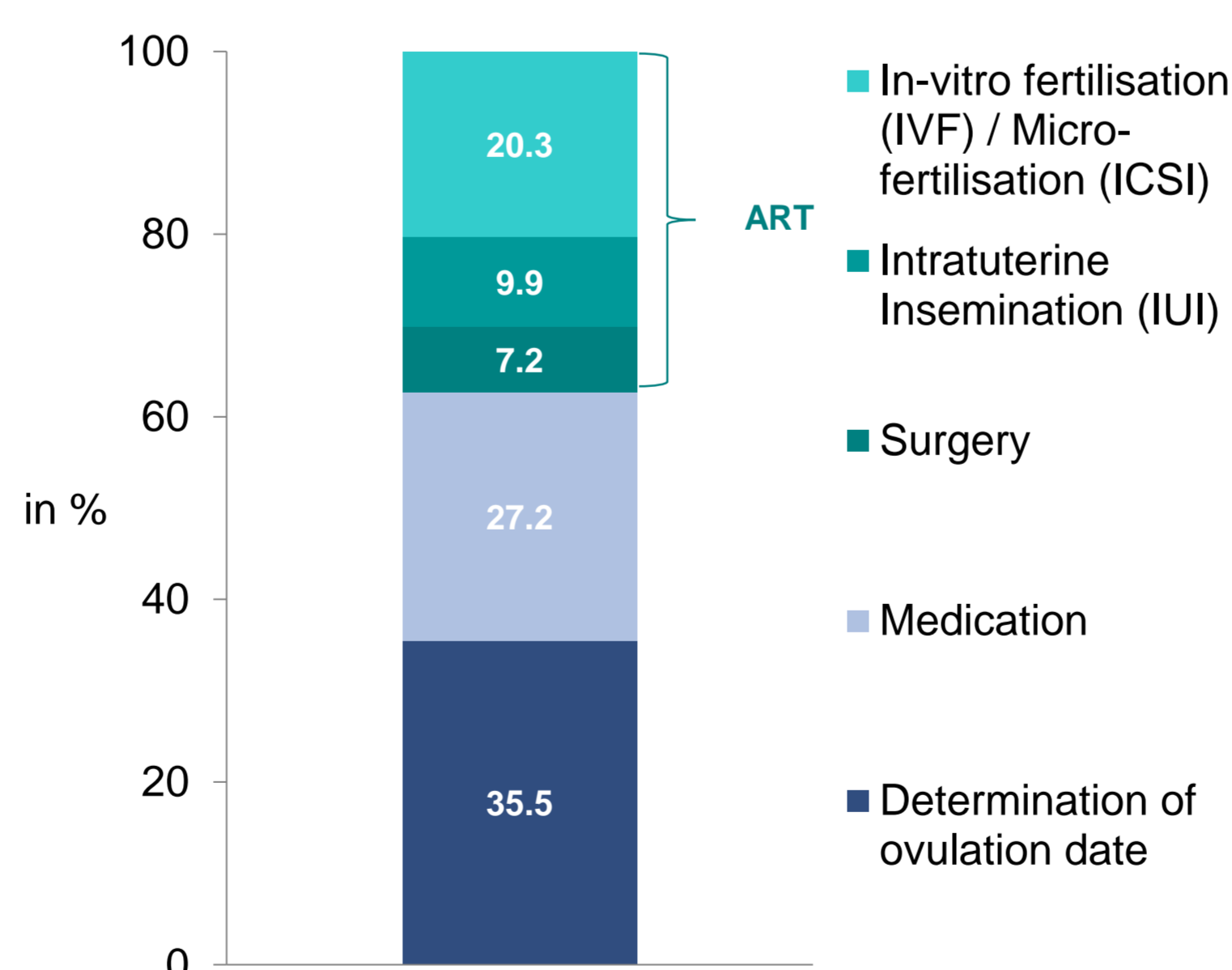


Figure 1: Socio-economic composition of users and non-users of ART (%)



Note: Example how to read: of those who used ART, 76% were childless

Figure 2: Type of support/treatment (if any) (%)



Note: Type of support or treatment among users of ART

Table 2: Results from logistic regression model: Usage of ART (0=no, 1=yes)

	Odds ratios	p> z
Age	1.09	0.000
Woman (ref=man)	1.67	0.009
Union status (ref=LAT)		
Cohabiting	1.06	0.898
Married	2.82	0.011
Number of children (ref=none)		
1	0.30	0.000
2	0.30	0.000
3 or more	0.23	0.008
Self-assessed infertility (ref=fertile)		
infertile	9.96	0.000
missing	1.84	0.001
Duration until pregnancy/trial time	1.01	0.001
Both have university degree (ref=other)	1.24	0.303
Bad health status (ref=no bad health)	1.74	0.027
Household net equivalence income (ref=< €750)		
>750	1.71	0.216
>1500	1.94	0.127
>2250	2.23	0.078
>3000	2.69	0.040
>3750	3.01	0.073
Constant	0.0005	0.000
Sample size in person-years	5.154	
Pseudo R2	0.204	

Note: controlled for region of Germany (East or west) and migration status (non-migrant, 1st generation, or 2nd generation) (both not significant on basis of p<0.1)

Discussion

Conclusion

- High degree of social stratification: being married and having a higher than average income facilitates the usage of ART
- Education has no direct effect: when controlling for income, we do not find a significant effect of education in the take-up of ART

- Strong impact of self-assessed infertility: if couples experience problems in becoming pregnant, they are more likely to use ART
- With increasing age, usage of ART becomes more common
- Being over- or underweight or reporting a bad health status also increases the odds of using ART

Outlook

- Is subjective health status constant or does it get influenced by treatments? → In future research, subjective measures of health should be lagged
- Separate analyses of fertile and infertile couples
- What is the outcome of fertility treatment?