

Title: New estimates of contraceptive use and mode effect

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INTRODUCTION

Universal access to sexual and reproductive health-care services by 2030 is a key target of the Sustainable Development Goals (SDGs). Yet, access to family planning, and especially modern contraception, remains limited worldwide. Recent estimates suggest that, worldwide, 49 percent of women age 15-49 years old currently use contraception. Out of them, an estimated 90 percent use modern methods (UN data portal and UN 2020). Behind these figures, substantial variations however persist across population subgroups, including among young people. Significant differences are also observed across countries, including a pronounced East–West divide in Europe (Dereuddre, Van de Velde, Bracke 2016).

This paper pursues two aims. First, the aim is to provide up-to-date estimates of contraceptive use from the recently collected Generations and Gender Survey round II data (GGS-II). This includes 19 European countries and 4 non-European ones (see the list in appendix). Trends over time and comparisons with estimates from other sources will also be provided. Second, the aim is to assess the impact of the changes in the mode of data collection, from face-to-face (in GGS-I) to self-completed web mode (in GGS-II), on reports of contraceptive use. Evidence from the literature suggests considerable mode effect for subjective items: with responses to survey questions in web mode showing more variations than in face-to-face mode (Piccitto, Liefbroer, Emery, 2022; Schumann and Lück 2023). It remains unclear if responses to questions on contraceptive use are also affected by the mode of data collection. Of particular interest here will be the results from countries where mixed mode of data collection was used for the GGS-II survey. This will allow us to tease out selection issues (do personal characteristics vary across modes) and mode effects.

The results presented in this long abstract are restricted to Moldova and do not analyze mode effects. The full results, including all GGS-II countries and mode effect, will be included in the EPC version of this poster/paper.

DATA AND METHODS

The paper uses data from GGS-II. This is a new round of data collection which was launched in 2020 with new nationally representative samples, a revised questionnaire, and the recommendation for the data to be carried out in mixed mode. More information about the survey may be found in Gauthier et al. (2025). The overview of countries in terms of sample size and mode of data collection appears in Appendix. We restrict the analysis to wave 1 data (with the exception of Moldova where we also include results from wave 2 which was carried in 2024).

The data on contraceptive use comes from the fertility module of the survey. This module includes questions on fertility intention, ability or not to have children, and contraceptive use

(among others). These questions are restricted to respondents age 18 to 49 years old. We restrict the analysis to women only. We also use provided cross-sectional weights.

In the survey, the question on contraceptive use is asked as: ‘Are you or your partner using or doing any of these things to prevent pregnancy at this time? Please name all of the things you use or do (variable FER12)’. Based on this question, we distinguish between modern and traditional methods based on the UN definition (see: UN metadata for SDG for target 3.7 on contraception: UN 2025). Furthermore, respondents who indicate that they used more than one method were classified as using a modern method if at least one such method was mentioned (even if the other one is traditional). This means that those coded as using a traditional method use only such a method.

The results are presented for women by marital status, age, education and parity (whether or not they already have children). In order to check the robustness of our findings, we also calculated contraceptive use by fertility intention. The assumption is that those not intending to have a child would be more likely to use contraception. Similarly, we also report data by sexual activity since it may indicate a higher (or lower) need for contraception.

RESULTS

We present below the results for Moldova (as mentioned these results will be extended to the other countries in the full paper/ poster).¹

From a time series perspective, the results show an overall decline in contraceptive use since the late 1990s (see Figure 1). Because of the availability of earlier data, this graph is restricted to women who are married or in union. This trend is surprising considering that during this period the total fertility rate in Moldova declined: from 2.4 children per women in 1990 to 1.7 in 2024. Such a decline in fertility could be expected to be associated with an increase – as opposed to a decrease – in contraceptive use.

The decline in contraceptive use is also visible between the estimates from the GGS wave 1 (collected in 2020) and the wave 2 (in 2024). And yet, during this period the government of the Republic of Moldova took measures to increase access to contraception especially for vulnerable groups (Lipcanu 2024). Such measures do not appear to have translated into higher contraceptive use at the overall population level. More detailed analyses (forthcoming) will allow us to examine this further for specific subgroups.

The full set of results broken down by covariates appear in Table 1. Results show that the majority of women use modern methods (42 percent) as opposed to traditional (11 percent). Results also show higher use among partnered women (married or in-union) as opposed to non-partnered (single) ones. As to fertility intention, results show that 52 percent for those not intending to have children use contraception and 49 percent for those intending to have children. The difference is much smaller than one could have expected. As to sexual activity, results show that 62 percent who report being sexually active are using contraception, against

¹ What is peculiar about Moldova is that part of the data collection took place prior to the first Covid lockdown (January to March 2020) and part during the Covid pandemic (July to December 2020). Obviously there is here a possibility that access to contraception was negatively impacted during the pandemic. For this reason, in the next version of the paper, we will divide the sample to contrast these two periods (see also Emery and Koops 2022).

40 percent of those who are not sexually active. In the full version of this paper, we will investigate further these results in order to get a better understanding of the respondents' actual need for contraception.

In the final section of the paper, we will also examine mode effect. As mentioned, this is not applicable to Moldova where all the data were collected in face-to-face mode.

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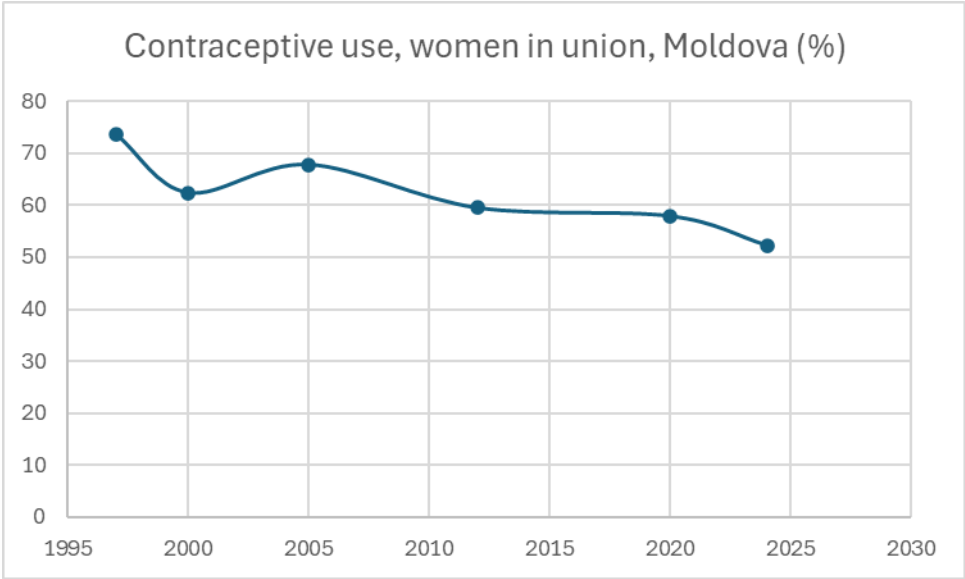
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Figure 1: Trends in contraceptive use (in percent)



Source: Own calculation for 2020 and 2024 (from GGS-II data) and other data from the UN Data Portal. The other data points come from other surveys, namely RHD (1997), MICS (2000 and 2012), and DHS (2005).

Table 1. Contraceptive use (in percent) by covariates for women age 18-49 years old* (provisional estimates) – Moldova

	Contraceptive Use in %		Contraceptive Use in %
Total*	53		
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Type		Family Status	
Modern	42	With biological child	58
Traditional	11	No biological child	38
Non-use	47		
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Union Status		Fertility Intentions**	
Married (or in union)	60	Intends to have children	49
Not in union	38	Unsure	59
		Does not intend to have children	52
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Age		Sexual Activity***	
18-19*	24	Active	62
20-24	52	Not Active	40
25-29	55		
30-34	58		
35-39	58		
40-44	56		
45-49	55		
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Education			
Low Education	47		
Medium Education	53		
High Education	60		

Source: own calculation, Generations and Gender Survey (GGS-II).

Notes: ‘*’: the estimates for Moldova is for the population age 15 to 49 years old (in the other countries this is restricted to 18-49), **: The question on fertility intention was asked in the survey as: “Do you intend to have a/another child during the next three years?” (variable FER14) (with possible answers: "Definitely not", "Probably not", "Unsure", "Probably yes", "Definitely yes", "Currently expecting a child"); ***: The question on sexual activity is phrased as: “Did you have sexual intercourse in the past 4 weeks?” (variable FER13) with possible answer yes or no.

Appendix: Overview of countries in Generations and Gender Survey Round II (GGS-II)¹

Country/ territories	Data Collection Wave 1	Mode Wave 1	Net Sample
Argentina (Buenos Aires)	Aug – Dec 2022	CAPI	2,393
Austria	Oct 2022 – Mar 2023	CAWI	8,267
Belarus²	Apr – Nov 2017	CAPI	9,994
Croatia	May – Jul 2023	CAWI	7,487
Czechia	Oct 2020 – Jul 2022	CAWI (2%), CAPI (98%)	5,594
Denmark	Mar – Jun 2021	CAWI	8,269
Estonia	Mar – Jun 2021	CAWI	9,257
Finland	Oct 2021 – Mar 2022	CAWI	3,388
France	Jan – July 2024	CAWI (75%), CATI (25%) ³	14,285
Germany	Aug 2021 – Jan 2022	CAWI (86%), SAPQ (14%)	22,048
Hong Kong (SAR)	Feb – Apr 2023	CAWI	4,551
Iceland	Aug – Dec 2025 (expected)	CAWI	n/a
Italy	Jun 2025 –Apr 2026 (expected)	CAWI (30%), CAPI (70%) ⁴	n/a
Kazakhstan²	Apr – Oct 2018	CAPI	14,857
Latvia	Dec 2025 – Feb 2026 (expected)	CAWI	n/a
Moldova	Jan – Dec 2020	CAPI	10,074
Netherlands	Nov 2022 – Nov 2023	CAWI	8,078
Norway	Nov – Dec 2020	CAWI	5,374
Poland	Sep 2025 –April 2026 (expected)	CAWI (40%), CAPI (60%) ⁴	n/a
Sweden	Mar – Aug 2021	CAWI (67%), SAPQ (33%)	8,082
Taiwan	Jan 2024 – Feb 2025	CAWI (61%), CAPI (39%)	7,761
United Kingdom	Aug 2022 – Jan 2023	CAWI	7,875
Uruguay	Oct 2021 – Oct 2022	CAPI (86%), CAWI (14%)	7,192

Where CAPI: computer assisted personal interviewing (i.e. face-to-face), CATI: computer assisted telephone interviewing, CAWI (self-completed computer-assisted web interviewing, SAPQ: Self-administered paper questionnaire.

Notes: 1- In addition, data collection is expected in 2026 in Lithuania and South Korea; 2- the data collection in Belarus and Kazakhstan took place before the official launch of the GGS-II in 2020. These two countries used a slightly different version of the questionnaire. 3- In France and percent in CATI also includes those that have completed the survey using mixed mode (i.e. started in one and completed in the other), 4- The mode breakdown in Italy and Poland is provisional.