The Correlates of Natural Method Use in Moldova :

Is Natural Method Use Associated with Poverty and Isolation, and Can it be Reduced by Family Planning Programmes?

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I. Context & Aims

The Republic of Moldova has a high and continued reliance on natural methods (24%) when compared to west-European and other former Socialist republics. These methods have high failure rates (c.27%, Trussell 2004) and are associated with repeated induced abortion use (Westoff 2005) and unwanted pregnancy.

We investigate whether economic collapse in Moldova plays a role in persistent natural method use and whether family planning (FP) programmes mediate contraceptive choices after controlling for economic and spatial influences.

II. Research hypotheses

Hypothesis 1: Natural method use will be highest among women with lowest economic status Rationale: The effect of wealth is based on the Easterlin synthesis framework (Easterlin 1979). Modern methods have a direct, financial cost of use. Natural methods have no direct cost of use. Women in 0.4 low wealth groups may be unable to afford the cost of modern contraception.

Hypothesis 2: Natural method use will decline with greater exposure to FP media, while modern method use will increase.

Rationale: The Moldovan government has attempted Figure 1: Predicted probabilities of method type by age and FP media exposure to reduce the burden of unwanted pregnancy and abortion use through FP national media campaigns. This program explicitly encouraged the use of modern contraception, and switching from natural methods.

III. Data and study sample

Data: 2005 Moldovan Demographic and Health Survey. Survey coverage: 11,095 households, 7440 women aged 15-49 responded to the survey (response rate 95.1%).

Study sample: 6039 sexually experienced women aged 15-49 after excluding 1401 who reported having never had sex.

IV. Methods

Dependent variable: Type of current contraceptive method used, categorised as modern method (40.3%), natural method (21.1%) & non-use (38.6%).

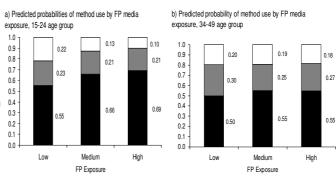
Explanatory variables: Wealth index category and exposure to FP media are key variables. Control variables include socio-demographic characteristics, regional effects, fecundibility & exposure to intercourse.

Modelling approach: Probability of current method used estimated using a multilevel, multinomial logistic regression.

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V. Findings

- Probability of natural method use declines with greater asset wealth.
- Modern method use increases with greater asset
- The effect of wealth is small; the probability of natural method use declines by only 4% points from the low to high categories.
- The effect of FP media is dependent on the age of the respondents (see figure 1).
- The effect of FP media declines from 14% points for age 15-24 (Fig 1a) to 5% points for age 34-49 (Fig 1b).



VI. Conclusions

- The effect of economic status is consistent with research hypothesis 1, but the effect is small. Any efforts directed toward groups with low wealth are likely to have only a limited effect in causing a substitution of natural method for modern methods.
- The effect of FP media exposure is to increase the prevalence of modern methods, consistent with research hypothesis 2. This effect attenuates with age, such that the effect of FP exposure is lower for older age groups than for the youngest age groups.

VII. Policy

Subsidised contraceptive methods are unlikely to increase the prevalence of modern method use in Moldova.

Future FP media efforts need to concentrate on specific mechanisms for reaching older women, such as the integration of services in maternity or abortion services.

KEY REFERENCES:

Easterlin, R.A., 1979, "An economic framework for fertility analysis," Studies in Family Planning

Kowal, D 2004 Coitus interruptus (withdrawal) in Contraceptive Technology, 18th edition (revised) Hatcher, R., Trussell, J., Stewart, F., Nelson, A.L., Cates Jr., W., Guest, F., Kowal, D., (eds). New York, Ardent Media: 311-315

Westoff, C., 2005, Recent Trends in abortion and contraception in 12 countries DHS analytical studies No 8. Caleverton Maryland, ORC Macro