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Letter to the Editor

Knowledge and practices of women regarding prevention of mother-to-child transmission of HIV (PMTCT) in rural south-west Uganda

Worldwide, about 3.4 million children aged under 15 years are HIV-infected, with 90% living in Sub-Saharan Africa;¹ 150 000 of these children are in Uganda. Ninety-five percent of pediatric HIV in Sub-Saharan Africa results from mother-to-child transmission (MTCT) during pregnancy, labor, or with breastfeeding. Prevention measures (PMTCT) can reduce the risk of MTCT,² but only if women have this knowledge.^{3–6} Currently, in rural south-west Uganda, information on MTCT and PMTCT is provided to women by local health workers including volunteer village health teams.⁷ This study explored the knowledge and practices of women in rural south-west Uganda regarding MTCT and PMTCT to determine if women have this needed knowledge.

We conducted an exploratory descriptive study among women of child-bearing age (15–49 years) from Mwizi, a rural sub-county in Mbarara district in south-west Uganda, in July and August 2011. A semi-structured oral questionnaire was administered to 100 women randomly sampled from the five sub-county parishes; 10 women per parish.

Of the 100 women approached, all participated; 88% were aged between 15 and 25 years, 88% had a primary education, 84% were peasant farmers, 88% were married, and 91% had been pregnant or were pregnant at the time of the study. Ninety-one percent knew that MTCT occurs; 72% were aware of PMTCT. Only 7% had adequate knowledge about MTCT and the needed prevention steps. While 82% knew MTCT can occur during labor and delivery, only 54% knew breastfeeding was a risk and only 23% knew HIV could be transmitted during pregnancy. Sixty-eight percent knew that delivery at a health facility could reduce the risk because additional preventative measures would be taken. Seventy percent recalled hearing messages about MTCT and PMTCT from a health worker, their major source of PMTCT information. Several women had practiced PMTCT interventions themselves or had advised their friends.

In conclusion, most women of child-bearing age in Mwizi sub-county of Uganda lacked adequate knowledge to prevent MTCT despite high awareness of MTCT and the need for PMTCT. For PMTCT knowledge to trickle down to rural women, messaging from village health workers, the major source of information, needs to be reinforced. More training on techniques to reinforce PMTCT messages is needed. Other forms of messaging, i.e., radio and cell phone messages, village meeting discussions, and social gatherings might reinforce prevention awareness.^{8,9}

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Ethics statement: The study received ethical approval from the Institutional Review Committee of Mbarara University of Science and Technology.

Conflict of interest: No competing interests.

References

1. UNAIDS report on the global AIDS epidemic 2010. Joint United Nations Programme on HIV/AIDS; 2010. Available at: http://www.unaids.org/globalreport/Global_report.htm (accessed May 22, 2012).
2. Guay LA, Musoke P, Fleming T, Bagenda D, Allen M, Nakabiito C, et al. Intrapartum and neonatal single-dose nevirapine compared with zidovudine for prevention of mother-to-child transmission of HIV-1 in Kampala, Uganda: HIVNET 012 randomised trial. *Lancet* 1999;**354**:795–802.
3. Chopra M, Rollins N. Infant feeding in the time of HIV: rapid assessment of infant feeding policy and programmes in four African countries scaling up prevention of mother to child transmission programmes. *Arch Dis Child* 2008;**93**:288–91.
4. Falnes EF, Tylleskär T, de Paoli MM, Manongi R, Engebretsen IM. Mothers' knowledge and utilization of prevention of mother to child transmission services in northern Tanzania. *J Int AIDS Soc* 2010;**13**:36.
5. Barigye H, Levin J, Maher D, Tindiwegi G, Atuhumuza E, Nakibinge S, et al. Operational evaluation of a service for prevention of mother-to-child transmission of HIV in rural Uganda: barriers to uptake of single-dose nevirapine and the role of birth reporting. *Trop Med Int Health* 2010;**15**:1163–71.
6. Mbonye AK, Hansen KS, Wamono F, Magnussen P. Barriers to prevention of mother-to-child transmission of HIV services in Uganda. *J Biosoc Sci* 2010;**42**:271–83.
7. Brenner JL, Kabakyenga J, Kyomuhangi T, Wotton KA, Pim C, Ntaro M, et al. Can volunteer community health workers decrease child morbidity and mortality in southwestern Uganda? An impact evaluation. *PLoS One* 2011;**6**:e27997.
8. Mitchell KJ, Bull S, Kiwanuka J, Ybarra ML. Cell phone usage among adolescents in Uganda: acceptability for relaying health information. *Health Educ Res* 2011;**26**:770–81.
9. Birks LK, Powell CD, Thomas AD, Medard E, Roggeveen Y, Hatfield JM. Promoting health, preserving culture: adapting RARE in the Maasai context of northern Tanzania. *AIDS Care* 2011;**23**:585–92.

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