Advisory note

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Use and procurement of additional lubricants for male and female condoms: WHO/UNFPA/FHI Advisory note - Key points

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While the use of oil-based additional lubricants with condoms increases the rates of slippage or breakage of condoms, non-oil-based lubricants either decrease, or have no effect on, the slippage or breakage rates. At the present time procurement agencies are advised to avoid lubricants containing high levels of glycols (greater than 9% mass fraction) and polyquaternary compounds owing to possible concerns about the safety of these materials when lubricants are used by at-risk populations.

Introduction

Many people who use male or female condoms also use additional lubrication to make condom use more comfortable. Additional lubricants (obtained separately by users) are usually referred to as "personal lubricants". Such lubricants are used especially frequently by men who have sex with men (MSM) and commercial sex workers. In a survey of MSM of Latin American origin living in New York City, USA, 93% reported using additional lubricants (59% always and 74% in at least 80% of sexual encounters) regardless of condom use *(1)*. In another survey of MSM in San Francisco, USA, 89% reported using a lubricant during all sexual encounters *(2)*. Female sex workers also report high rates of additional lubricant use with condoms. For example, sex workers in brothels in Nevada, USA, reportedly use additional water-based lubricants with condoms 89% of sexual intercourse episodes *(3)*.

National programmes involved with condom distribution in WHO Member States have expressed concern regarding the safety of use of additional lubricants with condoms. Recently, WHO reviewed the available scientific evidence related to the use of additional lubricants with condoms with a view to providing guidance to the United Nations Population Fund (UNFPA) and other bulk procurement agencies for the purchase of additional lubricants to be supplied with male and female condoms. In April 2011, in collaboration with UNFPA and Family Health International (FHI), WHO convened in Geneva, Switzerland, a Female Condom Technical Review Committee to evaluate the current knowledge related to the use of additional lubricants for male and female condoms. The technical review committee made recommendations regarding the procurement of appropriate lubricants by national programmes for family planning and for control of sexually transmitted infections, including HIV. These key points are extracted from the full report of the technical committee which is available at www.who.int/reproductivehealth/publications/rtis/rhr12_33/en/.

Impact of additional lubricants on condom failure rates

Water- and silicone fluid-based lubricants have been shown to have either no effect or to reduce failure rates, when used with latex condoms for vaginal intercourse *(4, 5, 6, 7)*. Oil-based lubricants can cause latex to lose strength rapidly and should not be used with latex condoms.

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Using an additional water-based lubricant with condoms could be particularly important for anal intercourse. In a prospective study *(8)*, condom breakage was found to be associated with the type of additional lubricant used: when the water-based lubricant supplied with the study condoms was used, the breakage rate was 3%, whereas it was 7.7% when an oil-based lubricant was used. In the same study, the condom breakage rate was 10.8% when saliva was used and 21.4% when no additional lubricant was used.

Recent studies *(9, 10, 11, 12)* suggest that lubricants containing high concentrations of glycols (propylene glycol or glycerol) may cause epithelial damage, particularly when used during anal intercourse. Some polyquaternary compounds have also been found to enhance HIV-1 replication *in vitro (12)*. Therefore, at the present time it is recommended that procurement agencies purchasing personal lubricants avoid products with a mass fraction of glycol in excess of about 9% and products containing polyquaternary compounds.

Conclusion

The review committee concluded that use of additional non-oil-based lubricants is associated with either a decrease or no change in the rate of slippage or breakage of the condom. Oil-based lubricants, however, have been shown to increase the rates of slippage or breakage of condoms and therefore not recommended. Procurement agencies are advised to avoid lubricants containing high levels of glycols (greater than 9% mass fraction) and polyquaternary compounds.

These key points are extracted from the full report of the technical committee available at www.who.int/reproductivehealth/publications/rtis/rhr12_33/en/.

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