



How common is condom failure?

For most clinicians the concept of organ failure conjures up vivid images. The patient presents with specific symptoms; the physical examination yields clinical signs that lead to the performance of special investigations. Based on these a diagnosis is made and a plan of treatment implemented, or the patient is referred for organ transplantation. We have been trained to combine the science of medicine with the art of clinical practice in our management of patients. Scientific inquiry is fundamental in the investigation of clinical problems, and ideally should result in improved patient care.

In case you are wondering about the title, allow me to start from the beginning. A recent study reported on 164 women requesting termination of pregnancy.¹ Only 21% of participants were using a method of contraception, and the condom was the most popular (53%). What caught my attention was that of the 18 condom users, 15 reported condom breakage. A quick search revealed another study, done in a population of women requesting emergency contraception, which found that 90% did so because of 'condom failure'.² Until then I had never heard of 'condom failure', which is defined as 'breakage or slippage' and may occur at various stages of sexual intercourse.

It makes sense that on rare occasions, if faulty or not used properly, a condom may rupture or slip – resulting in the risk of pregnancy and possible sexual disease transmission. The studies above obviously had biased samples because they only included women who were either pregnant or had requested post-coital contraception. I suspected that in a random sample of people not presenting to a health care facility the figures would be insignificantly low. However, a cross-sectional study reported that of 481 condom-using healthy males, 34.1% had experienced recent condom failure. More worrying was the finding that adolescents reporting multiple sex partners and those indicating that they had sex with a new partner on the day they met were much more likely to report condom failure.³ The overall prevalence of failure in the latter study was similar to figures reported in a study of incarcerated teenagers, in whom it occurred in 37%.⁴ While studies report variable rates of condom use^{5,6} it would seem that we also need to focus on 'proper' condom use in order to reduce the risk of condom failure. This is particularly important because condoms are becoming the preferred method not only for disease prevention but for pregnancy avoidance as well.

Using our organ failure analogy we can safely say that the signs are clear and don't require a doctor; the patient has already made a diagnosis of 'condom failure'. What remains for the clinical investigator is a scholarly isolation of causal variables so that we can have data on what warning symptoms condom users should look out for. The latter could include symptoms of bad condom application (i.e. technique), and how a user is able to know if the condom is too big or too small (if

this is ever an issue). The response to a question about condom safety standards from talk@loveLife was disappointing – 'loveLife does not manufacture condoms for us to have that kind of information but I will suggest that you try condom manufacturers ...'. However, David Harrison of Lovelife gave a useful guide: 'I am not sure if condoms have to be certified by the SABS in terms of law. However, all condoms distributed free by government and all the major retail distributors are SABS approved. The package contains the SABS logo on the outside. If it's not there, don't buy it.'

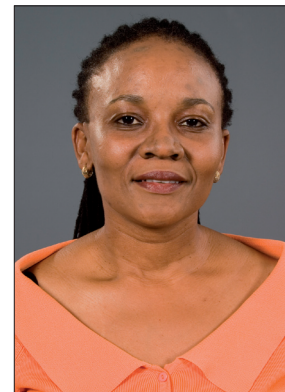
There are data suggesting that latex condoms are less likely to slip and break than non-latex products,⁷ but for those allergic to latex a non-latex condom is better than no condom at all.

Finally, here is the good news:

- Lower rates of condom failure are achievable, as reported in a randomised controlled trial in which 4 637 attempts to use the condom were evaluated: 'complete slippage was 0.63% (0.42 - 0.90%), and total failure (clinical breaks plus complete slips) was 1.04% (0.76 - 1.37%)'.⁸
- Condom skills can be improved, as reported in a study comparing three groups of participants. The first group had one session of training and the second three sessions, while a third (control) group received no training. The greatest improvement was seen in the three-session group.⁹

Clear evidence-based guidelines could potentially help reduce the risk of pregnancy and disease transmission. But like any inquiry we first need estimates of how big the problem is. My cursory literature search did not identify general population studies quantifying the problem of 'condom failure' in Africa.

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