E-COMMERCE AND FEMALE CONDOMS

Credit: Ryan W. Daniels (by assignment from Rutgers)
E-COMMERCE AND FEMALE CONDOMS

Acknowledgements
This case study was carried out by Rutgers as part of the Universal Access to Female Condoms Joint Programme (UAFC), in partnership with and edited by the Institute for Reproductive Health, Georgetown University (IRH). The findings are based on a desk research, online review, and in-depth interviews with female condom manufacturers, distributors, and civil society organizations involved in female condom programming and advocacy. Rutgers (for UAFC) wishes to thank the manufacturers and other respondents that participated in this research for their time and openness in answering our questions, and for their commitment to making female condoms widely available. The authors would like to thank Ms. Merel Heilmann (Advocacy Officer at Rutgers) for her valuable contributions to the design of this analysis. Several colleagues from UAFC contributed to the analysis of findings and made valuable suggestions, most notably Ms. Heidi van Hoof (Advocacy Officer at Rutgers), Ms. Merel Heilmann (Advocacy Officer at Rutgers), Ms. Marie Christine Siemerink (UAFC Coordinator), Ms. Ciska Kuijper (MEAL Officer for UAFC), Ms. Judit Barniol (Project Manager at i+solutions), and Ms. Manusika Rai (Senior Consultant at i+solutions).

Organization Bio
Rutgers is an international center of expertise on Sexual and Reproductive Health and Rights (SRHR) founded and based in the Netherlands, where most primary and secondary schools use its sexuality education packages. Rutgers applies its expertise worldwide, supports various international partners to improve sexual and reproductive health and the acceptance of sexual rights and gender equality in their countries, approaches sensitive issues in a positive way, and has gained a wealth of experience in making sexuality and sexual and reproductive rights a topic of discussion within different cultural contexts. Rutgers is co-founder and consortium partner in the Universal Access to Female Condoms Joint Programme (UAFC). This international programme started in 2009 with the aim to make female condoms accessible, affordable and available for all. Four organizations (Oxfam Novib, Rutgers, i+solutions and the Netherlands Ministry of Foreign Affairs) combined their knowledge and expertise in working with civil society organizations, supply chain management and procurement, and advocacy on SRHR at in-country and international levels to make this woman-initiated prevention method against unintended pregnancies and STIs, including HIV, available to all.

Authors Bios
Saskia Husken has been an advocacy officer at Rutgers in the Netherlands since early 2013. She leads the advocacy component of the Universal Access to Female Condoms Joint Programme (UAFC). Saskia holds a Masters of Science in International Development from the University of Nijmegen, the Netherlands, and worked on HIV programming and gender issues in Zambia, Cameroon, and Tanzania for 10 years. Since 2000, Saskia has been advocating for youth participation and sexual and reproductive health and rights worldwide. Her involvement in female condoms is combining her areas of expertise and interests, as she believes that access to a variety of female condoms, an empowering dual protection method, should be available to all.

Alexandra Rijke is a freelance researcher working on qualitative research projects in the fields of social sciences and the humanities. Alexandra holds a Masters of Science in International Development Studies and a Masters of Arts in Gender Studies. In addition to her work as a freelance researcher, Alexandra is currently a PhD candidate at the Cultural Geography department of Wageningen University, where she is analyzing the relationships of Palestinians and Israelis with the material barriers existing in the West Bank.

For more information: www.femalecondoms4all.org | office@rutgers.nl
E-COMMERCE CASE STUDIES SERIES

This report is one of seven case studies, written to provide the reproductive health (RH) supplies community with a deeper understanding of the current landscape and future potential of obtaining RH supplies through e-commerce. Each case study focuses on either one specific country (India, Kenya, Mexico, and the United States) or one new and underused RH technologies (emergency contraception, female condoms, and the Standard Days Method®). These case studies are descriptive only, and do not advocate for or against e-commerce as a means to distribute RH supplies.

EXECUTIVE SUMMARY

This case study report presents current trends, potential advantages, and challenges related to the use of e-commerce for the distribution of female condoms. Several female condom stakeholders (advocates, manufacturers, and retailers) currently use e-commerce to distribute this product, while others have expressed an interest in using e-commerce in the future. Female condoms are currently sold online in India, China, the Netherlands, and the United States (U.S.). Most (potential) e-commerce customers live in the U.S., Europe, China, and large cities in countries such as India and Nigeria. In these places, customers benefit from the growing number of female condom brands available online (frequently a greater number of options than at their local pharmacy) and the ease and privacy of online ordering. The female condom market has historically been dominated by one brand; the emergence of new female condom products is likely to lead to wider distribution and/or lower prices, increasing the viability of e-commerce for female condoms.

Despite some uptake in selected locations, suppliers face challenges in increasing online sales. Some of these challenges are customer-related. For example, many women and men are not familiar with female condoms or their correct use. Demonstration of how to insert and use female condoms correctly is essential for uptake and sustained use. Such instructions are time consuming, but results from female condom programming around the world show that interpersonal communication is essential for good uptake. Online videos and learning materials can instruct people in places where there is sufficient bandwidth, but they may not fully replace the interaction and confidentiality of live instructions. Historically, female condoms are associated with sex workers, resulting in stigma against the product itself. There are also challenges to suppliers in the female condom market. Because female condoms have been subsidized in most developing countries, internet sales are hampered by the lack of a viable commercial market. E-commerce is likely to gain importance as a means for distribution that runs parallel to, and does not replace, offline sales and programming around female condoms.

More information on female condoms can be found at www.femalecondoms4all.org and www.fcmi.org.
Female condoms are made of a soft, thin material that fits inside a woman’s vagina. Like male condoms, female condoms are a barrier method, protecting against unintended pregnancy and sexually transmitted infections (STIs), including HIV, by keeping the penis and sperm from contact with the cervix and vagina. Unlike male condoms, female condoms cover parts of the external female genitalia, providing additional protection from STIs. Most female condoms are pre-lubricated and easily adapt to body temperature. A female condom can be inserted prior to sexual intercourse, is not dependent on a male erection, and can remain in place after ejaculation. The effectiveness of female condoms is comparable to that of male condoms; failure rate is about 5% in perfect use and 21% in typical use.¹

Female condoms have several contraceptive advantages. They are effective in preventing pregnancy, provide contraception only when needed, and do not disrupt the users’ fertility. They offer an alternative for people who do not wish to use a hormonal contraceptive. Female condoms have no known side effects or risks (although people who are allergic to latex are advised not to use latex female condoms), and can be used by people of all ages. Most importantly, female condom use can be initiated by women themselves, contributing to women’s empowerment. Women and girls are at greater risk of STI/HIV infection than men and boys due to biological differences, but also due to gender inequality, sexual norms and socio-economic barriers to access resources. Women and girls often lack information about sexual and reproductive health, and they are unaware of the risks associated with their own or their partners’ sexual “behaviors.” Women who do recognize their vulnerability are often powerless to protect themselves. Women who receive information and counseling, and who learn to use female condoms, may be able to protect themselves even if their partners refuse to use a male condom.²

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**ENABLING factors**
- Availability of female condoms via e-commerce is growing.
- Ordering female condoms online is easy for customers, and can increase access to the method.
- Customers can preserve their anonymity when they purchase female condoms via e-commerce.
- Using the internet as an information channel can increase awareness of the product.
- Producers or distributors have the opportunity to provide information on the use of the product.

**HINDERING factors**
- A general lack of product awareness hinders the potential for e-commerce growth for female condoms.
- The lack of interpersonal communication, which can introduce customers to the product and provide instructions for correct use, may deter first-time users from purchasing female condoms online.
- The lack of commercial markets in areas where female condoms are free or subsidized by non-governmental organizations or governments makes it difficult to establish online sales.
- Continued product stigma associated with sex workers is hindering widespread use and online sales.
- Perceived difficulty of using the method persists.
- The lack of universal access to the internet, particularly among women in low resource settings, will have a continued impact on online sales of female condoms.
- Gender inequality – including existing gender norms, patterns of gender relations, roles male and female roles and relationships, and related issues of power and inequality – is considered a primary issue which underlies all other hindering factors.

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¹ These factors are listed in no particular order, since their importance differs by context.
Table 1. Types of female condoms and Availability Online.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Regulatory status</th>
<th>Primary area of distribution</th>
<th>Availability online</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC2</td>
<td>WHO/UNFPA prequalified</td>
<td>145 Countries</td>
<td>Yes</td>
</tr>
<tr>
<td>Cupid</td>
<td>WHO/UNFPA prequalified</td>
<td>36 Countries</td>
<td>Yes</td>
</tr>
<tr>
<td>Cupid 2</td>
<td>Functionality study finished</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Results submitted to UNFPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLL Velvet</td>
<td>WHO/UNFPA prequalified</td>
<td>India, Australia, Bahamas, Nepal, Brazil</td>
<td>Yes</td>
</tr>
<tr>
<td>VA w.o.w.</td>
<td>Functionality study finished</td>
<td>Argentina, Brazil, Germany, India, Indonesia, Portugal, South Africa, UK</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Results submitted to UNFPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman’s Condom</td>
<td>WHO/UNFPA prequalified</td>
<td>China, South Africa, Malawi, Zambia</td>
<td>Yes</td>
</tr>
<tr>
<td>Phoenurse</td>
<td>CE marking</td>
<td>Brazil, Mexico, Kenya, South Africa, Eritrea, Sri Lanka, Papua New Guinea</td>
<td></td>
</tr>
<tr>
<td>Air FC</td>
<td>CE marking</td>
<td>Germany, Chile, Colombia</td>
<td></td>
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</tbody>
</table>

Source: www.fcmi.org

E-commerce for Female Condoms

Setting the Stage: Global Female Condom Sales and Distribution

According to data from the Reproductive Health Interchange (RHInterchange), approximately 239 million female condoms (with a market value of $153 million) have been procured since 2000; and since January 2014 a total of 48.3 million female condoms have been shipped by United Nations (UN) agencies and other international partners. Data for private sector sales, both online and offline, was not available. Data at RHInterchange is entered on voluntary basis and does not include private sector and other shipments. Although the numbers are still relatively small compared to other contraceptives, in recent years sales of female condoms have been rising steadily. New female condom brands and products are entering the global market, and retail markets have grown in some middle- and high-income countries.

Since 2013, two types of female condoms have been prequalified by the World Health Organization (WHO) and the United Nations Population Fund (UNFPA): the “FC2” female condom from the Female Health Company (currently available in 145 countries), and the “Cupid” female condom from Cupid Ltd. (currently available in 36 countries). Since March 2016, the HLL Velvet female condom from HLL Life Care Limited in India, and the Woman's Condom from Dahua Shanghai Medical Apparatus Co. Ltd. in China have also received WHO/UNFPA prequalification status. Prequalified products are approved for bulk procurement by UN agencies and other international procurers. In addition to these four prequalified female condoms, a range of other female condoms are at various stages of development and market access (see Table 1).

A large proportion of the global supply of female condoms is handled by a few bulk purchasers or major funders for distribution via the public sector. The major procurers are UNFPA, the United States Agency for International Development (USAID), the Global Fund to Fight HIV/AIDS, TB and Malaria, and International Planned Parenthood Federation (IPPF). They supply female condoms on behalf of governments or in-country programs. Female condom programs initially focused on female sex workers, while current programs—supported by organizations such as UNFPA, Population Services International (PSI) and the Universal Access to Female Condoms joint programme (UAFC)—focus on the general population. In addition to commercial sales and free distribution via the public sector and commercial sales, female condoms are distributed at subsidized prices via social marketing programs.

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iii All currency amounts are in United States dollars, unless otherwise noted.
FINDINGS

Female condoms can be found for sale online on a variety of websites in many countries, including India, China, the Netherlands, and the U.S. In Nigeria, Costa Rica, and other countries, online sales of female condoms are expected to start in the near future. The global nature of the internet and the far reach of some delivery systems demonstrate the global availability of female condoms via e-commerce. The four prequalified female condoms (the FC2, the Cupid, the HLL Velvet, and the Woman’s Condom) are sold via the manufacturers’ websites and can be found on third-party websites such as Amazon.com, Alibaba.com, and Ebay.in (see images of types of female condoms available in Figure 1). Prices of female condoms differ by market with a higher price on websites aimed at the U.S. and EU markets, where a pack of four Cupid condoms sells for ~$8.00 on Amazon.com, and a lower price on websites aimed at the Indian and Chinese markets, with a pack of four Cupid condoms selling for less than $3.00 on Ebay.in. Analysis of the relationship between female condoms and e-commerce is relatively new, and more online research is necessary to determine the actual presence of female condoms online.

While the use of female condoms is increasing offline, three main factors hinder their use: overall lack of product awareness, the relatively high price of female condoms, and cultural barriers. First, knowledge and use of female condoms among many groups in different countries is still low, particularly in areas where the unmet need for contraceptives is high. A recent survey in Nigeria showed that men and women, particularly in urban areas, increasingly know about female condoms, but only 1.3% of men and 1.1% of women responded that they had used a female condom during their last sexual contact with a non-regular partner. Secondly, the price of female condoms can discourage widespread uptake. Indicative prices from the Access RH Product Catalogue show $0.54 for the FC2 and $0.35 for the Cupid. Female condom prices are higher than male condom prices, largely due to higher production costs and lower volumes. The problem is circular: vendors cannot negotiate a lower price due to the small market and the lack of a significant increase in demand, which is mostly caused by the high price. While the return on investment of female condoms has been demonstrated, female condoms remain low on the list of donor and government investments. Thirdly, culture has an impact on female condom demand and use. Persisting myths and misconceptions — for example, that this is a product for sex workers — need to be constantly addressed and dispelled. Experience from UAFC country programs in Cameroon, Mozambique and Nigeria shows...
that a general acceptance of female condoms can be realized once initial questions, concerns, myths, and misconceptions are properly addressed.\textsuperscript{8}

Analysis of female condoms programs, literature, and stakeholder interviews shows various factors that influence the relationship between the availability, accessibility, and use of female condoms and e-commerce. While most of these factors are also at play in “traditional” (offline) female condom distribution, some are specifically enabling or restricting for female condom distribution via e-commerce.

**Enabling Factors**

**Increased Availability**

Increased availability was the most common advantage that respondents mentioned when asked about the use of e-commerce to distribute female condoms. This was the case in Europe and the U.S. where the product is rarely found in shops, but where it is available online via a large array of websites (see Figure 2 for an example). Women in these contexts may search online for a hormone-free barrier method of contraception, such as the female condom. Manufacturers, distributors, and non-governmental organizations (NGOs) involved in female condom programming and advocacy felt that e-commerce could increase the availability and sales of female condoms in these contexts.

“A female condom manufacturer commented: “The female condom is not very well known in Europe and the U.S. so it is very difficult to convince a retailer to carry the product in their stores. So, many distributors went around that problem by selling the product via their website.”\textsuperscript{9}

Figure 2. FC2 female condoms available at drugstore.com.
Ease of Access for the Customer

The second advantage of e-commerce for female condoms mentioned by respondents was the ease of ordering a female condom via e-commerce. This advantage of e-commerce was mentioned by respondents working in the U.S., Europe, Asia, Africa, and Latin America.

A respondent from a Dutch shop selling female condoms, both online and offline, said: “It is so easy; it is just a click away, at whatever time you find the most suitable and you get it delivered at home.”

Anonymity

Buying RH supplies, including female condoms, can be an uncomfortable situation. One producer observed, when speaking about the U.S. context, that customers appreciate the anonymity: “You do not have to leave your house and go to a store. Customers in the U.S. can be a bit embarrassed and do not want their business to be out in the open like that.” This advantage of e-commerce was also mentioned by respondents working in Europe, Asia, Africa, and Latin America.

Online reviewers of e-commerce sometimes express regret that offline sources seldom offer female condoms. For example, “Can’t believe I waited so long to try this. It’s fantastic! Easy to use, adds to the sensation in my humble opinion, easy for him and doesn’t interrupt the process like (male) condoms do. And feeling much less untidy afterwards is another big bonus. Not going to be shy about using this anymore! Just wish they were sold in stores. Women should have equal ease of access to products intended for them anyway.”

MALE VERSUS FEMALE CONDOMS?

Female condoms are often compared to male condoms. Since e-commerce is so successful with the distribution of male condoms, why should it not be successful for female condoms as well? However, there are differences between the products that should not be overlooked.

The first is product awareness. Male condoms have been around for decades and have been promoted and subsidized by governments since the 1980s. People are aware of male condoms and look for them online. For female condoms to become as successful as male condoms via e-commerce, product awareness must increase significantly.

Secondly, marketing messages are important. Respondents felt that female condoms should not compete with male condoms. Instead, they should be marketed as a choice for women, a product that addresses the challenges that male condoms cannot (such as the willingness of the man to use it), and as an alternative to short-term, non-hormonal contraceptives. One manufacturer explained: “It is about women’s empowerment and providing them with a method that is controlled by themselves.”

Increased Awareness.

Product awareness is a complicated and very important issue for female condoms. The lack of product awareness hampers offline sales, and respondents argued that this challenge can be addressed by e-commerce to a certain degree. The presence of female condoms online helps to increase overall awareness of the product. If female condoms appear next to male condoms during an online search for “condoms” on a large web shop, awareness of the product increases. As explained by one respondent: “It helps make the product more known; it normalizes it.”
Private Provision of Information.
In some circumstances, private provision of information is essential. One respondent gave the example of a customer in a drugstore, where “the last thing you want is an explanation from the lady behind the counter, with a queue of other people standing behind you.” In e-commerce, you can design your website to ensure consumers get all the information they need, at their own pace, in the privacy of their own home.” Some manufacturers use their website or the websites of distributors to provide the customers with more information. This includes the use of video clips on how to use the product, which customers can watch where, when, and as often as they want.

Hindering Factors
Gender Inequality
For many reasons, especially the feminization of the HIV/AIDS epidemic in the 2000s, there is an increasingly urgent need to “increase women’s ability to negotiate safer sexual relations, combat gender discrimination and violence and increase access to female-controlled prevention methods such as the female condom.” However, women’s sexuality and empowerment remains a challenging topic in many societies. Lack of gender equality continues to pose a barrier to access to RH supplies worldwide, and to female condoms in particular.

For example, respondents in India cited the lack of freedom for women as one of the biggest constraints on the sale of female condoms both offline and online. As explained by a local NGO representative, “women are not supposed to be going online and logging onto websites where they can see about condoms and sex.” In India, it is almost impossible for women to have such a product delivered to them, either at home or at work, due to the associated stigma.

Lack of Product Awareness
All respondents identified this as the most important barrier to the sale of female condoms via e-commerce. In the U.S., Europe and China, and in wealthier urban areas of Nigeria and India, it was mentioned as the key hindering factor. One manufacturer explained, “As long as you do not have any product awareness and then [no] brand awareness, it is very difficult to get people to go to your website and actually purchase the product.”

As explained by one respondent: “Practically, challenges are the availability of electricity and the ability to use computers that are not infected with viruses that might get your bank account information. People might be reluctant to use e-commerce to make a purchase because of this.”

Lack of E-commerce Infrastructure
While the world seems more connected online than ever, there are still many areas and populations that do not have safe and reliable internet, electricity, banks, roads, petrol, delivery cars, and registered addresses for home deliveries. While in many countries in Africa and Asia there are large areas where the necessary infrastructure is available, not all people living in these areas will have the knowledge and financial resources to use them. Furthermore, most people in rural areas do not have the necessary infrastructure for e-commerce.

Most factors that hinder the sale of female condoms via e-commerce are not specific to the product but are related to all online sales. One manufacturer wondered about the exclusion of certain groups because of this. “You have to look carefully at who uses e-commerce ... compared to higher-priority consumers. Do they have access to a bank account or credit to be able to purchase something?”

Lack of Interpersonal Communication
Several respondents asserted that it would be extremely difficult to get first-time users to buy female condoms via e-commerce. Female condoms are a new product to most women and men. Face-to-face (interpersonal) contact with first-time users can reassure them of the effectiveness of the product and provide proper instructions for insertion and use. One manufacturer said, “Whether it is through a friend or through a training or through a doctor, that does not matter. But person-to-
person contact is crucial in making up someone’s mind in buying the product, let alone buying it online.” The majority of respondents expressed concern that with the growing use of e-commerce as a source of female condoms, these first-time users would not have the benefit of interpersonal communication.

**Lack of a Commercial Market**
Female condoms have been distributed on a large scale by international organizations and governments in low-resource contexts. However, in these countries where increased product awareness exists, female condoms were not sold for the full commercial price. They were either given away for free or sold for a highly subsidized price. One producer explained, “This makes it very difficult...to build a sustainable market where you have a repeat costumer who is going to come back for more product for the commercial price, let alone a sustainable e-commerce market.” However, respondents felt that there are other contexts and customers who would have the financial resources to purchase female condoms at commercial price, creating a sustainable offline and online market.

**Product Stigma**
In many countries, early introduction of female condoms focused on providing sex workers with a tool to halt the spread of HIV and AIDS. While such high-risk populations may remain a target for some female condom programming, the product itself has suffered from association with these programs and the stigmas surrounding sex work. As respondents mentioned, a woman carrying a female condom is often considered to be a sex worker.

**Perceived and Actual Difficulty of Use**
The design of female condoms is inherently linked to one of the most culturally sensitive parts of a woman’s body: the vagina. This poses a special challenge for the marketing of female condoms, particularly in some developing countries where cultural norms discourage women from touching their genitalia. Although research shows that women who have received proper instructions find it easy to use, some women require practice and patience to use female condoms correctly. If women perceive female condoms as being difficult to use or against their cultural values, they will be unlikely to purchase the product online.

**CONCLUSIONS**
Female condoms are available via e-commerce on a global scale, but this does not mean that they are purchased via e-commerce on an equally large scale.

There are major regional differences. In certain high-resource settings, such as the U.S., Europe, China and large cities in India and Nigeria, e-commerce is a viable method of selling all types of products. However, female condoms sales are hindered by an overall lack of product awareness. Most people simply do not know about female condoms and, as a result, do not search for or buy the product, either offline or online. In low- and middle-

<table>
<thead>
<tr>
<th>ENABLING factors</th>
<th>Higher Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Increased availability</td>
<td></td>
</tr>
<tr>
<td>✓ Ease of access for consumer</td>
<td></td>
</tr>
<tr>
<td>✓ Anonymity</td>
<td></td>
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<tr>
<td>✓ Increased product awareness</td>
<td></td>
</tr>
<tr>
<td>✓ Private provision of information</td>
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<table>
<thead>
<tr>
<th>HINDERING factors</th>
<th>Lower Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Gender inequality (underlies all)</td>
<td></td>
</tr>
<tr>
<td>✓ Lack of product awareness</td>
<td></td>
</tr>
<tr>
<td>✓ Lack of e-commerce infrastructure</td>
<td></td>
</tr>
<tr>
<td>✓ Lack of interpersonal communication</td>
<td></td>
</tr>
<tr>
<td>✓ Lack of commercial market</td>
<td></td>
</tr>
<tr>
<td>✓ Product stigma/Perceived and actual difficulty of use</td>
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</table>
income settings, demand creation programs could use a social marketing approach to educate customers on product benefits and approach priority customers with tailored messages and pricing. In low-resource settings, product awareness may have been increased by government programs in which female condoms are distributed via health care facilities and NGOs (either through free distribution or social marketing), but there still are other factors that would prevent e-commerce from becoming a viable distribution channel. Some countries or settings lack e-commerce infrastructure – such as the lack of safe and reliable internet connection, roads, and petrol – and a commercial market for female condoms. In addition, the stigma associated with the product and the unequal position of women in these settings would limit e-commerce sales.

On the other hand, e-commerce can complement distribution approaches such as free or subsidized distribution via the public sector and NGOs, commercial sales via shops, and sales via social marketing. Using the full range of distribution approaches can help reduce the barriers identified in this analysis. For example, e-commerce allows customers to upload feedback on their preferences and concerns, which vendors can then use to adapt their messaging both online and offline. A more vibrant online market will contribute to a larger overall retail market for female condoms.

**FUTURE RESEARCH**

Based on this analysis, further research is recommended to gain better insights into product awareness through e-commerce in high-resource areas, such as Europe, U.S., China, and large cities in countries such as India and Nigeria.

**The scope, scale, and potential of distributing female condoms via e-commerce:** Some critical follow-up areas of research include the connection between offline programs and online sales: are sales higher in places with greater experience and familiarity with female condoms, or are online sales higher in areas that lack offline availability? And how do past programs run by donors or others influence present sales?

**Product awareness through e-commerce in high-resource areas:** What do we know about female condoms in Europe, U.S., China, and large cities in other countries such as India and Nigeria. As female condoms are an underused product in both high and low-resource settings, increased investment is needed for both offline programming and online promotion.

**Variations in e-commerce experience between brands:** As more brands and manufactures enter the market, their experience with online sales may differ in significant ways, particularly as competition drives product and price differentiation. Further research could determine best practices among manufacturers’ approaches and product offerings.


9. Interview with a manufacturer on 21-08-2015

10. Online review from two years ago accessed on 28 Nov 2015 at http://www.walgreens.com/store/c/fc2-female-contraceptive/ID=prod6052635-product NB: There is no way to validate this comment as being the spontaneous opinion of a satisfied customer, versus a product endorsement placed by the manufacturer.

11. Interview with a manufacturer on 21-08-2015

12. Interview with civil society organization on 28-08-2015.

13. Interview with a manufacturer on 21-08-2015


15. Interview with a manufacturer on 21-08-2015.

16. Interview with civil society organization 20-08-2015.

17. Interview with a manufacturer on 21-08-2015.

18. Interview with civil society organization on 20-08-2015.


20. Interview with a manufacturer on 25-08-2015.