



E-COMMERCE OF REPRODUCTIVE HEALTH SUPPLIES IN MEXICO



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Acknowledgements

This case study was carried out by Mexfam, in partnership with the Institute for Reproductive Health, Georgetown University (IRH). It provides an overview of the e-commerce market for reproductive health (RH) supplies in Mexico. This case study is based on a desk review and an assessment of internet sites that provide access to RH supplies. The case study team would like to thank all of the stakeholders and contributors to this case study for their formative insight.

Organization Bio

Mexfam is the Mexican Family Planning Association. It was established in 1965, and has evolved considerably since then. Currently, Mexfam provides services through the following programs: 1) The Rural Community Program, 2) The Urban Community program, 3) The Young People program, and 4) Medical Services Clinics.

Authors Bios

Laura Violeta Chávez Guadarrama is an advocate in the National Autonomous of Mexico University. She has worked on projects in human rights, sexual and reproductive rights, gender, and equity since 2000. She is currently a Manager of the Resource Mobilization, which applies her knowledge in national and international human rights law.

Iliana Moreno Alvarez holds a Bachelor of Pedagogy from the National Autonomous of Mexico University. Iliana has worked in the field of sexual and reproductive health since 1993. She has worked in the Transition Project Mexico Office from the International Planned Parenthood Federation. At Mexfam, she has served as the coordinator of clinical services, and she is currently the coordinator of the Resource Mobilization and Fundraising department.





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 technology (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 examines the current Mexican landscape for e-commerce of reproductive health (RH) supplies and considers the implications for its future. E-commerce in Mexico is expanding rapidly; more than half of the population is online, and e-commerce has a total market value of more than \$12 billion.ⁱ The potential market for online sales of family planning (FP) supplies depends on several factors, including internet usage growth, demographic trends, and current and future use of methods suitable for distribution via the internet. These factors are highly interconnected. For example, according to the 2014 Mexican National Survey of Demographic Dynamics, more than 75% of women who use contraception use permanent and long-acting reversible contraceptive methods (LARCs), which require a clinician to insert. Women who use non-clinical, short-acting methods that are suitable for online sale tend to be young adults who are online in greater numbers than their older counterparts.

A review of websites confirmed the feasibility of making online purchases for short-acting FP methods and assessed the adequacy of information, reliability and ease of purchasing, and navigation within the websites. This review found no instances where a prescription was required for procuring hormonal methods. The assessment did find unevenness in the quality and type of information provided to customers, and revealed inconsistency in search capabilities across websites. Despite some problems – cumbersome search protocols and the lack of adequate information – a wide range of hormonal and barrier methods appear to be readily available online. In addition, Mexico's e-commerce market is primarily used by younger age groups. As Mexico's large youth age cohorts enter early adulthood, there is a clear potential for an increase in clients who obtain RH supplies through e-commerce, especially short-acting FP methods.

ⁱ All monetary amounts are in United States dollars, unless specified otherwise.

ENABLING factors

- ✓ Demographic trends favour an expansion of e-commerce as the large youth cohort, many of whom are internet users, reach adulthood.
- ✓ Internet use has increased, particularly among youth, through a rapid growth in users and internet-enabled devices.
- ✓ Rapid increase in e-commerce in other sectors of the economy suggests the potential for future growth of the sale of RH supplies online.
- ✓ Online payment systems to support e-commerce are increasingly available to customers.

HINDERING factors

- ✓ Insufficient laws and regulations decrease customer trust in e-commerce and could deter purchases.
- ✓ Electronic payments methods are not universally available to all potential customers.
- ✓ Some pharmacy websites require customers to provide personal information to complete RH purchases online, which concerns customers who value privacy.
- ✓ Persistent, poorly-designed search protocols and inadequate access to product information online prevents customers from finding RH supplies and information.
- ✓ Spacing methods, which are prime for e-commerce distribution, are a relatively small portion of methods used.

CONTEXT

According to the World Bank, Mexico is an “upper middle income” country, with a Gross Domestic Product (GDP) of \$1.3 trillion and a Gross National Income (GNI) of \$16,710 per capita.¹ Mexico currently has a population of 127 million, with 34 million women of reproductive age (ages 15-49).² Mexico is considered a young country; 28% of the total population is under age 15 and 50% is under age 28.³ Although young, Mexico is well on its way toward a demographic transition; the largest age cohort is ages 10-14, with reduced cohorts for ages 0-9, reflecting a potential decline in fertility rates.

In Mexico, 70% of women of reproductive age who are married or in union report contraceptive use. According to the 2014 National Survey by the Instituto Nacional de Estadística y Geografía (INEGI), 98.7% of women ages 15-49 have heard of at least one contraceptive method, regardless of whether they have ever used a method.⁴ Among married or in union women of reproductive age, 66% were using modern methods.⁵ The percentage is significantly lower among women in rural areas, especially women from indigenous cultural groups with low levels of education.⁶

Market data for FP use is limited, and no figures were available for 2015. As of 2011, the contraceptive market

in Mexico was valued at \$293 million.^{7,8} According to an interviewed expert in the pharmaceutical industry, purchases of Oral Contraceptives (OCs) dropped over 4% from September 2010 to September 2011, which indicated a switch to other methods. Companies such as Schering, Pfizer, Wyeth, Abbott, Janssen, and Asofarma offer injectables, hormonal patches and OCs; and a wide

Table 1. FP method use (women, ages 15-49), 2014

FP Method	Percent
Female sterilization	49.9%
Copper Intrauterine Device	15.6%
Male condom	13.3%
Injectables	5.5%
Oral Contraceptives	4.2%
Implants	3.2%
Vasectomy	2.6%
Withdrawal	2.4%
Fertility Awareness Methods	2.3%
Patch	0.8%
Emergency Contraception	0.1%
Female condom	0.1%
Hormonal Intrauterine Device	0.1%
Total	100.0%

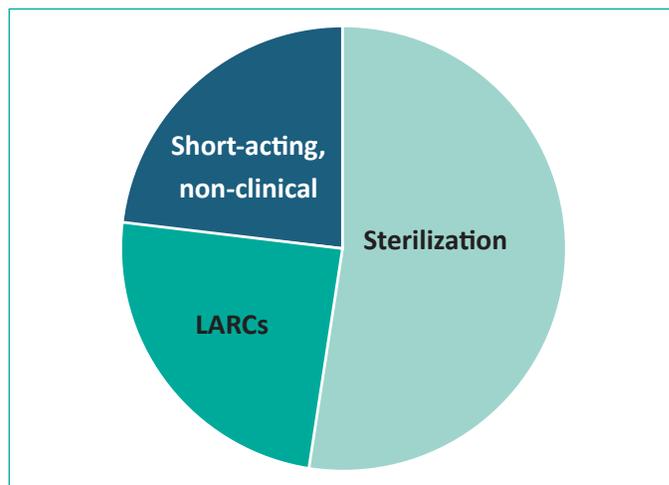
Source: INEGI, National Demographic Dynamics Survey, 2014.

range of condoms are available in many colors, flavors, textures, and prices under brands such as Trojan, Sico, Simi, and Prudence. According to estimates, about 180 million Trojan male condoms were sold in 2010.

As shown in **Table 1**, based on the 2014 Mexican Survey of National Demographic Dynamics, there are an estimated 16.5 million users of contraception.⁹ More than 75% of current method use consists of female or male sterilization (49.9% and 2.6% respectively) and LARCs that require a clinician for insertion, such as intrauterine devices (IUDs) or implants. This method mix, which is skewed toward permanent and long-acting methods, may explain the above-mentioned decline in demand for OCs reported in 2011. As shown in **Table 1** and **Figure 1**, less than one in four women are using short-acting spacing methods that do not require a nurse or a doctor. These women are considered potential clients for obtaining RH supplies through e-commerce. The most common methods likely

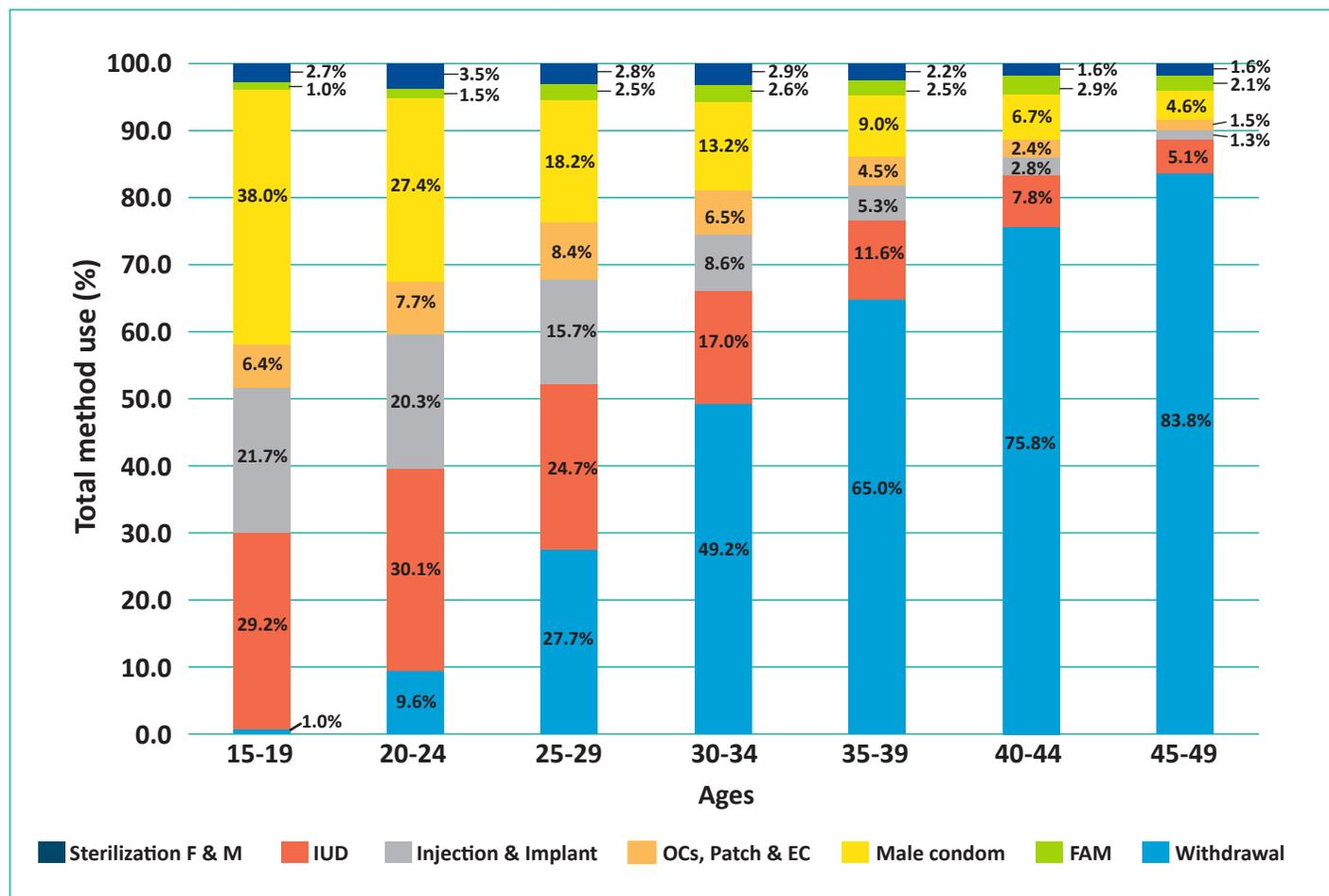
to be offered through e-commerce are OCs (over 600,000 women, 4.2% of all users), male condoms (more than 2 million women, 13.3% of all users), and fertility awareness methods (FAM) (380,000 women, 2.3% of all users).

Figure 1. Grouped FP method use (Mexican women ages 15-49, 2014)



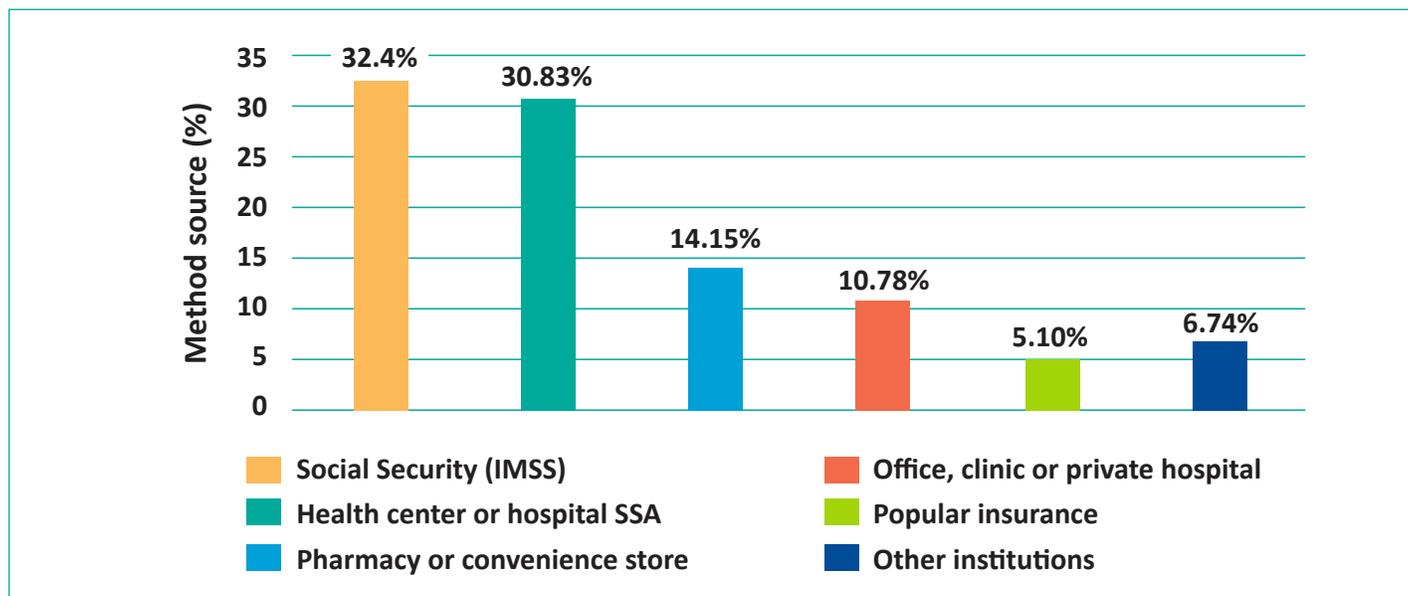
Source: INEGI, National Demographic Dynamics Survey, 2014.

Figure 2. 2014 changes in FP method mix by age group, 2014



Source: INEGI National Demographic Dynamics Survey, 2014.

Figure 3. Changes in FP method (women, ages 15-49)



Source: INEGI, National Demographic Dynamics Survey, 2014.

Based on the 2014 Mexican Survey of National Demographic Dynamics, the method mix shifts with the age of the user. As **Figure 2** illustrates, the youngest age groups are also the most likely to use short-acting methods. Additionally, the majority of Mexican women rely on government insurance to obtain their RH supplies. As shown in **Figure 3**, more than 75% of women obtain their method of contraception from a national or local health delivery venue. Fewer than 15% of women obtain their method from a pharmacy.

E-commerce Market

According to a 2015 study of e-commerce by the Mexican Association of the Internet, A.C. (AMIPCI), the estimated market value of e-commerce is increasing rapidly.¹⁰ It rose by 34% from 2013 to 2014, generating revenues of \$12.2 billion.¹¹ An earlier study by the Interactive Advertising Bureau of Mexico (IAB) found that 66 million Mexicans were internet users as of 2014, which represents 55% of the total population, compared to 30% in 2009.¹²

Figure 4. Evolution of e-commerce market, 2009-2014*



Source: Mexican Association of the Internet, A.C. (AMIPCI). * \$1.00 USD = 13.28 MXN

In AMIPCI’s 2015 study, 75% of all internet users said that they had made an online purchase in the first three months of 2015.¹³ Customers ages 18-34 bought more online than those age 35 or older. Over half of shoppers (57%) acquired products on the internet from international stores; 64% from the United States (U.S.), 36% from Asia, and 13% from Latin America.¹⁴

On average, the top category for online purchases was travel, followed by sporting events and wellness products. The three most common forms of online payment were debit cards (32%), credit cards (30%), and PayPal (23%).¹⁵ Major firms such as Walmart of Mexico and Central America (Walmex), Comercial Mexicana, Grupo Famsa, Soriana, Liverpool, Sears, and Palacio de Hierro are turning toward e-commerce as their websites have started to generate substantial revenues.¹⁶

FINDINGS

There are no concrete figures on the size of e-commerce of RH supplies; however, it appears to be quite small (less than 1%) of the market for RH supplies. Estimates place the value of the e-commerce market for RH supplies at under \$553,000 per year.¹⁷

Three sources of RH supplies through e-commerce were found: 1) companies that produce and distribute pharmaceuticals and FP methods;¹⁸ 2) large retail stores and supermarkets that carry FP methods (including Superama and Wal-Mart de México); and 3) two major

pharmacies (Farmacias del Ahorro and Farmacias San Pablo). In addition, an analysis was conducted of the websites that enable RH supply purchases for seven identified FP methods: OCs, injectables, contraceptive patches, implants, male condoms, female condoms, and emergency contraception (EC). The analysis considered key factors such as the adequacy of information, reliability and ease of purchasing, and comfort of navigation for the customer.

Based on a review of websites offering RH supplies online (see **Table 2**), in most instances a prescription was not required for hormonal methods.¹⁹ The review found inconsistencies in the quality and type of information provided online and in search methods for RH supplies across the websites. In some cases, a generic search did not work, and a potential customer had to search using brand names. Most websites provided delivery at various levels of cost, some with a minimum purchase requirement. Some websites require a detailed registration, including personal data and contact information, which may inhibit those who want privacy from moving forward with a purchase. Additionally, some websites offer access to medical counseling services.

Mexico’s three largest online markets are Mercado Libre, eBay, and Amazon.ⁱⁱ The Argentina-based Mercado Libre only offered male and female condoms and the contraceptive patch Ortho Evra. Amazon and eBay offered a wider variety of non-hormonal products and male and female condoms from India, the United Kingdom (UK),

Table 2. Websites offering RH supplies online

Platform	Male condom	Female condom	OC	Hormonal Patch	EC	Ring	Injectables
Mercado Libre	x	x		x			
eBay	x	x					
Amazón	x						
Superama	x		x	x		x	x
Walmart	x		x				
Farmacía del Ahorro	x		x	x	x		x
Farmacías San Pablo	x		x		x		

ⁱⁱ Mercado Libre is an Argentina-based company which facilitates purchase, sale, payment, and auction with a presence in 13 countries in Latin America, including Mexico. eBay facilitates online purchases and auctions (www.ebay.com). Amazon was founded in the U.S. and sells online in multiple countries.

China, Thailand, and the U.S. Amazon offered more in-depth and diverse information on RH supplies, presenting information from the actual manufacturers. All three provide shipping; some offered free international shipping with a minimum purchase. Prices seem similar, but no data is provided on costs per unit.

RH supplies are also available through the websites of major supermarkets Superama and Walmart. Superama is a large supermarket chain with a pharmacy branch that has been allied with Walmart since 2008. Superama's portal is clearly organized into sections, which makes it easier to search, but the customer cannot make a generic search and must know the brand name before making the purchase. No information was found related to contraindications or side effects. A variety of hormonal methods were available without a prescription, including an injectable contraceptive. The Walmart site also offers pharmaceutical products, including four types of hormonal contraceptives. There were six brands of condoms available in different forms at varying costs, with a total of 47 options.

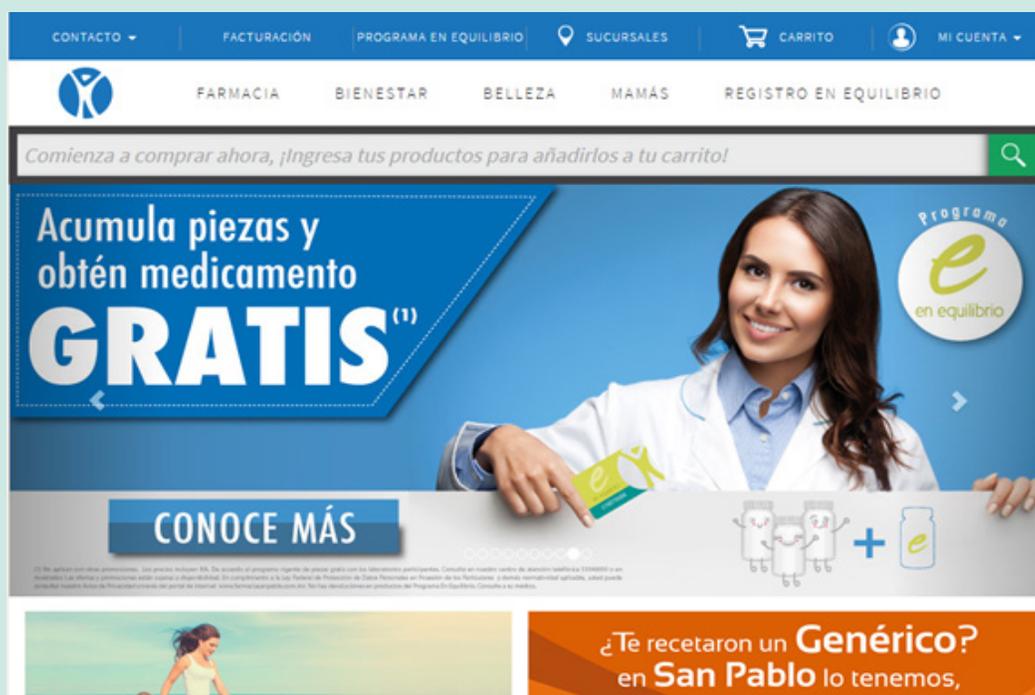
In addition, RH supplies can be found on two pharmacy websites, Farmacia del Ahorro and Farmacias San Pablo. General words, such as "contraception" resulted in

confusing search findings. Fast and efficient searches on these sites require customers to know the active formula, the specific name, or a trademark of a drug. The section for Sexual Health includes a sub-section for "Condoms," which contains the most common brands of male condoms. Prices vary from one pharmacy to the other. In order to make online purchase from these pharmacies, a customer must register or create an account, which requires entering personal data such as date of birth, name, postal code, email address, and a personal password. However, these online pharmacies provide online consultations, which other websites do not offer.

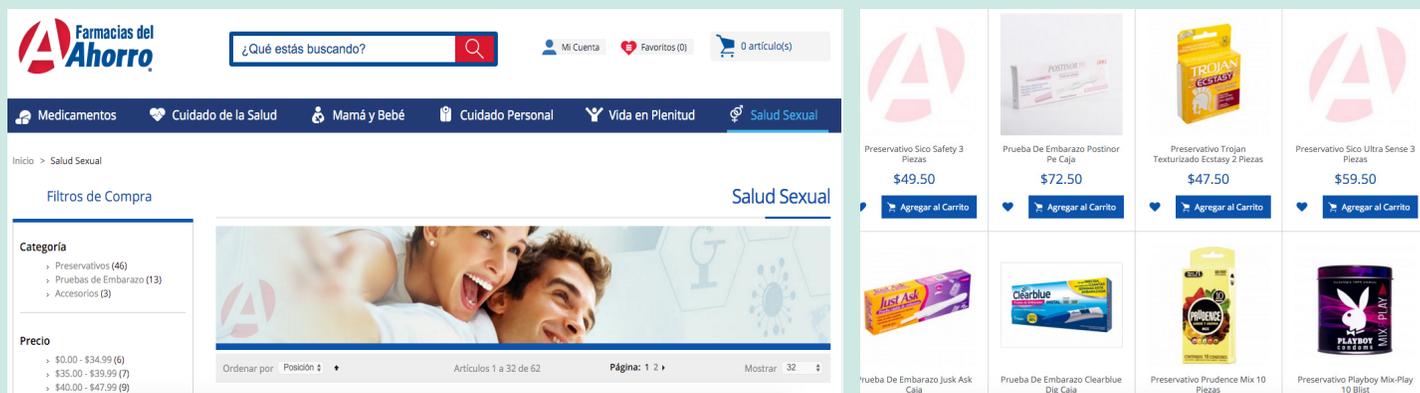
Enabling Factors

Favorable Demographics

Findings from recent surveys of internet users show that younger age groups are more likely to make purchases online. Demographic studies also show that the younger age groups are more likely to use short-acting FP methods, most of which can be sold online. There is a potential for growth in the number of young women among less affluent populations who will have increased online access to RH supplies through their internet-enabled mobile devices.



Yasmin OC is available on the Farmacia San Pablo website



Condoms and pregnancy tests are available on the Farmacias del Ahorro website

Rapid Increase in Internet Use and E-commerce

Like its northern neighbor, the U.S., Mexico is experiencing dramatic increases in the number of people with access to the internet, including internet-enabled cell phones. It is estimated that, by 2020, e-commerce will double in size.

Availability and Acceptability of Online Payments

A significant proportion of internet users, especially those in the younger age cohorts, report making online purchases with debit cards, credit cards, and PayPal. While there are concerns about online security, the infrastructure for online transactions is available.

Hindering Factors

Laws and Regulations

There is no specific regulation of practices in e-commerce. Almost anyone can buy and sell all types of products through the internet, which can contribute to an unsafe marketing environment for customers. This situation may undermine consumer confidence in portals like eBay and MercadoLibre, where it is possible to buy various contraceptive methods without regulation.

Electronic Payment Methods

Despite the existence of credit and debit cards and PayPal, the development of e-commerce is limited by a lack of universal access to electronic payment methods.

Lack of Privacy at Pharmacy Websites

Pharmacy websites' registration requirements ask for personal information. This may inhibit online purchase of sensitive RH supplies. E-commerce growth in Mexico will require the collaboration of government and private sector to provide greater security in all transactions and to improve public confidence in both privacy protection and anti-theft measures.

Cumbersome Search Protocols and Inadequate Information

Based on the website review conducted, generic searches did not yield useful results. Until companies develop platforms with a more user-friendly search process and purchasing interface, and with more complete information on contraception, it will be difficult for this market to grow.

Low Use of Spacing Methods

Short-acting spacing methods are the most favorable for online sales. These methods include male and female condoms, OCs, EC, hormonal patches, and vaginal spermicides. As found in the India case study, one obstacle for e-commerce of RH supplies is the relatively low use of short-acting spacing methods. Although currently used by only 23% of women using FP, there is likely to be a greater demand for spacing methods in the future as Mexico's youth cohort reaches adulthood.

CONCLUSIONS

E-commerce in Mexico is growing rapidly and has the potential to become a reliable source for procuring RH supplies. However, this area is largely without government oversight or regulation. The retail e-commerce market is primarily used by the younger age groups who also have the highest use of short-term FP methods. As Mexico's large youth cohorts enter early adulthood, many of them may obtain RH supplies through e-commerce channels.

FURTHER RESEARCH

This case study uncovered several areas that would benefit from further inquiry and research.

➤ **Regulation and oversight:** This case study does not make policy recommendations, but future research could explore the benefits and drawbacks of collaboration between the government and private sectors to provide quality assurance and security in all transactions. Would this collaboration improve public confidence in making purchases online?

➤ **Customer behavior:** Mexican customers obtain most of their RH supplies through the health care system. It would be interesting to explore whether that trend has been stable or whether new channels are gaining popularity and influence.



Endnotes

1. WB gives an estimate of \$9,870 2014 GNI per capita using Atlas method. <http://data.worldbank.org/country/mexico>. http://www.prb.org/pdf15/2015-world-population-data-sheet_eng.pdf
2. http://www.prb.org/pdf15/2015-world-population-data-sheet_eng.pdf IBID and <http://www.prb.org/DataFinder/Topic/Rankings.aspx?ind=18>
3. PRB 2015 Pop Data Sheet Ibid, "Encuesta Nacional De La Dinámica Demográfica 2014 Nota Técnica" Boletín De Prensa Núm. 271/15 9 De Julio De 2015 Aguascalientes, Ags.
4. INEGI. Population, Household and Housing. Birth and fertility. [10/01/2015] Link consultation: <http://www3.inegi.org.mx/sistemas/temas/default.aspx?s=est&c=17484>
5. The estimate of 73 percent for any method versus 66 percent modern methods is from PRB 2015 world pop data sheet. IBID. The estimated prevalence has not changed much since 2006. Mexico's 2006 overall contraceptive prevalence was 70.9 and 66.5 for modern methods. <http://www.prb.org/DataFinder/Topic/Rankings.aspx?ind=42>.
6. INEGI. Population, Household and Housing. Birth and fertility. op. cit.
7. USD estimate based on an exchange rate of 13.28 Pesos = 1\$US as of Sept 23 2014. The USD has strengthened against the Peso by over 25% since 2015.
8. "A low industry in contraceptives" by Espinosa Erendira. Published: Monday, October 31, 2011 at 08:41:00 <http://www.cnnexpansion.com/manufactura/2011/10/31/a-la-baja-industria-de-anticonceptivos>.
9. INEGI. Encuesta Nacional de la Dinámica Demográfica 2014. Tabulados principales resultados Enadid14_tabulados-principales-resultados. Cuadro5.4 Mujeres de 15 a 49 años usuarias de métodos anticonceptivos. <http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/especiales/enadid/enadid2014/default.aspx>
10. Mexican Internet Association B.C. AMIPCI. Study on Electronic Commerce in Mexico 2015. See online: [02/10/2015] Link consultation: https://amipci.org.mx/estudios/comercio_electronico/Estudio_de_Comercio_Electronico_AMIPCI_2015_version_publica.pdf
11. Picture: Mexican Internet Association (AMIPCI). Estimated market value of E-commerce in Mexico 2014. Query link: IBID. USD estimate based on an exchange rate of 13.28 pesos = 1\$US as of Sept 23 2014.
12. Interactive Advertising Bureau (IAB) México, Brief on Media consumption among Internet users and devices in Mexico (seventh edition). Redirection to SlideShare [28/10/2015] Query link: <http://www.slideshare.net/iabmexico/estudio-consumo-medios-dispositivos-mexico> IAB Mexico conducted a 2014 study of Consumer Media and Devices use on the Mexican Internet (seventh edition) with 1,196 interviews consisting of 49 percent women and 51 percent of men in six areas of Mexico, with an age range from 13-70 years. IAB is an association of companies involved in interactive advertising in major markets around the world. Since 1996, it has been promoting the use of Internet as a communication tool for brands and to maximize the effectiveness of online advertising. Site: <http://www.iabmexico.com/>
13. Mexican Internet Association A.C. AMIPCI. Study on Electronic Commerce in Mexico 2015. op.cit.
14. Mexican Internet Association A.C. AMIPCI. Study on Electronic Commerce in Mexico 2015. IBID.
15. IAB México, Brief Media consumption among Internet users and devices in Mexico (seventh edition). op.cit.
16. Article: Multiva Group. Excelsior, Money and Image. E-commerce continues its growth trend in Mexico. Online inquiry [date: 30 / March / 2015] [Consulted: 28 / October / 2015] Reference Link: <http://www.dineroenimagen.com/2015-03-30/53232>
17. According to the MexFam research team, this figure is estimated based on 2014 data from National Chamber of the Pharmaceutical Industry (CANIFARMA), which reported a total sector-wide turnover of \$204,445 billion pesos, of which an estimated 1.9% is accounted for by contraceptive methods, or \$3,902 billion pesos. In 2015 the Ministry of Finance and Public Credit (SHCP) estimated that only 0.18% of pharmaceutical transactions are made through e-commerce. Based on this small percentage, the total e-commerce market for contraceptives comes to \$7,342,512 million pesos, which at an exchange rate of \$1.00 USD = \$13.28 MXN gives a figure of \$552.900 USD.
18. (Asociación Mexicana de Farmacias, A.C. (Anafarmex); Laboratorios Bayer de México S.A. (Women's Health Care); Laboratorios Pfizer México (Consumer Health Care); and Prudence México (a condom manufacturer)
19. Based on follow-up with the MexFam research team, one online source, "Farmacia San Pablo," may require a prescription for the purchase of ECs. E-mail communication, 15 February 2016.

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