

Original research article

Suspect online sellers and contraceptive access[☆]

Bryan A. Liang^{a,b,c,*}, Tim K. Mackey^{a,d}, Kimberly M. Lovett^{a,b,e}

^a*Institute of Health Law Studies, California Western School of Law, San Diego, CA 92101, USA*

^b*San Diego Center for Patient Safety, University of California San Diego School of Medicine, San Diego, CA 92101, USA*

^c*Department of Anesthesiology, University of California San Diego School of Medicine, San Diego, CA 92103, USA*

^d*Joint Doctoral Program on Global Health, University of California San Diego-San Diego State University, La Jolla, CA 92093, USA*

^e*Kaiser Permanente, El Cajon, CA 92020, USA*

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Abstract

Background: Issues surrounding contraception access have been a national focus. During this debate, adolescent and adult women may seek these products online. Due to safety concerns, including potential counterfeit forms, we wished to assess whether online “no prescription” contraceptives were available.

Study Design: We assessed online availability of reversible, prescription contraceptive methods resulting in <10 undesired pregnancies/year, i.e., Depo-Provera shot; oral contraceptives; NuvaRing; Ortho Evra patch; Paragard and Mirena IUDs; and Implanon/Nexplanon implants. Using Google search “buy ITEM no prescription,” we reviewed the first five result pages for “no prescription” vendors. Searches were conducted 1/3/2012–2/20/2012.

Results: All contraceptives were available as “no prescription” products. Furthermore, IUDs were advertised as “over-the-counter” and YouTube videos provided “how to” videos, including a cartoon version. We also found that illicit online pharmacy marketing is shifting from direct search engine access to social media (Facebook, Twitter, Slidehare, flickr).

Conclusion: Online contraceptive sales represent patient safety risks and a parallel system of high-risk product access absent professional guidance. Providers should educate patients, while policy makers employ legal strategies to address these systemic risks.

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Keywords: Internet; Contraceptive access; No prescription; Over-the-counter; Online pharmacies; Patient safety; Public health; Birth control; Counterfeits

1. Introduction

According to the National Center for Health Statistics, approximately 43% of never-married US female teenagers have had sexual intercourse [1]. Indeed, 50% of all pregnancies in the United States are unintended [2]. Consequently, teenage pregnancy and contraception have become centralized media themes, and there are direct-to-consumer advertisements for most branded prescription products, such as the contraceptive ring, IUDs and various oral contraceptive pills.

Contraception issues have been a source of public debate due to significant policy proposals and reform efforts. Mandated vs. voluntary coverage, funding sources, religious exemptions and political influences have fueled heightened attention to contraception methods, conditions under which they may be accessed, and potential barriers, particularly for teenage females.

However, despite recent efforts to increase contraceptive access, these adolescents are often underserved because current delivery structures do not take into account their limitations and needs [3]. For example, sexually active adolescents have barriers to contraceptive access related to fears of disclosing sexual activity, stigma associated with teenage pregnancy, lack of transportation and lack of independent financial resources [3].

In addition, these younger patients have been raised with the Internet, which is increasingly being utilized for consumption of health information and social networking

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* Corresponding author. San Diego Center for Patient Safety, University of California, San Diego School of Medicine, San Diego, CA 92101. Tel.: +1 619 515 1568; fax: +1 619 515 1599.

E-mail address: baliang@alum.mit.edu (B.A. Liang).

[4]. In fact, 2010 surveys show that 31% of young adults currently use the Internet for health-related information [4], while 95% are actively online [5]. Hence, they are facile with online culture, including purchasing and e-commerce, which facilitates independent online purchasing [6].

The combination of these factors has created opportunities for illicit online sellers to exploit particularly teenagers as well as other patients by marketing pregnancy prevention methods without professional guidance. This activity is increasingly concerning due to access barriers, the complexity in choosing appropriate contraceptive methods, opportunities for selection error [7] and possibility of encountering counterfeit products [8].

Indeed, earlier work has demonstrated online availability of contraceptives without a prescription [9,10]. However, the Internet has evolved dramatically since this pioneering work, with social media, globalization and criminal actors entering into these markets [8,11,12]. Ongoing political/media attention and access difficulties only magnify the importance of reassessing the status of these online products. Hence, we reviewed whether and which types of contraception continue to be available online without oversight, the ease of access, and online marketing approaches being employed.

2. Materials and methods

We focused our research on reversible contraceptive methods that resulted in first-year failure rates of <7–9% per year [13]. These highlighted methods included intrauterine devices (IUDs) and implants, shot, pill, ring, and patch.

These contraceptive methods were then searched using Google. For “shot”, we searched “Depo-Provera”; for pills, we searched common monophasic, biphasic and triphasic oral contraceptives; for ring, we searched “NuvaRing”; for patch, we searched “Ortho Evra” patch; for IUDs, we searched “Paragard” and “Mirena”; for implants, we

searched “Implanon” and “Nexplanon” (Table 1). Specifically, we searched “buy ITEM no prescription” with ITEM representing the specific drug or device. Because previous work has shown consumers generally purchase goods online after visiting three to five sites, we examined the first five result pages [14,15]. Ethical and legal concerns regarding falsifying patient information and purchasing online without a prescription precluded us from actual purchasing [11]. Searches were conducted 1/3/2012–2/20/2012.

3. Results

For each of the methods of birth control, online sites were identified that offered to sell them without prescriptions (Table 1). We also found both direct links to illicit online pharmacy websites as well as social media links to advertisements. Facebook, Twitter, Slideshare and flickr links highlighted illicit online pharmacy advertising for contraceptives without a prescription (Fig. 1). In addition, we observed new combinations of illicit online access that integrated search engines and social media: Facebook pages providing direct inserts of sponsored links from Bing.com to contraceptive “no prescription” seller advertisements (Fig. 2).

Beyond marketing of contraceptives as “no prescription” products, we found some were advertised as “over-the-counter”, a substantively different and clearly fraudulent marketing approach. Specifically, we found multiple IUDs being advertised as “no prescription” and “over-the-counter” (Fig. 3). Because of this finding, we further assessed whether social media YouTube “how-to” videos were available for invasive contraceptive application. We identified several YouTube videos demonstrating and teaching IUD and implant insertion and removal, including a cartoon version (Fig. 4).

4. Discussion

The unfettered online availability of many contraceptive forms without a prescription puts consumers, including vulnerable adolescents, at serious risk. As consumers rather than patients, they are not provided with professional guidance; education on safe-sex practices; contraceptive methods and safe use; sexual exploitation/abuse screening; nor sexually transmitted disease screening.

Previous work highlighted the online availability of contraceptives without a prescription, which itself is a worrying trend [9,10]. Yet, not only does this illicit online availability persist, it is expanding to different and much more extensive and powerful online marketing platforms. Online sellers now offer open access to contraceptive products via popular social media platforms such as Facebook and Twitter, frequently accessed and relied upon by teenagers and young adults as well as by other vulnerable populations. Indeed, use of social media such as

Table 1
Contraceptive methods available without prescription online

Method	Products
Oral monophasic	Allesse, Beyaz, Brevicon, Demulen, Desogen, Levlen, Loestrin, Norinyl, Ortho-Cept, Ortho-Cyclen, Ortho-Novum, Yasmin, Yaz
Oral biphasic	Jenest-28, Mircette, Necon, Ortho-Novum 10/11
Oral triphasic	Ortho-Novum 7/7/7, Ortho Tri-Cyclen, Tri-Levlen, Tri-Norinyl, Triphasil, Micronor, Nor-QD, Ovrette
Extended cycle	Lybrel, Seasonale, Seasonique
Emergency contraception	Plan B, Ella
Depo Provera shot	
NuvaRing	
OrthoEvra patch	
IUDs	Paragard (Copper IUDs), Mirena IUD (Flex T IUDs)
Implants	Nexplanon, Implanon, Norplant

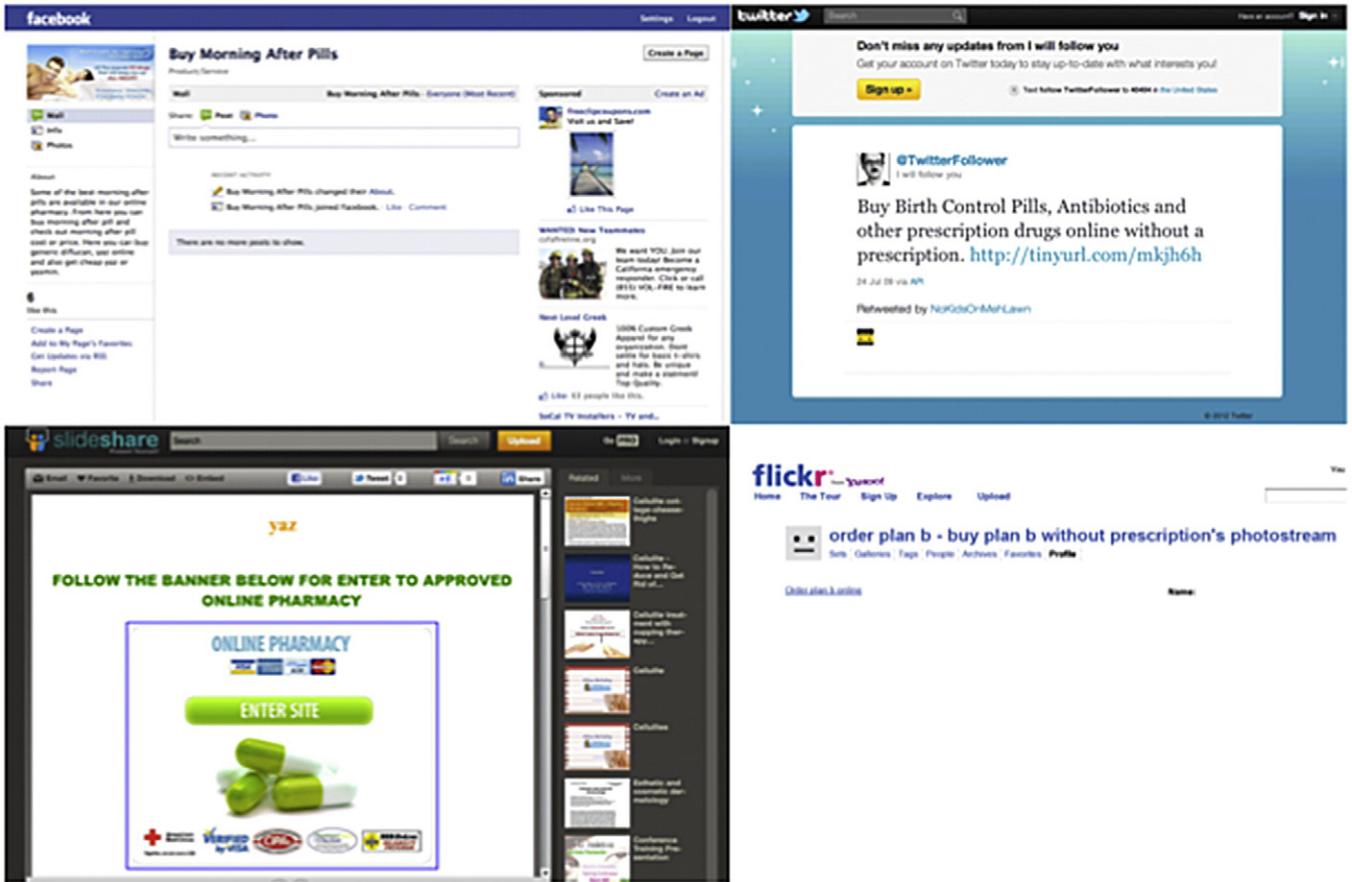


Fig. 1. Social media platform examples advertising contraceptives: Facebook, Twitter, flickr, Slideshare.

Facebook and Twitter is the number one pastime of 16–24-year-olds in the UK, while 80% of US teens online now use social media such as Facebook or MySpace [5,16]. Unregulated advertising of contraceptive products via these high-traffic social media platforms may mislead

particularly younger consumers regarding the authenticity, safety, risks and benefits. We note that, as far as we are aware, this study is the first to report all four major social media platforms — Facebook Twitter, Slideshare and flickr — advertising “no prescription” drugs online. Other



Fig. 2. Social media direct links to sponsored links for illicit sales.

Prescriptions Over-the-Counter Meds for Pets Meds for Practitioners How to Order

Home / Over The Counter / Family Planning / Nova-T (Copper Intrauterine Device)

Nova-T
(Copper Intrauterine Device)
Manufactured by Schering
Brand

Over the Counter Product
Email to a Friend
Be the first to review this product

Buy Multiload IUD (Intrauterine Device) Online at Canadian Pharmacy Store

Multiload IUD (Intrauterine Device) : Buy Online Canada Drugs at Discount Price

MULTILOAD CU250
Manufactured by: Organon Inc.
NO prescription required

Refer this product to a friend and earn \$15 USD!

Type	Strength	Quantity	Price (USD)
Brand	Cu250	1 each 3-Year Device	\$74.74
Brand	Cu375	1 each 5-Year Device	\$80.49

Multiload IUD (Intrauterine Device)
Intrauterine Device
Manufactured by Organon Inc.
Over the Counter Product

Flexi-T IUD (Intrauterine Device)
Select a Size
Add to Cart
NO prescription required
MORE INFO

Fig. 3. IUDs advertised as “no prescription required” and “over-the-counter product”.

work has found only one or two of these social media marketing events [11,17]. This may mean that suspect online sellers see social media as an important venue for reaching this younger target customer base for their products. Indeed, a recent International Narcotics Control Board report from the UN Office of Drugs and Crime also warns of illegal online drug sellers targeting youth through social media [18].

This situation may also directly lead to purchases of counterfeit drugs and devices due to the concerns with online drug sellers [12]. Indeed, counterfeit birth control pills and patches have already been identified as penetrating the US health care market [10]. This has significant implications for

costs from unintended pregnancies and other remedial care that may be necessary.

The online direct-to-consumer (DTC) medical marketplace now firmly provides an unregulated pathway of access to drugs/devices that is entirely peripheral to traditional medical care and is therefore not accountable for employing standard patient safety protocols including informed consent and risk screening. Yet, the unique risks of contraceptives are widespread and significant. Obesity, diabetes mellitus, positive smoking status, hypertension and migraine without aura—common conditions in females—significantly increase the risk of developing thromboembolic disease while taking most preparations of contraceptive medications

Search results for mirena insertion

Filter

- Mirena Insertion Animation
by Aib-Ping | 2 years ago | 171,036 views
- Mirena Insertion.avi
The video shows a simulated view of Mirena Insertion Regent's Onstage Hyster. German Member: Kishaba, India. Video: 4/16/2012 12:05.
- Mirena insertion under Hysteroscopy view by osama shawki
by osamashawki | 10 months ago | 4,842 views
- Mirena insertion perfect
by osamashawki | 6 months ago | 3,362 views
- IUD Insertion
Learn how, when to insert IUD
by medic4life | 1 year ago | 2,484,707 views
- IUD insertion (mirena)
Hey everyone- noticed a lack of videos discussing the process of IUD insertion, and what it was like for people who've had it done. I wanted to ...
by altheatre | 9 months ago | 2,759 views
- Mirena Insertion Cartoon
Brief overview of what to expect during your mirena insertion.
by hollyblyth | 1 year ago | 2,547 views

Search results for Implanon insertion

Filter

- Implanon (Nexplanon) Insertion
Implanon is a long acting contraceptive implant that is fitted by trained healthcare professionals. The implant is 4cm by 2cm in size and is a ...
by built4surgery | 2 years ago | 210,305 views
- Implanon birth control implantation procedure quick and sim...
by hairyballs27 | 2 years ago | 104,104 views
- Implanon NXT insertion June 2011 lemm
Insertion of Implanon NXT (a subdermal, long-acting progestin-only hormonal contraceptive implant, effective for up to 3 years)
by dreeef | 6 months ago | 8,595 views
- Experience/insertion of implanon
www.Implanon-usa.com everything u need to know is here. www.youtube.com how it is inserted here.
HD by Caraghnaasmomma | 7 months ago | 2,269 views
- Implanon Insertion
am implant birth control
by BATMANvose | 4 months ago | 934 views
- Mónica de inserción del implante subdérmico ...
Inserción del implante subdérmico anticonceptivo Implanon por el Dr Fernando García Sánchez Insertion Implanon
by HéctorGarcía | 1 year ago | 80,190 views
- Implanon review
This is just my personal experience with Implanon. Everybody's body reacts differently to medications. Any questions ask away. I hope this was ...
by Colmanmemy2010 | 5 months ago | 5,151 views
- IMPLANON® (etonogestrel implant)
by dndafshy | 1 year ago | 12,582 views

Fig. 4. You Tube videos on Mirena IUD and Implanon insertion.

[19]. Indeed, the American College of Obstetrics and Gynecology has endorsed the United States Medical Eligibility criteria developed in 2010 by the CDC to provide clinicians with guidance in prescribing contraception to women with medical problems. [19].

Contraceptives are not inherently dangerous, but if they are used by women with significant health concerns without guidance, the implicit notion that contraceptive methods are safer than pregnancy may be undermined. Medical problems have been reported in women who buy oral contraceptives without a prescription [20]. Women without guidance also misperceive risks and contraindications regarding the safety of oral contraceptives, and, in particular, teens in the USA do not employ birth control nearly as frequently as their counterparts in other countries [21]. Without the oversight of medical professionals, these significant risks are overlooked, undisclosed, not discussed, and a source of substantial and unnecessary risk for female populations. Indeed, newly identified adverse events, warnings and recalls regarding contraceptive products have been issued [22] which may not be understood or even known by these patients. For pharmaceutical contraceptives, the largest risk is that the purchaser may have medical conditions that should preclude her use of the method bought.

Importantly, the special characteristics of today's adolescents with regard to Internet use, sexual intercourse onset and pregnancy prevention needs, in combination with reluctance of accessing the traditional health care system for pregnancy prevention [23], equate to higher risk of exploitation by illicit online marketing, particularly through social media. This group is particularly at risk with virtually universal access to any contraceptive without a prescription or medical professional oversight, and access to instructional YouTube videos detailing how to insert and/or remove IUDs/implants without leaving their home, disclosing their intentions or visiting a health care provider. This can potentially lead to reckless behavior in attempting to self-insert contraceptive devices.

This expansion of unfettered and potentially dangerous online access is likely to continue as platforms including Facebook and Bing.com continue to find means to promote sponsored links advertising "no prescription" products. Despite fines levied by the US Department of Justice (DOJ) against Google for inappropriate online pharmacy marketing, other platforms have not been penalized and regulation of Internet and social media-based DTC advertising remains largely unaddressed [12]. Hence, multidisciplinary and multisectorial approaches are necessary to address these online sales [8].

Reform should be a priority. Physicians should educate patients and families regarding the patient safety risks of online contraceptive purchasing. In addition, the risks and skills requisite to use or implant contraceptive devices as well as the need for professional oversight to carefully select, monitor and adjust contraception should be emphasized. Issues such as permitted age to access Plan B should be

covered, as erroneous information has been inadvertently perpetuated by providers [24].

Furthermore, strong community education is necessary. Public health and primary care organizations, including adult and pediatric specialties, nursing and pharmacy organizations, and civil society entities, should participate in public awareness campaigns. Information about online risks potentially impacting women and adolescents should garner special attention.

Finally, legal responses to these illicit online contraceptive sellers should be urgently considered. Short-term measures to temporarily shut down websites and long-term legislation that allows for broad prosecution of these sellers should be a priority, as the scope of suspect online sellers grows to include more vulnerable populations and social media platforms. International cooperation should also be sought as these vendors market their suspect products across geopolitical lines. Health care providers should also take note that physicians who themselves have bought contraceptive methods such as IUDs online from online pharmacies for sale to patients have been prosecuted and sued criminally and civilly for misbranding, violations of the Food, Drug, and Cosmetic Act and state laws, as well as for medical malpractice [25,26].

Online availability and marketing have created an unaccountable system of contraceptive access that caters to vulnerable groups including adolescents. Provider and policy attention is needed as an urgent patient safety and public health concern.

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