## Web Sites Mislead Teens About Sexual Health

BY BETSY BATES

Los Angeles — Teenagers cruising mainstream Web sites can hardly be faulted for thinking that emergency contraception is difficult to obtain, birth control pills will make them fat, and IUDs are meant for older women, not adolescents.

That's because incomplete and inaccurate information abounds on the Internet, even on very well-known Web sites, according to an analysis performed in 2008 by Stanford (Calif.) University researchers.

"We found a lot of myths about IUDs, emergency contraception, birth control, and when women should be getting Pap smears, especially their first one," said Alisha T. Tolani, a student in the human biology program at the university.

Ms. Tolani and her research mentor, Dr. Sophia Yen of the division of adolescent medicine at Stanford's Lucile Packard Children's Hospital, presented their findings in a poster at the annual meeting of the Society of Adolescent Medicine.

Web sites were selected for analysis based on practitioner recommendations and Google searches of key terms, such as "birth control," "morning-after pill," and "sexually transmitted disease." The top 10-15 results for each search term were included. The 35 Web sites examined were assessed for accuracy on 26 topics.

In general, sites provided "fairly accurate" information on STDs, Ms. Tolani and Dr. Yen reported in their poster. For example, 100% of Web sites addressing STDs correctly noted that most sexual-

ly transmitted diseases are asymptomatic and that when symptoms are present, they may include burning with urination and discharge.

However, information about transmission was often vague or incomplete. Just 9 of 29 (31%) STD Web sites informed adolescents that herpes can be transmitted by kissing, and 14 of 29 (48%) mentioned skin-to-skin contact as a possible source of transmission.

Some contraception information was uniformly accurate, with Web sites making it clear that withdrawal is not a very effective means of preventing pregnancy, and noting that hormonal contraception does not protect against STDs.

On other topics, however, the information gleaned on Web sites was inaccurate or incomplete.

More than half of the Web sites that addressed contraception listed weight gain as a possible side effect of birth control pills, a myth contradicted by 47 randomized, controlled trials.

Five Web sites incorrectly stated that the calendar/rhythm method is effective at preventing pregnancy, and three misstated the effectiveness of emergency contraception.

Often, the Web sites omitted important information, considering that approximately a quarter of teens use the Internet to answer "some or a lot" of their questions about sexual health, Ms. Tolani said in an interview.

Although 16 of 34 (47%) Web sites noted that minors need a prescription for emergency contraception, they failed to mention that in many states, minors can obtain those prescriptions directly from authorized pharmacists. Very few sites explained exactly where emergency contraception can be obtained. (The Web sites should be revised to reflect the recent court order allowing 17-year-olds to obtain emergency contraception without a prescription.)

Nearly a third of Web sites failed to de-

## Recommended Sites for Teens

► Go Ask Alice! at www.goaskalice.columbia.edu.

► Center for

Young Women's Health at www.youngwomenshealth.org.

► TeenWire at

www.teenwire.com.

► TeensHealth at http://kidshealth.org/teen.

Sources: Ms. Tolani and Dr. Yen

bunk common myths about emergency contraception by explaining that is not an abortifacient, and making a distinction between emergency contraception and RU-486 (mifepristone).

Just 5 of 27 (19%) Web sites dealing with contraception reflected 2007 American College of Obstetricians and Gynecologists guidelines recommending IUDs as a safe means of contraception in adolescents. Many were neutral, failing to mention adolescents and IUDs. But three sites incorrectly stated that IUDs should be reserved for parous women, the researchers found.

Most Web sites offering information on Pap smears had been updated in the past few years. Nonetheless, their recommendations for when women should have Pap smears "were all over the place," with 40% offering advice that contradicted ACOG's 2003 guidelines, which state that women should begin receiving Pap smears at age 21 years or 3 years post coitarche, Ms. Tolani said.

"I think physicians need to specifically debunk the myths that we know are out there," she said.

Neither Ms. Tolani nor Dr. Yen had any conflicts of interest to disclose with regard to their study.

## **Common Sex Myths on the Internet**

**Myth:** Emergency contraception is difficult to obtain.

Reality: Emergency contraception is over the counter for women who are aged 17 and older; it may be available OTC soon for younger minors as well. Minors can currently receive prescriptions directly from authorized pharmacists in nine states: Alaska, California, Hawaii, Maine, Massachusetts, New Hampshire, New Mexico, Vermont, and Washington.

**Myth:** Emergency contraception induces an abortion.

**Reality:** Emergency contraception does not cause an abortion and is not RU-486.

Myth: IUDs are for multiparous women

**Reality:** IUDs are safe for use in adolescents, including the nulliparous and serially monogamous.

**Myth:** Oral contraceptives cause weight gain.

**Reality:** A review of 47 randomized, controlled trials found no evidence that combined hormonal contraceptives caused weight gain.

Myth: Women should begin having Pap smears at age 18 years or immediately following coitarche, and should have a Pap smear after each change of sexual partner.

**Reality:** The American College of Obstetricians and Gynecologists recommends that women begin having Pap smears beginning at age 21 years or 3 years post coitarche.

**Myth:** Kissing is safe, even if your partner has herpes.

**Reality:** Herpes can be transmitted by kissing an infected individual.

Source: Dr. Yen

## Statins Improve Carotid IMT in Teens With Type 1 Diabetes

BY BETSY BATES

Los Angeles — Treating adolescents with type 1 diabetes with statins early in the course of their disease may lead to measurable improvement in their carotid in-

tima-media thickness, an important risk factor for stroke and heart disease, preliminary data showed.

A pilot study of 26 adolescents with type 1 diabetes found that those randomized to receive simvastatin (Zocor) for a year demonstrated a regression from baseline of the progression of carotid intima-media thickness (IMT), while those receiving a

placebo had continued worsening of their IMT, Dr. Francine R. Kaufman reported at the annual meeting of the Society of Adolescent Medicine.

Measurements by two-dimensional ultrasound of the IMT of the carotid artery is an indirect but useful way to assess the presence and progression of atherosclerosis, Dr. Kaufman explained in her presentation during the meeting's "Hot Topics" session.

An earlier, long-term study of carotid IMT in 115 adolescents with diabetes and 87 controls was conducted at Children's Hospital Los Angeles, where Dr. Kaufman

After a year, IMT had increased in the control group by 0.0065 mm, while it regressed in statin takers by -0.0156 mm.

DR. KAUFMAN

heads the center for diabetes, endocrinology, and metabolism and is director of the comprehensive childhood diabetes center.

In that study, investigators found that adolescents (aged 12-21 years) with diabetes had significantly thicker IMT measurements than controls, and that there was an association between higher IMT and elevated levels of

LDL cholesterol, apolipoprotein B, and lysophosphatidic acid (J. Pediatrics 2004;145:452-7). The current study explored whether early treatment of type 1 diabetes with statins might have an impact on carotid IMT.

Adolescents assigned to receive statins or placebo were similar in age (15-16 years), baseline  $HbA_{1c}$  values

(8.4%-8.5%), and baseline IMT (mean 0.5510-0.5656 mm); 30% were males and 70% were females. Mean LDL cholesterol levels were slightly lower in the place-bo group (133 mg/dL), compared with adolescents who received a statin (147 mg/dL).

After a year, IMT had increased in the control group by a mean 0.0065 mm, while it regressed among statin takers by -0.0156 mm, reported Dr. Kaufman, professor of pediatrics at the University of Southern California, Los Angeles.

Dr. Kaufman said that the American Diabetes Association, American Academy of Pediatrics, and American Heart Association all agree that children with type 1 diabetes should be screened for dyslipidemia.

How to manage dyslipidemia in adolescents with type 1 diabetes is still an unanswered question, she said.

"Most people suggest that we should start thinking about treatment when LDL is over 100 [mg/dL], and we should treat when LDL is in the 130 range," she said.

Dr. Kaufman said she has had no relevant financial relationships with pharmaceutical companies in the past 12 months.