

Young Doctors May Redefine Professional Values

BY CALVIN PIERCE

PHILADELPHIA — A new generation of young physicians will redefine what it means to be a medical professional—and how to balance a successful career with a rewarding personal life.

That's a prospect that Dr. Lawrence G. Smith views with optimism. As young doctors with different values enter practice, older physicians have a chance to

“build bridges” and help renew the profession, he said at the annual meeting of the American College of Physicians.

As physicians, Baby Boomers—a generation of optimists and workaholics—“have done nothing in medicine to improve social justice.” Boomer doctors generally “value physician autonomy over quality of care,” a stance that is “perniciously negative.” Boomers have not fought to improve access to care or

to ensure that health care resources are justly distributed, he said.

The legacy of the Baby Boomers is “the most mediocre, high-cost health care system the world's ever seen,” said Dr. Smith, dean of the Hofstra University School of Medicine, Hempstead, N.Y., and chief medical officer for the North Shore–Long Island Jewish Health System, Great Neck, N.Y.

Yet Boomer doctors keep asking: “Why

is the young generation so unprofessional?” As evidence of what many see as a “crisis in professionalism” and a “horrific conflict” brewing in the workplace, Dr. Smith cited data from Merritt Hawkins & Associates, a national physician search and consulting firm. In a 2007 survey of doctors aged 50-65 years in various specialties, 68% of the 1,175 respondents said that newly trained physicians are less dedicated and hard working than the senior doctors were when they started out.

New doctors are starting medical school later in life, are predominantly women, are ethnically diverse, are wired into technology, and—above all—are determined to “work to live,” in contrast to the Boomer ethos of “living to work” that defines people through their jobs. To accommodate young physicians who value predictable workweeks and control

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of their lifestyle, medical practices will need to offer flexible hours, child care, a culture of quality, and a reward system that emphasizes excellence over sheer endurance, he said.

Generation X physicians (born in 1965-1980) have begun transforming medical practice by rejecting the Boomers' pride in long work hours, focusing instead on achieving balance. These doctors are members of a pragmatic, cynical, self-reliant generation that doesn't believe in “paying your dues,” hierarchy, and micromanagement. “They will work hard when they work,” but they want freedom and time, Dr. Smith said.

Members of Generation Y (born since 1981 and also known as the Millennial Generation) are just starting medical school. This was “a safe, protected, sheltered group of kids” who grew up going to “play dates” and other planned activities, and who now have “helicopter parents” eager to be involved in their college lives. They tend to be conservative, rules oriented, fond of security, and like working in teams. This optimistic, achievement-driven generation “is looking for work that has meaning,” and thus may go “back to the roots of medicine,” he said.

Generation X and Generation Y physicians need to be “unafraid of falling totally in love with being a doctor,” Dr. Smith said. Their reluctance to be totally committed to a medical career is a reaction against the Boomer tendency to equate professional commitment with a willingness to sacrifice their personal lives.

Senior physicians must show younger colleagues that they value and expect commitment to patient care, altruism, and patient advocacy, he said, but make it clear that success won't be measured by “how many hours you work.” ■

EPIDUO™

(adapalene and benzoyl peroxide) Gel 0.1% / 2.5%

For Topical Use Only

Not For Ophthalmic, Oral, or Intravaginal Use.

BRIEF SUMMARY

INDICATIONS AND USAGE

EPIDUO Gel is a combination of adapalene, a retinoid, and benzoyl peroxide, and is indicated for the topical treatment of acne vulgaris in patients 12 years of age and older.

CONTRAINDICATIONS

None.

WARNINGS AND PRECAUTIONS

Ultraviolet Light and Environmental Exposure: Avoid exposure to sunlight and sunlamps. Wear sunscreen when sun exposure cannot be avoided.

Erythema, scaling, dryness, and stinging/burning may occur with use of EPIDUO Gel.

ADVERSE REACTIONS

Observed local adverse reactions in patients treated with EPIDUO Gel were erythema, scaling, dryness, stinging, and burning. Other most commonly reported adverse events ($\geq 1\%$) in patients treated with EPIDUO Gel were dry skin, contact dermatitis, application site burning, application site irritation, skin irritation.

DRUG INTERACTIONS

Exercise caution in using preparations containing sulfur, resorcinol, or salicylic acid, medicated or abrasive soaps and cleansers and products with high concentrations of alcohol or astringents in combination with EPIDUO Gel. Concomitant use of topical products with a strong drying effect can increase irritation. Use with caution.

Pregnancy

Pregnancy Category C. There are no well-controlled trials in pregnant women treated with EPIDUO Gel. Animal reproduction studies have not been conducted with the combination gel or benzoyl peroxide. Furthermore, such studies are not always predictive of human response; therefore, EPIDUO Gel should be used during pregnancy only if the potential benefit justifies the risk to the fetus.

No teratogenic effects were observed in rats treated with oral doses of 0.15 to 5.0 mg adapalene/kg/day, up to 25 times (mg/m²/day) the maximum recommended human dose (MRHD) of 2 grams of EPIDUO Gel. However, teratogenic changes were observed in rats and rabbits when treated with oral doses of ≥ 25 mg adapalene/kg/day representing 123 and 246 times MRHD, respectively. Findings included cleft palate, microphthalmia, encephalocele and skeletal abnormalities in rats; and umbilical hernia, exophthalmos and kidney and skeletal abnormalities in rabbits.

Dermal teratology studies conducted in rats and rabbits at doses of 0.6-6.0 mg adapalene/kg/day [25-59 times (mg/m²) the MRHD] exhibited no fetotoxicity and only minimal increases in supernumerary ribs in both species and delayed ossification in rabbits.

Nursing Mothers

It is not known whether adapalene or benzoyl peroxide is excreted in human milk following use of EPIDUO Gel. Because many drugs are excreted in human milk, caution should be exercised when EPIDUO Gel is administered to a nursing woman.

Pediatric Use

Safety and effectiveness of EPIDUO Gel in pediatric patients under the age of 12 have not been established.

Geriatric Use

Clinical studies of EPIDUO Gel did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects.

Carcinogenesis, Mutagenesis, Impairment of Fertility

No carcinogenicity, phototoxicity, genotoxicity, or fertility studies were conducted with EPIDUO Gel.

Carcinogenicity studies with adapalene have been conducted in mice at topical doses of 0.4, 1.3, and 4.0 mg/kg/day (1.2, 3.9, and 12 mg/m²/day), and in rats

Rx only

at oral doses of 0.15, 0.5, and 1.5 mg/kg/day (0.9, 3.0, and 9.0 mg/m²/day). In terms of body surface area, the highest dose levels are 9.8 (mice) and 7.4 times (rats) the MRHD of 2 grams of EPIDUO Gel. In the rat study, an increased incidence of benign and malignant pheochromocytomas in the adrenal medulla of male rats was observed.

No significant increase in tumor formation was observed in rodents topically treated with 15-25% benzoyl peroxide carbopol gel (6-10 times the concentration of benzoyl peroxide in EPIDUO Gel) for two years. Rats received maximum daily applications of 138 (males) and 205 (females) mg benzoyl peroxide/kg. In terms of body surface area, these levels are 27-40 times the MRHD. Similar results were obtained in mice topically treated with 25% benzoyl peroxide carbopol gel for 56 weeks followed by intermittent treatment with 15% benzoyl peroxide carbopol gel for rest of the 2 years study period, and in mice topically treated with 5% benzoyl peroxide carbopol gel for two years.

The role of benzoyl peroxide as a tumor promoter has been well established in several animal species. However, the significance of this finding in humans is unknown.

In a phototoxicity study conducted with 5% benzoyl peroxide carbopol gel, no increase in UV-induced tumor formation was observed in hairless mice topically treated for 40 weeks.

No phototoxicity studies were conducted with adapalene. However, animal studies have shown an increased tumorigenic risk with the use of pharmacologically similar drugs (e.g., retinoids) when exposed to UV irradiation in the laboratory or sunlight. Although the significance of these findings to humans is not clear, patients should be advised to avoid or minimize exposure to either sunlight or artificial irradiation sources.

Adapalene did not exhibit mutagenic or genotoxic effects *in vitro* (Ames test, Chinese hamster ovary cell assay, mouse lymphoma TK assay) or *in vivo* (mouse micronucleus test).

Bacterial mutagenicity assays (Ames test) with benzoyl peroxide has provided mixed results, mutagenic potential was observed in a few but not in a majority of investigations. Benzoyl peroxide has been shown to produce single-strand DNA breaks in human bronchial epithelial and mouse epidermal cells, it has caused DNA-protein cross-links in the human cells, and has also induced a dose-dependent increase in sister chromatid exchanges in Chinese hamster ovary cells. In rat oral studies, 20 mg adapalene/kg/day (120 mg/m²/day; 98 times the MRHD based on mg/m²/day comparison) did not affect the reproductive performance and fertility of F₀ males and females, or growth, development and reproductive function of F₁ offspring.

No fertility studies were conducted with benzoyl peroxide.

PATIENT COUNSELING INFORMATION

– Advise patients to cleanse the area to be treated with a mild or soapless cleanser; pat dry. Apply EPIDUO Gel as a thin layer, avoiding the eyes, lips and mucous membranes.

– Advise patients not to use more than the recommended amount and not to apply more than once daily as this will not produce faster results, but may increase irritation.

– EPIDUO Gel may cause irritation such as erythema, scaling, dryness, stinging or burning.

– Advise patients to minimize exposure to sunlight, including sunlamps. Recommend the use of sunscreen products and protective apparel, (e.g., hat) when exposure cannot be avoided.

– EPIDUO Gel may bleach hair and colored fabric.

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