The Harm Associated with Menthol Cigarettes

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The harm and detriment to the public’s health from mentholated cigarettes cannot be measured mainly by mortality rates associated with using these products. Given that cigarettes, when used as directed, kill 50% of the people who smoke them, tying menthol cigarette use to increased risk of tobacco-related diseases has been difficult. Generally, epidemiologic studies are used to try to make that connection. The problems with this approach are: (1) these tools may be just too blunt to detect a difference in harm in the presence of the overwhelming harm associated with smoking any tobacco product, and (2) it is difficult to identify “menthol cigarette users” without error, particularly since most of the reported studies were not originally designed to address menthol cigarettes. Only one epidemiological study to date has found an association between menthol cigarette use and an increased risk of lung cancer mortality compared to none menthol smokers (Sidney, 1995). And the effects found in that study were limited to men only. On the other hand, there have been at least 4 studies that found no association between menthol cigarette use and lung cancer mortality (Kabat, 1991; Carpenter, 1999; Stellman, 2003; Brooks, 2003). Initially, like most other people in the field, we had a narrow definition of harm thus following the epidemiological paradigm to a dead end. In articles in the latter part of 1990s and earlier this decade, both Drs. Gardiner and Clark suggest that there may be some chemical property associated with menthol that is leading to so many African American lung cancer deaths (Clark, 1996; Gardiner, 2004). But it has become clear after a careful review of the evidence that we, along with many in the field were asking the wrong questions and looking for answers in all the wrong places.

Laboratory-based studies, on the other hand, have been hampered by the inability to get established menthol or non-menthol smokers to use the opposite cigarette style for the extended periods necessary to compare classic measures of toxicity. Even laboratory-based exposure studies have had mixed results. For instance, when comparing biomarkers of exposure (e.g., cotinine, CO) between menthol smoking and non-menthol smoking, some studies showed decreased values, some increased and some no difference. The answer may lie with the commercial cigarettes that were tested. Because cigarettes are so highly engineered, there are likely many differences between menthol and non-menthol cigarettes other than menthol levels. Moreover, to add insult to injury, all commercial tobacco products have some menthol in them – only a small percentage of cigarettes have enough to be considered “characterized” as menthol cigarettes.

It is harmful to the public’s health to start using tobacco products; it is harmful to have cigarettes that make it more difficult to quit tobacco products add to the burden of quitting. Harm must be seen in its broad social and public health context and encompass a wide range of distinct parameters. There are 6 broad areas that we will focus on in describing the harm from menthol cigarettes: initiation and youth uptake; spurious health messaging; menthols unique reinforcing properties and its relationship to nicotine;
inhibition of cessation; promotion of relapse; and predatory marketing to the most
vulnerable sectors of society. Let’s look at each one in turn.

Initiation and Youth Uptake

The scientific evidence is very strong that youth start with and prefer menthol cigarettes. Hersey, et al., (2006) seminal study using data from the Nation Youth Tobacco Survey showed that menthol cigarette use was significantly more common among newer and younger smokers. They reported that youth in middle school who had been smoking less than a year were significantly more likely to smoke menthol cigarettes compared to youth smoking who had been smoking more than a year (58.9% versus 51.1%). Similarly, they demonstrated that menthol cigarettes are the cigarettes most commonly smoked in middle school (Hersey, 2009). Still another study found that 22.8% of 17-year-old smokers reported using flavored cigarettes over the past month, compared to 6.7% of smokers over the age of 25 (Klein, et al, 2008). In a recent paper by SAMSHA, the authors confirm the Hersey findings cited above. This new scholarship asserts that adolescents who recently starting smoking cigarettes were more likely to start with menthol cigarettes as opposed to non-menthol cigarettes. (SAMSHA, 2009; available at: http://www.oas.samhsa.gov/2k9/134/134MentholCigarettes.htm).

Make no mistake about it; the tobacco industry has known for decades that that menthol cigarettes were a starter product for youth. Advisors to one tobacco company developed concepts for a “youth cigarette,” stating, “It’s a well-known fact that teenagers like sweet products” (Memo to Brown & Williamson, September 1972). Recent scholarship by Jennifer Kreslake demonstrates conclusively that the tobacco industry manipulated menthol levels in cigarettes to ensure the uptake by young smokers (Kreslake, et al, 2008). The trend is pretty clear; since menthol can mask the harshness of tobacco smoke, menthol cigarettes have emerged as a starter product for youth.

Augments Addiction through unique reinforcing properties

Virtually all cigarettes contain menthol, though most at subliminal levels. Use of menthol in manufacturing mentholated cigarettes varies from a relatively weak level of 0.1%–0.2%, to a strong application level of 0.2%–0.45% by tobacco weight (Hopp, 1993). The use of menthol is generally higher in lower-yield cigarette brands, compared with regular-yield brands; and menthol servers to reduce tobacco smoke’s harshness and stimulate cold-receptors and give the smoker the sensation of deeper and cooler inhalation (Ferris and Connelly, 2004). Menthol’s local analgesic effects serve to smooth the smoking experience. And while menthol doesn’t actually dilate the bronchi, it does give the smoker the sensation of deeper inhalation (Ferris and Connelly, 2004).

As was pointed out by a participant in the 2nd Conference on Menthol Cigarettes, menthol is a classic reinforcer; the minty taste, the excitation of taste buds, the coolness, in and of themselves are triggers for smoking. It is often suggested that people addicted to menthol cigarettes are not only addicted to the nicotine in cigarettes, but also to the menthol sensation that accompanies it. Menthol serves as the ultimate candy-flavoring. It not
only masks the harshness of cigarette smoke, which even the tobacco industry admits kills 50% of its users, but also delivers a minty taste along with other unique sensory stimulations, over and above the nicotine, thus giving the smoker additionally reasons to light up. The tobacco industry is thoroughly aware of menthol properties; the industry increases its concentration in lower yield cigarettes, while decreasing its concentrations in higher yield cigarettes (Kreslake, et al., 2008).

**Spurious Health Messages**

From their inception the tobacco industry has promoted menthol cigarettes as a safer and healthier alternative to regular cigarettes (citation). Those messages for soothing sore throats were even outlawed in 1942, but in one form or another have persisted to this day (Gardiner, 2004). These messages have had their intended impact. As far back as 1968 and continuing even recently, African American smokers and other menthol smokers have reported that they felt menthol cigarettes were less harsh, tasted better and were healthier for you (Tibor Koeves Associates, 1968; Hymowitz, 1995; Richter, 2008). Research published as late as 2010 is showing that menthol cigarette smokers believe that their cigarettes have medicinal properties and are less harmful than non-menthol cigarettes (Unger et al, 2010). Newport, the menthol industry leader, slogan “Alive with Pleasure” is case in point. Here, one of the most deadly products in the world is being promoted as alive with pleasure; what a contradiction in terms.

**Cessation inhibitor; relapse promoter**

While not all studies show menthol inhibiting cessation (Fu, 2008; Hyland, 2002), there are a growing number that show that menthol retards and undermines cessation efforts. African American menthol smokers are less successful with cessation regiments (Okuyemi, 2004, 2007). Menthol has been shown to attenuate the effect of bupropion among African American menthol smokers (Okuyemi and Ahluwalia, 2002). In another study both Latinos and African American menthol smokers had lower quit rates than their regular cigarette smoking counterparts (Gandhi et al, 2009). Pletcher and his colleagues found that while menthol and non mentholated cigarettes seem to be equally harmful per cigarette smoked in terms of atherosclerosis and pulmonary function decline, but found that menthol cigarettes may be harder to quit (Pletcher, et al, 2006). This later study was the first to find significant increase in relapse associated menthol cigarette smoking. It seems that menthol cigarette smokers not only have to get over the rewards associated with nicotine, but must also get over the rewards associated with menthol (candy mint taste, sensory excitations and cooling).

**Predatory Marketing**

Probably the hallmark of the history of menthol cigarettes is the relentless and unabashed marketing to African Americans, one of the most vulnerable sectors of the United States population. The blanketing of menthol messages to this community has covered literally every aspect of life, from Black owed publications and jazz concerts, through civil rights groups, to massive bill boards throughout the Black community. Numerous authors have
commented on this phenomenon (Sutton and Robinson, 2004; Yerger et al, 2007; Gardiner, 2004). The inundation of the Black community with menthol messages and products has been termed by one author, the African Americanization of menthol cigarettes (Gardiner, 2004).

Let’s be clear, tobacco industry’s tactics to promote menthol products, especially in the Black community are strictly up-to-date and resonate with the current Hip-Hop culture. The tobacco industry knows that Hip-Hop is much broader than just Rap music, and that Hip-Hop culture appeals to both urban and suburban youth. Elements of Hip Hop culture identified and targeted by the tobacco industry include music, dance, graffiti, language, cars (particularly rims), clothes, jewelry (ice, bling) alcohol, drugs and of course tobacco (Crawford, 2009).

Using the picture and images of well known rap artists to promote tobacco products has become standard fare. Rap artists dressed in Hip Hop attire including do-rags, cocked baseball hats, diamond ear studs, gold and silver chains (the bling-bling), sports t-shirts, tennis shoes and baggy pants are all decked-out to sell not only menthol cigarettes but also blunt wrappers (i.e. a tobacco sheet used to role marijuana joints). More often than not these blunt wraps, as they are called, are candy and fruit flavored and some are mentholated (Crawford, 2009).

R.J. Reynolds used the term “focus” communities and/or stores to designate areas with urban characteristics, high menthol sales and low income clientele; predominately minority and most often African American or Latino communities. Correspondingly “non-focus” areas were suburban, low- menthol sales and, for the most part, white communities. The tobacco industry places the highest quantities of mentholated products in “focus” retail stores (Wright, 2009).

Retail stores in “focus” areas receive higher discount rates on mentholated cigarettes compared to other brands. In “non-focus” communities menthol products were discounted $.50 a pack; on the other hand in “focus” communities, mentholated cigarettes are discounted between $1.00 and $1.50 per pack. Other promotions were more attractive in “focus” stores compared to “non-focus” stores. In “focus stores buy 1 get 1 free promotions predominated, while in “non-focus” stores buy 2 get 1 free was the general rule (Wright, 2009).

The tobacco industry places a higher quantity of interior and exterior signs at “focus” retails stores compared to “non-focus” retail stores. On average during the earlier part of this decade, R.J. Reynolds placed 4-8 exteriors signs in “non-focus” retail stores. Conversely, in “focus” retail stores upwards of 20 exterior signs was the normal practice. Similarly, tobacco advertisements have a higher profile in “focus” retail outlets compared to “non-focus” retail outlets (Wright, 2009).

At bottom, this type of predatory marketing of a deadly product that has been sweetened with menthol is an abomination and this is clearly a social justice issue. Kwesi Harris, speaking at the 2nd Conference on Menthol cigarettes said: “…that the marketing of
menthol to the African American community was not only targeted marketing, but also it was a question of environmental racism. These products were marketed to the least informed about the health effects of smoking, had the fewest resources with which to fight back, had the lowest amount of social support and had the least access to cessation services - this is indeed, a social justice issue.” (Harris, 2009).

Hence, youth uptake and initiation; spurious health messages; cessation inhibition and relapse promotion; augmenting addiction through unique sensory properties; and the blatant predatory marketing to the most vulnerable sectors of society – all must be considered in the calculation of harm of menthol cigarettes.