

BRIEF COMMUNICATION

## **Incorporating Music into Health Care Education: Experience at a College of Pharmacy<sup>1</sup>**

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### **Introduction**

Music is an integral part of virtually all societies and something that students can quickly relate to. Music reflects the creative, emotional and political forces of the societies that shaped it. The integration of music into health care education would emphasize that the connection between the humanities and the professional/scientific is more than rhetorical. During the past 15 years or so, the author has been collecting many songs that have health care connections. Some songs were presented as part of the classroom experience in lecture-based courses: health maintenance, pharmacology/medicinal chemistry, toxicology, and drugs of abuse. The latter was for students from different majors while the other three courses were part of the pharmacy curriculum. This article contains useful information regarding the background of this music, how it has been incorporated into classes and how students have reacted to this music.

### **The Songs**

The songs in the tables are from different eras, represent different social strata and many have a fascinating history. It is nice to relate that to their content and the shifting attitudes towards disease, treatment and other issues.

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“Toe to Toe with the HMO” and “AMA song” deal with the accessibility of health care, dehumanizing of patients and medical economics (Table 1). “Confessions” describes a patient manipulating a pharmacist in order to get some of those little blue pills that give him an edge over his competitors (“I can make a quarter million just walking in my sleep. Time is money.”). Questionable use of psychotropic medicines is also a theme of “Mothers Little Helper” and “Is it Peace or is it Prozac”.

“Big Mac Tree” raises the ecological issue of deforestation in South America, pokes fun at alienation in our own plasticized society and warns of unhealthy diets (“Every bite is a massive dose of the cholesterol... One day a grease ball down your valve, whoops a Big Mac attack”).

“The Unfortunate Rake” is an English ballad dating back to at least 1790 that originally dealt with the ravages of syphilis (Goldstein, 1960). This song crossed the Atlantic and evolved into the American classic, “Streets of Laredo”. Other infectious diseases are addressed in songs like “T.B. Blues” and “Goddamn HIV”.

During the prohibition period in the 1930s, one lot of Jamaican Ginger Extract, an alternative alcohol source colloquially called “jake”, was adulterated with neurotoxic tri-ortho-cresyl-phosphate (TOCP) and tens of

**Table 1.** Health care and toxicology songs

Artist	Song	Album
Camille West	Toe to Toe with the HMO; Viagra in the Water	Diva's Day Off (1999) CD
Phil Ochs	A.M.A. Song (1963)	A Toast to Those Who Are Gone (1986) CD
John Forster	Big Mac Tree	Entering Marion (1993) CD
Leadbelly	T.B. Blues (~1940)	Midnight Special (1998) CD
Richard Shindell	Confessions	Somewhere Near Patterson CD (2000)
Cheryl Wheeler	Is it Peace or is it Prozac?	Mrs. Pinocci's Guitar CD (1998)
Rolling Stones	Mother's Little Helper (1966)	Hot Rocks CD (1971)
Various	Various	The Unfortunate Rake: A Study in the Evolution of a Ballad CD (1960)
Mary Gauthier	Goddam HIV	Dixie Kitchen CD (2000)
Various	Various (1920s – 1930s)	Jake Leg Blues CD (1977)
Pinewood Tom	Silicosis is Killin' Me (1936)	Historical Ballads of the Tennessee Valley 33 1/3 vinyl (1982)
Youssou N' Dour	Toxiques	Set CD (1990)
June Tabor	He Fades Away	Against the Streams CD (1994)
Cast of play	Phosphorus	The Match Girls CD (1979)

thousands of Americans suffered permanent injuries. Victims hobbled around in a characteristic manner that became known as the “jake walk” and were said to have the “jake leg”. The tragedy inspired blues and blue grass songs which Morgan and Tulloss (1976) compiled in a set titled “Jake Leg Blues”.

“Silicosis is Killing Me” by Pinewood Tom (Josh White), a popular blues musician, is likely a tribute to the victims of a 1930s work project in West Virginia (“I was there a diggin’ that tunnel for six bits a day. Didn’t know I was diggin’ my own grave, silicosis eatin’ my lungs away”. Cherniack, 1986). “He Fades Away” offers a contemporary picture of a man dying of asbestosis from working the Australian Wittenoom asbestos mines (Hills, 1989) and “Phosphorus” deals with jaw necrosis from occupational exposure to white phosphorus (Felton, 1982). Youssou N’ Dour of Senegal and his band, Super Etoile de Dakar, address another contemporary concern in “Toxiques” where they assail the practice of dumping, wherein rich countries export toxic waste to poor countries that are ill-equipped to safely handle it.

Cocaine, marijuana, alcohol, and opium have been favorite topics of American music for a long time and many original recordings from the early 1900s still connect with listeners (Table 2). Some songs are funny but others are serious and cast drugs in a negative light. “Pipe Dream Blues”, sung by Hazel Myers, an African-American woman, is about opium dens and reinforces, perhaps unintentionally, the stereotype that Chinese men enticed white women

**Table 2.** Recreational drug songs

Artist	Song	Album
Johnny Cash	The Ballad of Ira Hayes (1965)	16 Biggest Hits CD
Hazel Myers	Pipe Dream Blues	Viper Mad Blues CD (1996)
Various others	Various (1920s – 1940s)	
Various	Various (1920s – 1940s)	Reefer Songs CD (1996)
Peter Tosh	Legalize it (1976)	Thump’n Reggae Jamz
The Toyes	Smoke Two Joints	CD (1995)
John Prine	Sam Stone (1971)	Prime Prine: The Best of John Prine CD (1977)
Beatles	Lucy in the Sky with Diamonds (1967)	Sgt Pepper’s Lonely Hearts Club Band (1967) CD
Jefferson Airplane	White Rabbit (1967)	White Rabbit & Other Hits CD (1990)
Big Moe	Various	City of Syrup CD (1999)
Cast of play	We Know Best; various others	Reefer Madness the Musical CD (2000)
Various others	Various – in Spanish	Corridos y Narcocorridos CD (2001)
Various	Various – in Spanish	Roots of the NarcoCorrido CD (2004)

into the opium habit. Racial stereotypes are ridiculed in “We know best” (“Clammy-handed darkies with twitching throbbing hips, reefer sticks protruding from their gigantic lips.”) while exploitation of Native Americans as well as alcoholism is the subject of “The Ballad of Ira Hayes”.

A song that is symbolic of its time is “Sam Stone”, about a heroin addict, that moved young people as a protest against the Vietnam War. Another trend of the sixties was psychedelic rock, and “White Rabbit” and “Lucy in the Sky with Diamonds” are among the most interesting of this genre. Peter Tosh was a co-founder of the Reggae group called the Wailers. These singers were raised in impoverished areas of Kingston, Jamaica and were respected for their political activism on behalf of the downtrodden as well as their musical talent. Tosh was arrested for marijuana possession and beaten by Jamaican police so when he was murdered in 1987 conspiracy theories were generated. “Legalize It” is his most well-known song advocating the use of marijuana.

A variation of the north Mexican traditional ballad, the narcocorrido, is now also a dominant music form among youth in Latino communities in the United States. Since they frequently glamorize drug traffickers, narcocorridos have been vilified and censored (Wald, 2002).

## Discussion

Music, literature and art have been employed in health care education before (Hunter *et al.*, 1995; Shapiro *et al.*, 2004). The present project is distinctive in that it incorporates music into existing science-based courses and attempts to reinforce course content while linking music to the external culture that helped to produce it. Students responded favorably to a survey, probably because the songs were entertaining. There was some difficulty in maintaining the students’ attention in large but not in small classes. Discussion about social criticisms raised by the songs was generated but no measure of student interest in this matter was undertaken.

As the excerpts presented herein show, some lyrics are very poignant and likely to provoke empathy, that elusive sentiment that is valued so much in health care professionals (Spiro, 1992). The stories that make up the songs, like those of literature, may be useful in cultivating empathy in students (Shapiro *et al.*, 2004). They also help present controversial issues that are sometimes avoided in health care education.

Another goal of this exercise was to enhance the motivation of students. According to one model, two components of the motivational process are attention and relevance. Music in the classroom, as described here, closely matches strategies described under attention and relevance (Wongwiwatthananutit & Popovich, 2000). Among the suggestions for attention the authors mention “create curiosity by using novel approaches, injecting personal and/or emotional material”; “using animation, inverse, flash, sound and other audio and/or video

capabilities...” and “maintain student attention by varying the elements of instruction...”. In the category of relevance, they include “use teaching strategies that match the motivational profile of the students” and “provide clear statements or examples that present the objective and utility of the instruction...”.

In short, the incorporation of music and songs in pharmacy courses was a satisfying experience and could be a stimulus for other health care education areas to try similar approaches.

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