Epidemiological Criminology (EpiCrim): Definition and Applicationⁱ

Mark M. Lanier, PhD

Key Words: Epidemiological Criminology, EpiCrim, Public Health, HIV/AIDS, Human Trafficking, Theory

Epidemiological Criminology (EpiCrim): Definition and Application

Abstract

In part due to globalization, crime and health problems increasingly exceed borders and academic disciplines. Epidemiological Criminology or "EpiCrim" is being developed to address this concern by providing a theoretical basis for interventions that transcend both international geopolitical and intellectual disciplinary boundaries. Most specifically it is the melding of Public Health with Criminal Justice. The purpose of this essay is to operationally define Epidemiological Criminology and to illustrate its utility for criminal justice practitioners, health care professionals and scholarly theoreticians. Five specific examples of the potential benefits of EpiCrim to each constituency are provided. To accomplish this, specific international health/crime problems that EpiCrim addresses are presented throughout the paper. The essay concludes with a 'call for action' as well as areas for additional

theoretical discussion and areas which require further empirical validation.

Introduction

A recent academic "exercise" is getting considerable international attention. While certainly not a paradigm shift (Kuhn, 1962), a new field, or sub-discipline, called Epidemiological Criminology, or "EpiCrim", is being developed by both Public Health and Criminal Justice scholars (Akers and Lanier, 2009; Lanier, Pack and Akers, 2010; Lanier, Lucken and Akers, 2010; Lanier and Henry, 2010; Lutya and Lanier, 2009). The multidisciplinary nature of this exercise facilitates the increasing movement towards theoretical integration (Barak, 1998; Robinson, 2004). This treatise has several objectives. To date, EpiCrim has received more notice in the Public Health arena than in Criminal Justice circles. Therefore the first objective is to rectify that imbalance with greater exposure to Criminologists, with the partial objective of fostering debate and critical discourse.

Second, historically the development of new theories has involved only scholars, often working in relative isolation.

Consequently, new theories may not only neglect practitioners input, but may result in theories that elude the comprehension, and consequent use of practitioners. While understandable, it is also regrettable. In an attempt to avoid this unfortunate pattern, EpiCrim attempts to integrate practitioners from the onset, this essay continues that effort. Specifically, what utility does this new academic development have for health care practitioners? How can it impact Criminal Justice professionals - people actually working in the field? How can it benefit scholars and academicians - those of us in the ivory tower of academia?

The third objective of this essay is to articulate Epidemiological Criminology precisely what "EpiCrim" means. In the first use of the term "Epidemiological Criminology," Akers and Lanier (2009) laid the historical foundation and genesis of EpiCrim but stopped short of operationally defining the concept. This essay completes that definitional task.

Following this explication, examples of how EpiCrim is useful for administrators, staff, workers, clients, as well as researchers is provided in five discrete yet related applications of EpiCrim. These are: 1) assistance with securing grants 2) forming and facilitating interdisciplinary teams 3) clarifying terminology 4) exposing harmful social policy and 5) identifying crime victims. Finally, how EpiCrim

may benefit criminological and Public Health adherents to positivism in each of the above examples and with theory testing (Popper, 1954/2002) are presented. For critical theorists many opportunities are also provided by EpiCrim. Phenomenological and constitutive criminologists, for example, should find ample opportunities to critique interpret and clarify EpiCrim. Throughout the paper an international focus to the utility of EpiCrim is applied to the increasing problems, and opportunities, presented by globalization (Lanier and Henry, 2010; Lutya and Lanier, 2009). The underlying unifying concept is the application of theory to both practice and policy. The specific method or methods employed, be they quantitative or qualitative, is best left to the future researcher to determine (Draper, 2009).

For now, to help examine the role of theory to practice consider that Blomberg and Lucken (2000) found that public policy and practice each develop with changing administrative and legal mandates; this is especially true for health care policies involving "unwilling subjects" such as those incarcerated (Lanier, Lucken and Akers, 2010). Policy is shaped in response to different historical contingencies, both cultural, political, and economic (Blomberg and Lucken, 2000). Included in this list of contingencies are various short and long-term Public Health and Criminal Justice demands which guide actual workplace practice.

Consider, for example, how health concerns such as HIV/AIDS have

changed the day-to-day practices of everyone in health care, correctional, judicial and law enforcement professions. Health issues that are impacting society have a magnified effect in many Criminal Justice environments such as prisons and jails (Lanier, 2006). This is due to the proliferation of health harming behavior (excessive drug use and abuse, unprotected sexual activity, etc.) found among many inmates (Braithwaite, Hammett and Mayberry, 1996; DiClemente, 1992; Lanier, Pack and Akers, 2010; Tewksbury and West, 2000; Zaitzow, 2001). As a consequence, health issues are increasingly the driving force behind both Criminal Justice policy and practice modification. Theoreticians, be they Criminologists or Public Health scholars, have not sufficiently addressed contemporary emerging health concerns in a concerted manner.

The concept of Epidemiological Criminology is presented as a bridging framework for better understanding the role of Public Health in Criminal Justice and vice versa. The first application is reconceptualizing crime as a measure of social health (Durkheim, 1964/1951). A second application is the cross utilization of practices between disciplines. For example, the theories and methods advocated by epidemiology have existed for generations and have served an important role in the study of disease and the explication of illness. Criminal Justice could pragmatically apply epidemiological

theories and methods to track trends such as the spread of specific types of crime (e.g., crystal meth in the Appalachian region, crack in inner cities, home invasions in once tranquil suburbs). This has been done previously and successfully.

Historical Precedent. It could be argued that the study of crime actually began as a health related field of study or discipline (Lombroso, 1876). Emile Durkheim (1864/1951) used what we now consider Public Health "factors" to explain deviance, specifically suicide. Well into the early nineteenth and twentieth century's the fusing of Public Health theory and methods to crime control was still a common and accepted practice. Blomberg and Lucken (2000) provided the example of Benjamin Rush, MD, who developed a theoretical model explaining crime in the nineteenth century. His explication of crime as a "moral disease" helped mold crime control policy and even helped with the architectural design of early American penitentiaries (Blomberg and Lucken, 2000). Dobash, Dobash and Gutteridge (1986) have also shown that the first women's prisons in England were heavily influenced by psychiatric notions of the criminality of women. The philosophical ideals, practice and ideologies of doctors, psychiatrists and psychologists in the late nineteenth century to early twentieth century were fundamental to both the creation of therapeutic regimes and for developing ideas about how to

best treat/control incarcerated women (Blomberg and Lucken, 2000; Dobash, Dobash and Gutteridge, 1986). Donald Cressey (1962) made the connection as well, though in a specific crime-only context. However, after this early melding of health and corrections, the two disciplines diverged.

Criminal Justice, with the influx of Law Enforcement Assistance Administration (LEAA) funding provided by the Omnibus Crime Control Act of 1968, strove to establish a separate identity from its academic roots in sociology and public administration. Despite this divergence, there have been a (very) few contemporary Criminal Justice scholars who have extensively examined heath issues such as Richard Tewksbury (2006), Barbara Zaitzow (2001) and Jeanne Flavin (2002). Leading Public Health researchers who have focused on Criminal Justice issues include Ralph DiClemente (1992), Robert Pack (2008) and Ronald Braithwaite. However no unifying theoretical basis has ever been applied. Instead, the overwhelming trend has been disciplinary divergence. EpiCrim seeks to reaffirm these earlier connections under a unifying theoretical concept.

Defining Epidemiological Criminology

Prior to laying out five applications of how EpiCrim may be helpful to health care and Criminal Justice professionals, "Epidemiological Criminology" needs defining (Akers and Lanier, 2009:

398). While this definitional exercise is by necessity simplistic and obvious, it may clarify terms and operations for readers unfamiliar with the "other" discipline. For example, Public Health associates may not appreciate the difference between Criminal Justice and Criminology. Criminologists may not grasp the variations within Public Health. Criminology refers to the "systematic study of the nature, extent, cause and control of law-breaking behavior" while Criminal Justice refers to the "crime control practices, philosophies, and policies used by police, courts and corrections" (Lanier and Henry, 2004: 4). Parenthetically, criminology is more concerned with theory while Criminal Justice is more concerned with practice (Draper, 2009; Rush, 2000).

Public Health is devoted to the prevention and eradication of diseases that may infect communities. Epidemiology is one of the five branches of public health; the others being biostatistics, social and behavioral health, environmental health, and health services administration and policy. Epidemiology is, above all else, a methodology (Robert Pack, personal correspondence, July 8, 2009). It is the study of variables, vectors and factors that affect disease spread. Epidemiology has traditionally served as the foundation for most Public Health interventions.

Consequently, just as Criminology is related to Criminal Justice, so too is Epidemiology related to Public Health, yet each are distinct. Despite these disparities some Epidemiology/Public Health and Criminology/Criminal Justice issues are so closely related as to be virtually inseparable in some areas, though few scholars have published anything that directly highlights their convergence (Akers and Lanier, 2009; Lanier, Pack and Akers, 2010).

EpiCrim is the purposeful and intentional assimilation of these disciplines. Specifically, how I define Epidemiological Criminology is the explicit merging of epidemiological and criminal justice theory, methods and practice. Consequently, it draws from both criminology and public health for its epistemological foundation. As such, EpiCrim involves the study of anything that affects the health of a society, be it: crime, flu epidemics, global warming, human trafficking, substance abuse, terrorism or HIV/AIDS. One reviewer astutely and succinctly added "EpiCrim is the study of crime as a disease." According to this unnamed source, one effective definition of disease for the EpiCrim argument is that disease "entails illness, sickness, and aliment due to genetic, developmental, infectious, poisonous, nutritional, toxic or poor environmental factors." However, the best definitional fit for EpiCrim is Webster's

conceptualization of disease as "any harmful, depraved, or morbid condition of the mind or society" (Webster's, 2009).

This unnamed reviewer went on to note that crime as a disease demands explication of causal relationships. These relationships could include - most obviously when using a medical analogy - biological and physiological causes of crime. The single most persistent crime variable is that males are much more likely to commit crime compared to females (Henry and Lanier, 2001). One potential explanation was provided by Lee Ellis (2005). Ellis presented evolutionary neuroandrogenic theory (ENA) to explain high rates of violent male crime, based on male sex hormones and the evolutionary idea that the more aggressive, dominant males are the ones most likely to reproduce. This aggression could manifest itself in violence such as rape, and other crimes; suggesting a devolution rather an evolutionary improvement in the human species. As such it could be considered an updated version of Lombroso's theory of atavism (Lombroso, 1876/1912). Zuckerman (1994) went so far as to suggest that some crime is actually predicated by the inherent biosocial characteristics of some individuals. Biological predispositions (e.g., genes) perhaps predict alcoholism and a predilection towards substance abuse (Lanier and Henry, 2010). Like Ellis's ANS (2005) conclusion, Zuckerman (1994) also argues for greater integration and understanding between

the health and crime relationships. These type of deterministic theories "assume objective and disengaged values" based on a underlying assumption of "atomism" (Slife and Williams, 1995; Draper, 2009). Draper explained, "Atomism is based on the philosophy that all things are reducible to the atoms which comprise it. In the case of criminology, it is the view that criminals and criminal behavior are ultimately reducible to a set of variables that cause this behavior. Advocates of this view invest a great deal of faith in the belief that if we could just accurately uncover, operationalize, and measure these variables (atoms), we could then determine what causes criminal behavior...if atoms determine everything about us, then who we are and what we do is not under our control" (2009: 66). This deterministic position has "troubling implications" and is worthy of lengthy critique.

While bio-physiological determinism justifiably has critics, it does highlight both historical and contemporary health and crime relationships. Consider further that occasionally criminals are found to be "not guilty due to insanity" (though this is not a medical term). Relationships could also include examination of the disease of crime emanating from social conditions such as poverty, hopelessness and a "sick society". As such, qualitative means of study may also be dictated (Draper, 2009; Tewksbury, 2009).

Durkheim also long ago used a medical analogy with crime being an indicator of the health of a society, since, "like pain for the individual patient, crime can serve as an indicator of a society's health; the more there is, the sicker the society" (Henry and Lanier, 2001:3). Durkheim wrote, "crime is normal because it is completely impossible for any society entirely free of it to exist" (1982:99) While he saw crime as being normal he also saw it as being functional, since he stated, "it is to assert that it is a factor in public health, an integrative element in any healthy society" (Durkheim, 1982: 98). However, too much or too little crime suggested a "sick society" (Durkheim, 1864/1951) or pathological condition. Too little crime is suggestive of a sick society since "(t)here is no occasion for self-congratulation when the crime rate drops noticeably below the average level, for we may be certain that his apparent progress is associated with some social disorder" (Durkheim, 1872/1938: 72). Perhaps this low crime socially disorder society could be the consequence of a repressive political regime that controls crime but prohibits individual self-expression and freedoms.

Parenthetically, the definition of crime itself is hard to articulate and has been the topic of book length arguments (Henry and Lanier, 2001). "Crime" varies temporally, spatially and by context. Consider that alcohol may be legal in one county and illegal in the next. At one

time in the United States, during Prohibition, it was illegal everywhere and this policy fueled even greater crime (more later on policy creating crime). For the current argument, and for sake of brevity, yet being cognizant that it is a reified definition of crime, the legal definition is accepted. The legal definition of crime is "acts prohibited, prosecuted, and punished by criminal law" (Henry and Lanier, 2001: 6). However, ideally crime should be viewed as acts of harm rather than government proscribed behavior. Crime, ands it illusive, diverse meaning is further complicated by the fact that "criminal behavior . . . often entails intensely subjective meanings and experiences for both the criminals and their victims" (Draper, 2009: 64).

Beyond Definition. There are other important basic issues to contend with beyond these definitional concerns. Most relevant for the current argument is the fact that health issues increasingly alter and impact Criminal Justice practice and policy. A few examples serve to illustrate this.

Diseases (Hepatitis C, tuberculoses, HIV/AIDS and others), aging prison populations and substance abuse are just a few of the health issues that are placing ever-increasing economic and operational strain on Criminal Justice practice, thereby subsequently altering Criminal Justice public policy worldwide. By necessity, then, Public Health is becoming highly important as a funding source, for technical expertise,

for staffing (nurses, medical doctors, etc) and for policy-making within the Justice arena. Numerous research reports and funding trends have also documented this health mandated change (Akers and Lanier, 2009). The Justice Department has even used Public Health analogies (FBI, 2000). The Centers for Disease Control and Prevention (CDC) now tracks homicides as a public health threat (CDC, 2009). Local community level agencies have also recognized the similarities and begun efforts towards integration. For example, the Center for Drug Free Living (2009) in central Florida has evidence-based programs that address crime and addiction in conjunction with both physical and mental health (www.cfdfl.com).

Furthermore, most destructive crime-related behaviors also have strong ties to mental and physical health problems. Consider how driving under the influence (DUI) of intoxicating substances is a legally sanctioned destructive behavior that impacts upon the mental and physical capabilities of the driver (not to mention the health of accident victims!). Interventions aimed at reducing this dangerous practice should consider mental and physical factors contributing to the use of intoxicating substances; since a combination of Criminological and Public Health factors may expose the causal mechanisms (variables, factors) for drunken driving (Mustaine and Tewksbury, 1999), binge drinking (Ventura, Gibson, Miller and

Piquero, 2005) and substance abuse in general. Adherents to EpiCrim have already considered drug abuse among gang members (Lanier, Pack and Akers, 2010).

Finally, there is also the observation that the Criminal Justice system itself has Machiavellian (2004) means of defining and using health. Polizzi interjects that "the health concerns of incarcerated individuals is fundamentally predicated upon the way in which these individuals find themselves constructed by the meaning-generating process of the criminal justice system. If we construct this group of individuals as dangerous but damaged, our strategies of intervention can become overly focused on the assessment of risk and less on the humanity of the individual" (Personal correspondence, July 22, 2009). This suggests the conflicting demands of treatment and custody (more on this below). This thesis lends itself to both empirical examination and critical discourse.

As you contemplate this overlap between Criminal Justice and Public Health, consider the following five closely related applications that illustrate how working professionals and researchers may benefit from EpiCrim. Each example also suggests empirical, philosophical and theoretical opportunities.

Application for Researchers and Practitioners

It is difficult to separate the Criminal Justice and Public Health behavioral correlates (see conclusion for more on this) as the drunken driving drinking example illustrates. Consequently, the increasing multidisciplinary nature of many funded research projects should come as no revelation (Lanier, Pack and Akers, 2010). This provides the first application of how EpiCrim is relevant to the professional. What percentage of your funding (both for research and agency operation) is grant-related or agency-dependent? Having a new, solid, multidisciplinary (and perhaps exciting) theoretical basis for grant proposals greatly strengthens the odds of being funded. The efficacy of EpiCrim is not just that it is "new and shiny" (peer reviewer), but that EpiCrim is by nature multidisciplinary and consequently would improve funding chances if used as a theoretical and methodological basis for grant applications. It would also permit and encourage, or perhaps demand, the inclusion of researchers from other academic domains. Many scholars have grasped the strength of multidisciplinary grant applications.

However, little analysis has been conducted on the relevant percentage of multi-disciplinarily funded projects and publications. For researchers an interesting empirical question thus becomes what percentage of funded research is multidisciplinary compared to single

discipline and has a trend emerged? Yet another pragmatic question is posed that would be useful for critical scholars. It would be remiss not to interject that the commercialization and commoditization of research and scholarship is an increasing by-product (or even primary objective) of the contemporary higher education. The ramifications of this trend for teaching, hiring, promotion, tenure and most importantly, objective scholarship, needs considerable critical examination.

A closely related, second application is that those scholars developing EpiCrim advocate a return to a paradigm under which disciplinary boundaries are blurred or even eradicated (Akers and Lanier, 2009; Lanier, Pack and Akers, 2010). One reviewer questioned why Public Health and Criminal Justice, why not integrate Public Administration, Psychology or any other social science disciplines?

First, EpiCrim seeks to be inclusive and multidisciplinary, thus much could, and should, be learned from any other academic area of study. The critical critique of Law is an additional obvious and important component. Second, if crime is presumed to be an indicator of the health of the societal whole (dis-ease), then both Criminal Justice and Criminology, as the academic disciplines most likely to address crime issues and Public Health as the academic discipline most likely to examine health issues, are the two most logical areas to

integrate. Third, there is historical precedence. Consider that AIDS and HIV and other contemporary health maladies have been examined by interdisciplinary teams combining public health and criminology for over twenty years (DiClemente, Lanier, Horan and Lodico, 1991; Lanier and McCarthy, 1989). A few texts have made the connection (Dobash, Dobash and Gutteridge, 1986, Braithwaite, Hammett and Mayberry, 1996; Lanier, 2006). Many of these academic efforts implicitly, and sometimes explicitly, merged Criminal Justice with Public Health, though all stopped short of naming the exercise. However, most prior contemporary scholarly activities have dealt with specific problems such as HIV/AIDS and none considered crime to be symptomatic of a dis-ease of the societal whole. This also provides the foundation for how EpiCrim may benefit health care professionals. One application would be resolution of the 'custody vs. care' dichotomy.

EpiCrim is by nature multidisciplinary and so allows correctional and health care workers a common ground as opposed to the traditional divergence. 'Custody vs. health care' conflicts are common in all correctional facilities. Some state Department of Corrections (Alabama for example) used to segregate and keep all HIV positive inmates in virtual lockdown depriving them of the rights and privileges provided other (presumably healthier) inmates. This blending of

disciplines should help reduce the inherent conflicts such as those presented by 'custody vs. care' as shown next.

Several research and policy opportunities suggest themselves. Obviously, the tension presented by the 'custody versus care' issue presents an ideal opportunity for application of Hegel's' dialectical principles (thesis, anti-thesis, synthesis) though in a micro context. In addition, for the academician, it should be important to help workers in each field better communicate and facilitate the efforts of the other, creating an ideal training and "sensitivity" opportunity – which of course would lend itself to empirical evaluation. Finally, to expand on this idea, consider bio-physiological realities. Criminologist and Criminal Justice professionals should comprehend mechanisms of both current and future disease spread to develop and impose policy. What if HIV/AIDS had been air borne? How would correctional facilities be altered? Police practice? Everyday life? That deadly catastrophic airborne plague will undoubtedly one day emerge, perhaps through natural causes, government ineptness or terrorist actions. Now consider the third application of EpiCrim.

Third, incorporating epidemiological models can, at times, require "nothing more than understanding the lexicon of terms used across both discipline. However, "different disciplines may at times be studying the same issue through different lenses" (Akers and Lanier,

2009: 4; see the Crime Prism [Henry and Lanier 1998] for discussion of contextual effects of crime definition). Symbolic Integrationists have much to offer here (Becker, 1973; Goffman, 1963; Lemert, 1951, 1967). As Akers and Lanier (2009:4) guestioned, when Criminal Justice professionals talk about addressing the "root causes" of crime are they are meaning the same thing as "primary care" to health professionals? As argued previously, each are really examining the correlates to crime and the correlates to health disparities are identical (e.g., poverty, minority status, lack of education, family history, neighborhood characteristics, geography, and other psycho-social indicators, etc.). Likewise, "tertiary care" could be analogous to Criminal Justice "programs" (care) such as specialized community policing, drug eradication and DARE units. These examples illustrate the third application of how EpiCrim can greatly increase our capacity by learning from other areas of study and by having different focal points and by using different philosophical and pragmatic lenses from those we are accustomed to (Akers and Lanier, 2009). Life experiences, academic training and other factors all serve to shape the lenses through which we view issues and provide solutions (Henry and Lanier, 2009). Health care professionals and Criminal Justice workers may be using the same approach, yet define it differently, or use different terminology based the lenses they apply.

Related to this, a dichotomy is created when one concept and term (e.g., rehabilitation) is used to achieve an underlying unnamed objective and a very disparate goal. For example, Polizzi guestions if "offender rehabilitation can be formulated as an authentic therapeutic process that seeks to explore the clinical needs of the offender with the goal of bringing-forth a better quality of life for that individual? It can also be used as a mechanism of control that becomes little more than the extension of a system of control that is cloaked in the image of therapeutic intervention" (Personal correspondence, July 22, 2009). Currently, the most common means of release from prison is parole, conditional release or supervised release (Lucken, personal correspondence, September 29, 2009). One common expectation to meet early release criterion is participation in some form of therapeutic activity (often simply holding a job). As such the "system" can track, monitor and control individuals well past their original prison release date. Recognizing this, some inmates opt to serve their entire sentence rather than be released under the therapeutic guise of parole or conditional release (Lucken, 1997). So, is the real objective of rehabilitation control or treatment?

Perhaps of most personal interest to critical scholars is the discourse on misguided public policy (Milovanovic, 2002; van Swaaningen, 1997). Specifically, a fourth application is that

government (often Criminal Justice) policies may actually harm public health care efforts and the health of the society as a whole by creating and perpetuating dis-ease (more on the concept of "dis-ease" follows). Several examples illustrate this.

In one of the first applications of EpiCrim Lanier showed how destructive government policy and inaction resulted in an increased incidence of HIV/AIDS in both the United States and South Africa (Lanier, 2009). Another health related example was provided by Scott Burris and colleagues (2004) who convincingly argued that current drug law and law enforcement strategies exacerbate, rather than reduce, the harmful consequences of drug abuse in America. Examples of this abound. Current laws regarding sentences for crack cocaine compared to powder cocaine especially harm African American drug users. How many people have been arrested and convicted of relatively minor (from a health standpoint) drug offenses that dramatically altered their career options and subsequent lives? How many non-violent drug offenders fill our prisons and jails and what is the social and economic consequence? Could actual treatment be cheaper and more beneficial than incarceration? Lanier, Pack and Akers when examining the impact of Criminal Justice policy on drug use among gang members concluded, "Once involved in gang activity, means of disassociating with the gang must be found. Current

a need for public health policy in the criminal justice arena....current drug laws concentrate drug abusers in close proximity with one another (prisons and jails) and consequently have the opposite of the desire effect" (2010:8).

Marijuana provides an excellent example of how American drug policies implicitly, and unknowingly, incorporate elements of Public Health and criminological theory. Consider how marijuana is presented as a "gateway drug" (Center for Drug Free Living, 2009) to using harder drugs without a shred of physiological empirical validation (Blaze and Lo, 1992; Ben Amar 2004). Presumably the main arguments against marijuana legalization are the dire, yet unsubstantiated, health consequences, yet tobacco and alcohol are sold (and taxed) each of which creates massive social dis-ease and individual harm. Blaze and Lo found that marijuana use was not a necessary stage for drug (ab)use progression, since nearly a third of drug users in their study reported never having used marijuana. However, alcohol and tobacco were implicated as important "gateway drugs" with tobacco being the more important of the two (1992).

Addressing the physiological harm, Ben Amar (2004) in a large Canadian study noted, "The World Health Organization (WHO) and several North-American and European expert committees conclude

that cannabis is less harmful for health than many other psychotropes." After comparing the toxicity of cannabis, heroin, cocaine, alcohol, tobacco and caffeine, Ben Amar concluded, "there is no scientific evidence that cannabis is a gateway drug conducting to the use of harder drugs such as heroin or cocaine. Contrary to alcohol and many other drugs, cannabis does not induce neither violence nor crime. In fact, it tends to suppress aggressiveness and to calm the consumer" (2004). Why then, does the Criminal Justice system continue to ignore health facts and create damage and social harm by advocating and enforcing the current marijuana policy? Obviously, "since they are only enforcing the law". However, EpiCrim advocates a health-based Criminal Justice system that would argue that perhaps law should be designed to reduce rather than contribute to social harm, decay and dis-ease. Based on the gateway hypothesis, both alcohol and tobacco should be criminalized as well, IF health is the priority.

Consider also the myriad of research opportunities presented by examination of the lack of needle exchange programs, the prohibition against condoms in prison and other counter intuitive government policies (Tewksbury and West, 2000) that adversely affect health and crime. EpiCrim adherents would again stress a health-based approach to Criminal Justice policy and practice. The overriding concern should

be the HEALTH of society, not puritanical, political or economic interests. Going back to the idea that crime is a reflection of a diseased society, policy should provide health, cures or remedies, as opposed to being a contributing factor.

To provide an illustration of crime being a disease symptom of the social body consider the causal mechanisms (illness) underlying the Black on Black crime phenomenon. According to the federal Centers for Disease Control and Prevention (CDC) – a Public Health organization - for African American males between 15 and 34 years of age, homicide is the leading cause of death ahead of AIDS, car accidents and disease. Nearly 95% of these young men were killed by other blacks. Startling, 1 in 30 young African American males will die prematurely from homicide (CDC, 2009). This is compared to 1 in 132 for black females and 1 in 495 for white females (Men at Risk, 2008). Aside from the obvious harm to young African American males, an important sub-group of society, whatever the illness, disease, causes or vector of this alarming figure, it had better be definitively identified, isolated and eradicated before it transmits to the societal whole. Wars create less individual harm.

Causality rates in the most horrific wars are lower. In Vietnam the casualty rate for American soldiers was 1:103 and in the most brutal war of modern history, World War Two, soldiers on the "front

lines" were safer than young African American males in contemporary American society, since death rates were "only" 1:40 for combat soldiers (Congressional Research Service, 2008). EpiCrim is one venue for addressing just this type of social plague. First, causal mechanisms must be identified; just as medical staff must identify and isolate causes to disease prior to effective treatment.

Consider that Black on Black homicides could be the symptom/result of misguided (diseased) social programs. Just as the causes of HIV/AIDS are multiple and the consequences diverse, Black on Black crime has more than one cause and many detrimental results. EpiCrim adds the critically needed linkage between the Criminal Justice and Public Health aspects of Black on Black crime and the horrific homicide rates.

Several other examples could be used to illustrate the linkages between health, crime and government policy and practice. The most well publicized example (few research methods or ethics texts fail to mention it) was the United States (US) Public Health Service (PHS) unethical "experiment" with economically disadvantaged black males during the Tuskegee syphilis study. Dr. Taliaferro Clark of the US PHS tried to salvage a well-intended but underfunded study (due the depression of the 1930's) of syphilis treatment in 5 Southern counties by allowing those victims in Macon County, Alabama (the site of

Tuskegee) to go untreated, after funding was withdrawn, to examine the long term effects – without any consent or notification to the "patients". The "recruits" incentives to participate in the study were free medical exams (the first for many of them), food and transportation. Yet, none were ever told they suffered from syphilis and none were provided treatment (Tuskegee Syphilis Story, 2009).

Other government policies less directly cause health problems but are nonetheless responsible. Barak (1991) eloquently exposed harmful social policy that exacerbated the homelessness problem nearly two decades ago when he wrote about "the political economy of the new vagrancy" and about "the crime of homelessness versus the crimes of the homeless." He specifically referred to policies that criminalized the behavior of the homeless, including trespass laws, park exclusion statutes, and off-limit orders, that have only intensified during the recent emphases on both securitization and risk (Beckett and Herbert, 2008). He also referred to the lack of interventionist programs for runaway youths, drug dependent populations, and military veterans. His call for action went unheeded and consequently homelessness in America has reached crisis proportions. As a result, homelessness is causing, contributing to, and increasing, many health (Crosby, Salazar, Holtgrave and Head, 2009) and crime problems. A

recent affirmation of Barak's homelessness causal argument was provided in Georgia.

Well intended, but harmful government policy and prohibitions against sex offenders resulted in large homeless tent cities sprouting up comprised solely of sex offenders (AP, 2009). Laws in Georgia (and many other places) prohibit convicted sex offenders from living in close proximity to schools, libraries, parks, playgrounds, etc. One consequence is that in some smaller locales there are few residential living options for convicted sex offenders. This has resulted in increased homelessness. Georgia government officials even suggested these men reside in a specific "tent city" after release from correctional supervision (AP, 2009). Similar sex offender homeless camps have been found in South Florida. One group lived under a highway bridge since it was the sole location meeting the new zoning restrictions (AP, 2009). One can only imagine the long-term individual and societal health consequences of this policy and the increased harm created by homelessness as Barak anticipated.

Government is obviously not the sole entity perpetuating harmful practice and policy. Industry has a long history of creating health harm and contributing to social disease as shown in Love Canal, by Firestone tires and the Ford Pinto cases (Lanier and Henry, 2010). The many examples of harmful policy presented above suggest the

dire need for this increased blending if the health and crime academic enterprises. EpiCrim provides a logical and yet innovative means of doing so from a "health of the society whole" perspective.

Fifth, and final, health care professionals, both workers and researchers, within Criminal Justice environments are in a unique and favorable position to recognize victims of crimes that correctional officers, police and prosecutors may overlook. For example, ongoing research into human trafficking in South Africa and Florida, USA has found several trafficking victims who were actually arrested (Lanier, 2010). Most recently, two young women were arrested in Orlando, Florida for a Craigslist-related prostitution sting. Joe Castrofort, Esq., the attorney representing the two "prostitutes" discovered them to be living in a van, having their passports and children withheld, and being forced to perform sex acts after coming to the United States from an island country to be with "boyfriends" they met online. The traffickers told the victims not to seek law enforcement help since the police will simply arrest and/or deport them for sex or drug offenses. In this case, that is exactly what happened. Sadly, on release, both women returned to the "boyfriends/captors/pimps" having no money, no passport, and limited English speaking ability.

This type of law enforcement response merely strengthens the hold that traffickers have over their victims. Workers within the

Criminal Justice and health care industry are in a unique position to identify and assist these types of victims. Nurses, Emergency Medical Technician (EMT's) and other health professionals should be trained to better recognize these types of crime victims. The Florida

Department of Law Enforcement (FDLE) has begun a study and intervention to better assist law enforcement officers with recognition and strategies to assist victims of human trafficking. In October of 2009 they held a 3 day conference on the topic.

Concluding Observations and Call for Action

In summary, the central unifying idea of EpiCrim has never been operationally defined in a comprehensive manner that allows serious contemplation, comparison, analysis, critique or integration. This paper presented a definition of Epidemiological Criminology. Further, the traditional erroneous contemporary practice is that crime causation and health behaviors have, more often than not, only been discussed from a particular ideological perspective, methodological orientation or academic discipline (Barak, 1998). For example, as Lanier, Lucken and Akers (2010) argued, historically disciplines such as Criminology, Criminal Justice, Psychology, Public Health and Sociology, etc. have been more divergent than inclusive. Consider that even within disciplines we often segregate and publish by methodological and

theoretical orientation (Tewksbury, 2009). There are additional sources of conflict.

Areas for Synthesis. Positivist and critical theorists too often lack discourse, much less agreement, perhaps to the detriment of policy and social health. It is rare for positivists to collaborate with critical scholars. Further, consider how compartmentalized most Criminal Justice (e.g., police, corrections and courts) and some Criminology programs are, and the resultant inherent friction between scholars and practitioners, where even certain programs get derogatorily labeled "cop shops". (A similar tension could well exist in Public Health programs). EpiCrim may provide one venue for breaking down these philosophical barriers and for the cross fertilization of ideas and techniques.

The role of researchers is to provide technical expertise, program evaluation and theory development for each of the five areas cited above (and more that I am sure to have neglected). Most competent positivistic researchers are already in the business of creating, testing (falsifying), and promulgating theory (Popper, 1954/2002); while critical theorists are actively seeking means to improve social conditions; EpiCrim provides a contemporary opportunity to expand each enterprise and perhaps for collaborative efforts. Both space and self-interest preclude an extended discussion of the tension between

positivism and critical scholarship (Draper, 2009; Milovanic, 2002) but it is hoped that EpiCrim can prove useful to adherents of each position.

Closely related is the serious discussion of quantitative compared to qualitative research approaches (Tewksbury, 2009). While not advocating one over the other, EpiCrim as a field of study would advocate that the specific problem under examination dictate the analytical and methodological approach rather than a preference of a specific researcher. Akers and Lanier concluded the earlier treatise on EpiCrim with the observation that, "we anticipate that methodological breakthroughs in one discipline will more quickly become available to the other, improving the quality of information used in decision making and leading to healthier and safer communities" (2009:5).

While conflict is inevitable, it should be a primary motivation for social change and the resultant progress. EpiCrim argues for the health of the societal whole with critical discourse being a positive mechanism for change. EpiCrim seeks to reverse the exclusionary trends cited above through inclusion, debate and actual rather that rhetorical synthesis. Intersections between Criminal Justice and Public Health theories and analytical techniques serve as examples that can help to expose harmful social policy and academic practice. EpiCrim presents a new enterprise that seeks to integrate the two disciplines in an effort to positively impact the health and well being of society. By

conceptualizing crime as a prime indicator of societal "dis-ease" this integration seems warranted.

Crime as Symptomatic of Dis-Ease. Polizzi guestions if: "the idea of crime as the dis-ease of the social body, crime is a symptom of that dis-ease? Crime becomes the symptom of the social body in dis-ease, which requires a solution that addresses both symptom and cause. Just as it is impossible to think about disease without a body, it is equally problematic to construct the image of crime without an exploration of the social body." (Personal correspondence, July 22, 2009). This observation suggests a synthesis of crime and social conditions and argues for greater recognition of the structural and/or societal causes of crime. The health (ease) of a society is presumed to be the desired normal state. Dis-ease, a clever conceptualization, suggests an abnormal, pathological and harmful societal state. However, if the Durkheimian concept that crime can be construed as a functional, barometer of the health of any given society, and as such is normal; then measures of "acceptable" and unacceptable" levels of crime are required. It is unlikely and utopian to suggest a society void of any crime. Durkheim pointed out that even a society of saints would experience deviance. Crime, as social harm, regardless of level, does suggest a societal ailment or dis-ease. Further conceptualization and examination of this idea is needed.

Beyond defining EpiCrim, highlighting applications and commonalities, and suggesting some methodological and theoretical research areas, much remains to be accomplished. Already mentioned is the dire need for increased critical discourse between academics. More importantly however, EpiCrim needs to start being useful for those outside the ivory towers of academia. Health care professionals and Criminal Justice practitioners may be among the first to make use of EpiCrim – that is the vision anyway.

References

- Akers, Timothy and Mark M. Lanier. 2009. 'Epidemiological Criminology': Coming Full Circle. American Journal of Public Health, 99, (3): 397-402.
- Associated Press (AP). September 28, 2009. Georgia Tent Camp is Last Resort for Sex Offenders. From the Dallas Morning News Online. Retrieved October 5, 2009, from
- http://www.dallasnews.com/sharedcontent/dws/news/nation/stories/DN-camp_29nat.ART.State.Edition1.b84112.html.
- Barak, Gregg. 1998. Integrating Criminologies. Boston, MA: Allyn & Bacon.
- Barak, Gregg. 1991. Gimme Shelter: A Social History of Homelessness in America. Westport, CT: Praeger.
- Barry, Kathleen .1979. Female Sexual Slavery. Englewood Cliffs, NJ: Prentice Hall.
- Becker, Howard. 1973. Outsiders: Studies in the Sociology of Deviance. New York, NY: Free Press:
- Beckett, K., and S. Herbert. 2008. Dealing with Disorder: Social control in the post-industrial society. Theoretical Criminology, 12(1): 5-30.

- Ben Amar, Mohamed. 2004. Pharmacology of Cannabis and Synthesis of the Analyses of the Principal Expert Committees. Drogues, santé et societe, 2-3(2-1): 9-60.
- Blaze-Temple, Debra and Sing Kai Lo. 1992. Stages of Drug Use: A Community Survey of Perth Teenagers. British Journal of Addiction, 87(2): 215-225.
- Blomberg, Thomas G. and Karol Lucken. 2000. American Penology: A History of Control. Aldine de Gruyter: New York.
- Braithwaite, Ronald, Theodore Hammett and Robert M. Mayberry. 1996. Prisons and AIDS: A Public Health Challenge. San Francisco, CA: Jossey-Bass.
- Burris, Scott, K. Blankenship, M. Donoghoe, S. Sherman, J.S. Vernick, P. Case. Lazzarini and S. Koester. 2004. Addressing the "Risk" Environment for Injection Drug users: the Mysterious Case of the Missing Cop. Milbanks Quarterly, 82: 125-156.
- Center for Disease Control and Prevention (CDC). 2009. Accessed July 17, 2009. http://www.cdc.gov/nchs/fastats/homicide.htm.
- Center for Drug Free Living. 2009a. Accessed July 17, 2009. http://www.cfdfl.com/AboutUs/Mission.aspx
- Center for Drug Free Living. 2009b. Accessed September 30, 2009 from http://www.cfdfl.com/Services/Fags.aspx?id=6
- Congressional Research Service. 2008. American War and Military Operations Casualties: Lists and Statistics (Order code RL 32492). Washington, D.C.: Congressional Research Service. Accessed October 1, 2009.
- http://www.law.umaryland.edu/marshall/crsreports/crsdocuments/RL3 2492_05142008.pdf
- Cressey, Donald R. 1960. Epidemiology and Individual Conduct: A Case from Criminology. The Pacific Sociological Review, 3:47-58.
- Crosby, Richard A., L.F. Salazar. D.R. Holtgrave and S. Head. 2009. Homelessness and HIV-associated risk behavior among African American men who inject drugs and reside in the urban south of the United States. AIDS and Behavior (in press).

- Draper, Matthew R. 2009. Inescapable Morality: Responding to the Qualitative versus Quantitative Issue. Journal of Theoretical and Philosophical Criminology, 1, (1): 59-78.
- DiClemente, Ralph J. 1992. Adolescents and AIDS: A Generation in Jeopardy. Newbury Park, CA: Sage Publications.
- DiClemente Ralph J., Mark M. Lanier, Patricia Horan and Mark Lodico. 1991. Comparison of AIDS Knowledge, Attitudes and Behaviors among Incarcerated Adolescents and a Public School Sample in San Francisco. American Journal of Public Health, 81:628-630.
- Dobash, R.P., R.E. Dobash and S. Gutteridge. 1986. The Imprisonment of Women. New York, NY: Basil-Blackwell.
- Durkheim, Emile. 1897/1982. The Rules of the Sociological Method. New York, NY: The Free Press.
- Durkheim, Emile. 1893/1984. The Division of Labor in Society. New York, NY: The Free Press.
- Durkheim, Emile. 1864/1951. Suicide. New York, NY: The Free Press.
- Ellis, Lee. 2005. A Theory Explaining Biological Correlates of Crime. European Journal of Criminology, 2: 287-315.
- Federal Bureau of Investigation (FBI). 2000. A Medical Model for Community Policing. FBI Law Enforcement Bulletin. Washington, DC: Department of Justice.
- Flavin, Jeanne. 2002. A Glass Half Full? Harm Reduction among Pregnant Women who use Cocaine. Journal of Drug Issues, 32, (3): 973-998.
- Goffman, Erving. 1963. Stigma: Notes in the management of Spoiled Identity. Englewood Cliffs, NJ: Prentice Hall.
- Henry, Stuart and Mark M. Lanier. 2001. What is Crime? Controversies over the Nature of Crime and what to do about it. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Henry, Stuart and Mark M. Lanier. 1998. The Prism of Crime: Arguments for an Integrated Definition of Crime. Justice Quarterly,

15: 609-627.

- Kuhn, Thomas. 1962. The Structure of Scientific Revolutions. Chicago, IL: The University of Chicago Press.
- Lanier, Mark M. 2006. The Impact of HIV/AIDS on Criminology and Criminal Justice, The International Library of Criminal Justice, Criminology and Penology. Hampshire, England: Ashgate Publishing.
- Lanier, Mark M. 2009. Epidemiological Criminology: A Critical Cross-Cultural Analysis of the Advent of HIV/AIDS. Acta Criminologica, 22, 2:60-73.
- Lanier, Mark M. 2010 in press. EpiCrim for Health Care Workers. Correct Care.
- Lanier, Mark M. and Stuart Henry. 2004. Essential Criminology. 2nd ed., New York, NY: Westview/Perseus Press.
- Lanier, Mark M. and Stuart Henry. 2010. Essential Criminology, 3rd ed., New York, NY: Westview/Perseus Press.
- Lanier, Mark M., Karol Lucken and Timothy Akers. 2010. Further need for Epidemiological Criminology. Chapter in Key Correctional Issues. Roslyn Muraskin (editor) 2nd Ed. Englewood Cliffs, NJ: Prentice Hall Publishing, 163-174.
- Lanier, Mark M., Robert P. Pack and Timothy Akers. 2010 in press. Epidemiological Criminology: Drug Use Among African American Gang Members. Journal of Correctional Health Care.
- Lemert, Edwin M. 1951. Social Pathology, New York, NY: McGraw-Hill.
- Lemert, Edwin M. 1967. Human Deviance, Social Problems, and Social Control. Englewood Cliffs, NJ: Prentice-Hall.
- Lombroso, Cesare. 1876/1912. L'Uomom delinquente. Milan, Italy: Hoepli.
- Lombroso, Cesare. 1912/1968. Crime: It's Causes and Remedies. Montclair, NJ: Patterson Smith.
- Lucken, Karol. 1997. Privatizing Discretion: 'Rehabilitating' Treatment

- in Community Corrections. Crime and Delinquency 43, (3): 243-259.
- Lutya, Thozama Mandisa and Mark M. Lanier. 2009. EpiCrim Criminological Responses to Human Trafficking of Women and Girls for Sexual Exploitation in South Africa. Paper presented at the Stockholm Criminology Symposium, Stockholm, Sweden, June 22-24.
- Machiavelli, Niccolo. 2004. The Prince. London, England: Penguin.
- Men at Risk (2008). Endangered Health. The National Men's Resource Center. Retrieved October 5, 2009, from http://www.menatrisk.org/health/endangeredhealth.html.
- Milovanovic, Dragan. 2002. Critical Criminology at the Edge. Monsey, New York, NY: Criminal Justice Press.
- Mustaine, Elizabeth, and Richard Tewksbury. 1999. Assessing the Likelihood of Drunk Driving: Gender, Context and Lifestyle. Journal of Crime and Justice 22, (1): 57-93.
- National Institutes of Health (NIH). NIH Roadmap Initiative. http://nihroadmap.nih.gov/.
- Pack, Robert P. 2008. Criminology and Public Health: Toward Common Ground. Invited presentation for EPI 1892XX: Epidemiologic Criminology. American Public Health Association; San Diego, CA.
- Popper, Karl. 1954/2002. The Logic of Scientific Discovery. 2nd ed. Florence, Kentucky: Routledge Classics.
- Robinson, Matthew B. 2004. Why Crime? An Integrated Systems Theory of Antisocial Behavior. Upper Saddle River: NJ: Pearson/Prentice Hall.
- Rush, George E. 2000. The Dictionary of Criminal Justice. 6th ed. London, England: Dushkin/McGraw-Hill.
- Schur, Edwin M. 1973. Radical Non-Intervention: Rethinking the Delinquency Problem. Englewood Cliffs, NJ: Prentice Hall.
- Slife, B.D. and Williams, R.N. 1995. What's Behind the Research?

- Discovering hidden assumptions in the Behavioral Sciences. Thousand Oaks, CA: Sage.
- Sweet, Nova and Richard Tewksbury. 2000. Entry, Maintenance and Departure from a Career in the Sex Industry: Strippers' Experiences of Occupational Costs and Rewards. Humanity & Society, 24, (2): 1-26.
- Tannenbaum, Frank. 1938. Crime and the Community. Boston, MA: Ginn.
- Tewksbury, Richard. 2009. Qualitative versus Quantitative Methods: Understanding Why Qualitative Methods are Superior for Criminology and Criminal Justice. Journal of Philosophical and Theoretical Criminology, 1, (1): 38-58.
- Tewksbury, Richard. 2006. 'Click Here for HIV': An Analysis of Internet-Based Bug Chasers and Bug Givers. Deviant Behavior, 27, (4): 379-395.
- Tewksbury, Richard and Angela West. 2000. Research on Sex in Prison during the Late 1980s and Early 1990s. The Prison Journal, 80, (4): 368-378.
- Timmermans, S. and J. Gabe. 2002. Introduction: Connecting Criminology and Sociology of Health and Illness. Sociology of Health and Illness. 24:501-516.
- Tuskegee Syphilis Story. 2009. http://wwwtuskegee.edu/global/story.asp?s accessed on September 29, 2009.
- Van Swaaningen, Rene. 1997. Critical Criminology: Visions from Europe. London, England: Sage
- Ventura, Holly E., C.L. Gibson, J. Mitch Miller and Alex R. Piquero. 2005. Binge Drinking: Patterns, Explanation, Policy in The Handbook of Alcohol Related Pathology (V.R. Preedy and R. Watson, Eds.). New York, NY: Academic Press.
- Webster's. 2009. Disease. (n.d.). Dictionary.com Unabridged (v 1.1). Retrieved September 30, 2009, from Dictionary.com website: http://dictionary.reference.com/browse/disease

Zaitzow, Barbara. 2001. Whose problem is it anyway? Women Prisoners and AIDS/HIV. International Journal of Offender Therapy and Comparative Criminology, 45, (6): 673-690.

Zuckerman, Marvin. 1994. Behavioral Expressions and Biosocial Bases of Sensation Seeking. Cambridge, England: Cambridge University Press.

¹ This paper draws from and builds upon, an earlier essay in the *American Journal of Public Health* (Akers & Lanier, 2009) and a short "lay" version of the argument in *Correct Care* (Lanier, 2010).