DRUG USE/ABUSE - AN EMERGING RISK FACTOR FOR CARDIOVASCULAR DISEASE: A CALL TO ACTION

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Abstract: According to the 2010 and 2011 National Survey on Drug Use and Health, an estimated 22.6 and 22.5 million Americans aged 12 or older were current (within the past 30 days) illicit drug users, respectively. These estimates represent 8.9% and 8.7% of the U.S population, respectively. Illicit drugs include: Marijuana/hashish, cocaine (including crack cocaine), heroin, hallucinogens, inhalants, or prescription psychotherapeutics used for non-medical purposes. Though studies have established an association between drug use/abuse and cardiovascular disease (CVD), drug use/abuse has still not been consistently included in the staple of CVD risk factors; thus, the impetus of this research. The research objectives were to: 1) demonstrate empirical data that supports the association between drug use/abuse and CVD; 2) explain the biological plausibility of the causal link between drug use/abuse and CVD; and 3) provide adequate data to support a Call to Action in the classification of drug use/abuse as an emerging risk factor for etiology and progression of CVD. The epidemiology of illicit drug use/abuse and its potential link with CVD were assessed by systematic review of peer review scientific journals and reports and the conduct of meta-analysis. Studies have shown the following associations: 1) cocaine (particularly “crack” cocaine) and methamphetamine and stroke (ischaemic and haemorrhagic); 2) amphetamine abuse and heart attack; 3) methamphetamine and increased risks of major neck artery tears; and 4) heroin and increased risk of endocarditis. Emerging themes derived from the information and data examined in this research were as follows: 1) there is definitely an association between drug use/abuse and CVD; 2) biological plausibility of the link between the illicit drug use/abuse and CVD is evident, though the causal link is still unclear; and 3) there is a public health need and significance to conducting additional studies that collect adequate data on drug use/abuse behavior in the study of the etiology and progression of CVD. Public Health professionals and health care practitioners need to be more proactive in examining drug use/abuse as a potential risk factor for CVD and/or CVD-related risk factors such as hypertension and diabetes mellitus. Medical consequences of drug use/abuse should not only focus on its relation to sexual transmitted infections (STIs) and HIV/AIDS, but also on CVD. Additional epidemiological studies examining risk factors to CVD should have adequate assessment of drug use/abuse.

Key Words: Cardiovascular Disease (CVD), Drug Use/Abuse, Sexual Transmitted Infections (STIs), Illicit Drug, Emerging Risk Factor, Call for Action, Meta-analytic Techniques, Biological Plausibility

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