

Life Expectancy and Its Relation to Crime: An Integrative Literature Review

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Abstract:- Life expectancy is the predominant metric for assessing population health, reflecting the general longevity of a population. This study was designed to determine the life expectancy and its relation to crime utilizing the integrative literature review. Searches of Google Scholar, Directory of Open Access Journals (DOAJ), ProQuest & Chadwyk-Healey databases, and Gale databases between 2000 to 2024 were made. Included articles were evaluated and subsequently synthesized into a narrative summary. The examined literature suggests a correlation between violent offending and victimization with increased mortality rates, as well as a heightened risk of death due to alcohol or drug-related causes or suicide. This indicates that governing bodies and health care systems might prioritize the prevention of violent behavior, potentially mitigating the risk of future suicides.

Keywords:- Crime; Life Expectancy; Mortality; Violence.

I. INTRODUCTION

Life expectancy is the predominant metric for assessing population health, reflecting the general longevity of a population. The aim of this research was to carry out a meta-analysis through an integrative literature review on the studies, which link the life expectancy on crime. Life expectancy is the average duration of years that individuals of a specific age are anticipated to live (OECD, 2017). According to Global Health Observatory data (n.d.), the overall mortality level of a population shows the life expectancy at birth. It delineates the mortality trend across all age demographics within a specified year, encompassing children, adolescents, adults, and the elderly. In 2016, the average life expectancy at birth was recorded at 72 years, with women averaging 74.2 years and men 69.8 years. This indicates that, globally, women tend to have a longer lifespan than men.

Gonzales-Perez (2017) noted that the World Health Organization (WHO) has acknowledged crime as a significant social issue and one of the most urgent challenges in public health since 2017. This epidemic, previously overlooked, has emerged as a significant contributor to mortality and premature death. In the early twenty-first century, 90 percent of deaths due to interpersonal violence globally were reported in developing countries. Crime has been a constant presence in human history, intricately connected to the social, political,

economic, and cultural characteristics of specific communities. Crime is not an inherent aspect of the human condition; instead, it is a sociohistorical construct that arises in response to the specific circumstances of the time. It serves as both a symptom and a reflection of social issues that necessitate responses from various sectors of society, given its widespread impact on individuals, groups, and the nation as a whole.

Limited information exists regarding the overall mortality rates of individuals engaged in criminal behavior. However, it is noted that prior to the age of 40, delinquent individuals are more prone to die from unnatural causes, such as accidents or homicide, compared to their conformist counterparts. According to the limited literature, four competing hypotheses exist regarding the elevated death rate among delinquent individuals. Factors include risk-taking and impulsiveness, increased substance abuse, inadequate self-care linked to a dysfunctional upbringing, and economic and educational deprivation (Laub & Vaillant, 2000).

This study addresses a gap in the existing literature on life expectancy and crime by performing a comprehensive evaluation of empirical journal papers published from 2000 to 2019. Instead of performing a singular primary study utilizing data from people, counties, or states to evaluate the link between the variables, the researcher analyzed previously published studies over the past decade. The objective is to comprehend how researchers are now examining the correlation between life expectancy and crime, their findings, and methods to enhance future investigations.

II. METHODOLOGY

This paper was designed to determine the life expectancy and its relation to crime. To achieve the mentioned objective, the researcher used the integrative literature review as a methodology for the study since the research does not involve primary data collection and data analysis.

Dudovskiy (2016) states that the objective of an integrative literature review is to examine, evaluate, and synthesize secondary data related to the research topic in a cohesive manner, thereby generating novel frameworks and perspectives on the subject matter. This approach aims to provide a comprehensive overview of the existing knowledge base, engage in a critical review, and consider the possibility

of re-conceptualization, while also seeking to enhance the theoretical foundations of the specific topic as it evolves (Snyder, 2019).

This paper utilized the relevant literature, both published and unpublished. These were obtained in the electronic databases, journals, and web-based search engines such as Google Scholar, Directory of Open Access Journals (DOAJ), ProQuest & Chadwyk-Healey databases, and Gale databases. Searches were limited by the date of publication from 2000 to 2024. Forty-five (45) literature searches were performed on all database. Each search reflected a variation in the combination of 17 keywords: crime, mortality and crime, life expectancy and crime, how life expectancy is correlated to crime. Indexed databases that produced keywords for searches were also incorporated. The references of each study were examined to confirm that all pertinent studies were included in the search. The search criteria yielded 20 papers, of which 11 presented data in a format suitable for analysis.

III. RESULTS AND DISCUSSION

The research conducted by Stenbacka et al. (2012) determined that both violent offending and victimization significantly influence the risks associated with alcohol and/or drug-related mortality, suicide, and overall mortality rates. The relationship exists autonomously from initial risk factors such as substance abuse and psychiatric conditions. The authors underscored the necessity of implementing more systematic screening for violent behavior and victimization within clinical environments to identify individuals at elevated risk. In a similar vein, the authors indicated that in clinical practice, individuals who have encountered victimization or violent offenses ought to be methodically assessed for substance abuse and provided with thorough treatment. Both violent offending and victimization warrant early recognition, as they both demonstrate an increased mortality rate from both natural and unnatural causes.

The study conducted by Garcia and Aburto (2019) revealed that between 1996 and 2013 in Venezuela, there was an increase of 3.57 years in female life expectancy, alongside a reduction of 1.03 years in lifespan inequality. The life expectancy for males has risen by 1.64 years, reaching a total of 71.00 years; however, the disparity in lifespan has also grown, increasing by 0.95 years. Had the rates of death associated with violence not escalated during this timeframe, male life expectancy would have experienced an increase of an additional 1.55 years, and there would have been a slight reduction in lifespan inequality. The findings indicate that the rise in violence-related fatalities among young men (ages 15–39) has hindered improvements in male life expectancy and exacerbated lifespan inequality, leading to greater uncertainty for Venezuelan males regarding their age at death.

Gonzales-Perez et al. (2017) conducted a thorough analysis of violent deaths—including homicide, suicide, events of undetermined intent, and deaths resulting from legal intervention—in Brazil and Mexico over the three-year periods of 2002-2004 and 2012-2014. Their study examined the impact of these mortality causes on life expectancy in both nations, as well as the contribution of various age groups to the years of life expectancy lost (YLEL). The primary factor contributing to YLEL among men was homicide during both intervals in Brazil (1.5 years) and in the latter period in Mexico (one year). During the period from 2012 to 2014, violent deaths represented approximately 16 percent of the total years of life lost in Brazil, while in Mexico, this figure stood at 13 percent. In both countries, the relative increase in years of life lost due to homicides and suicides among women was notably significant, despite violent deaths constituting only a small fraction—merely 3 percent—of the overall years of life lost. The greatest proportion of YLEL attributed to violent death was observed within the 15 to 29 age demographic across both nations and for individuals of both genders. The rise in violent mortality rates in Mexico, particularly among the youth, has hindered the potential for further advancements in life expectancy in recent years, especially for males. Similarly, the elevated rates of violent mortality in Brazil during both periods have impeded the advancement of life expectancy.

The study made by Su-Wuen & Lynvh (2016) offered statistical evidence for what had previously been a matter of hypothesis: that a criminal history correlates with a reduced life span. The data indicates that, on average, individuals with a criminal history in New Zealand have a life expectancy of 64 years, which is approximately 10 to 15 years shorter than that of the average New Zealand citizen. The data regarding causes of death elucidates that lifestyle choices, risk-taking behaviors, and psychological factors are essential for comprehending this disparity. Individuals with criminal backgrounds exhibit an elevated risk of mortality in vehicular incidents, are more susceptible to homicide, and demonstrate a greater propensity for self-inflicted death.

A further investigation by Jones (2017) highlighted that individuals released from incarceration encounter significant challenges, including an elevated risk of mortality. The author conducted an analysis of mortality rates among former inmates in North Carolina, encompassing both violent and nonviolent fatalities. The findings of the research indicated that there were 926 fatalities among former inmates throughout the duration of the study. In comparison to the general population of North Carolina, the standard mortality ratios (SMRs) exhibited an elevation for all-cause mortality across total deaths, heart disease, cancer, suicide, and homicide. Consequently, the mortality rate among individuals previously incarcerated in North Carolina was markedly elevated compared to that of other residents of the state.

Cano et al. (2024) conducted a comprehensive review of law enforcement drug seizures and the associated overdose mortality rates in the United States. Research indicated that seizures of synthetic opioids, particularly fentanyl, constituted the most commonly analyzed category of drug seizures, while overdose fatalities, encompassing all substances, emerged as the most frequently scrutinized outcome. A substantial proportion (86%) of studies indicated at least one statistically significant positive correlation between a law enforcement drug seizure metric and an overdose mortality outcome, with the strongest consistency observed in relation to fentanyl-related seizures. The findings exhibited a degree of inconsistency concerning seizures associated with stimulants and various other substances. Consequently, the review presented coherent evidence indicating that fentanyl-related seizure measures correlate positively with overdose mortality outcomes, notwithstanding the limitations intrinsic to drug seizure data, even when information regarding seizure weight or dosage is lacking.

The study conducted by Fujita-Imazu et al. (2024) assessed the impact of evolving trends in drug- and firearm-related mortality on life expectancy in the United States from 2000 to 2020. The findings indicated that in 2020, the combined impact of drug-related incidents and firearm-related fatalities diminished male life expectancy by 1.67 years, in contrast to a reduction of 0.67 years observed in 2000. Moreover, had these two causes of death not been factored in, male life expectancy in 2019 would have reached 78.02 years. In the year 2000, the impact of drugs and firearm-related mortality diminished life expectancy for women by 0.20 years, escalating to a reduction of 0.63 years by 2020. Had it not been for the detrimental influence of these two preventable factors, female life expectancy would have reached 82.25 years in 2019. Consequently, the surge in drug- and firearm-related fatalities, particularly among younger demographics, has led to a notable decline in life expectancy at birth attributable to these mortality factors. In the absence of prompt measures to address these avoidable factors contributing to mortality, the life expectancy in the United States is likely to remain stagnant and could potentially experience a decline.

Vargas (2023) examines the impact of multiple homicides on life expectancy for both male and female populations, providing empirical evidence regarding the temporal and spatial relationship between the homicide rates of men and women, categorized by age group, throughout the period from 2002 to 2020. Utilizing data from the National Institute of Statistics and Geography (INEGI) alongside population projections from the National Population Council (CONAPO), an estimation of homicide mortality rates for both men and women from 2002 to 2020 was conducted. This analysis encompassed the proximity of homicides involving both genders, the spatial dynamics of multiple homicides, and the implications of these incidents on life expectancy. Individual homicides have resulted in the most significant reduction in life expectancy for both men and women. The detrimental impact on the life expectancy of

both females and males resulting from multiple homicides became apparent starting in 2008. Investigating the homicides of women in proximity to the homicide of one or more men prompts an inquiry into whether these crimes predominantly stem from criminal violence, with gender-based factors playing a comparatively minor role.

Coid et al. (2021) investigate the potential impact of a syndemic on premature mortality among men in a socioeconomically disadvantaged area of Glasgow. A convergence of multiple health conditions and health-related behaviors was observed in Glasgow East. A syndemic model of joint effects, which includes a four-component latent variable (violence, substance dependence, psychiatric morbidity, and a diathesis of biological/behavioral risk), revealed synergy among components and clarified ongoing disparities in poor physical health and chronic health conditions. Effect modification was observed between the general syndemic factor and contextual variables at both individual and social environmental levels, depending on location. The research demonstrated that syndemic effects were validated through the synergistic interactions of psychiatric morbidity, substance misuse, violence, and biological/behavioral risks to physical health. A hypothetical model was developed to clarify the ways in which the syndemic poses potentially life-threatening risks for young men, both currently and as precursors to future physical health conditions that may shorten their lifespan.

Knowles et al. (2022) investigated whether estimated life expectancy (ELE) fluctuates over time and if these variation correlate with intra-individual variations in delinquency among 1,147 boys who had been arrested for the first time. A rapid cohort design yielded data for individuals aged 14 to 21. Projected life expectancy exhibited a linear progression, indicating that teenagers become increasingly optimistic regarding their longevity as they mature. Within individuals, gains in ELE correlated with reductions in offending, a pattern continuous throughout development. These findings indicate the efficacy of ELE as a focal point for intervention in mitigating juvenile crime.

Ultimately, Redelings, Lieb, & Sorvillo (2010) demonstrated that elevated homicide rates frequently align with diminished social cohesion within communities, and various elements of the social environment have been identified as precursors to homicide and violent crime. Seventy-five percent of the variation in the impact of homicide on life expectancy across neighborhoods can be anticipated by analyzing the levels of poverty within those neighborhoods. This highlighted the significance of tackling economic disparities as an integral component of homicide prevention initiatives. The authors posited that communities characterized by a robust social fabric have the potential to mitigate violent crime by fostering a sense of social organization and belonging among their members.

IV. CONCLUSION

The examined literature suggests a correlation between violent offending and victimization with increased mortality rates, as well as a heightened risk of death due to alcohol or drug-related causes or suicide. Consequently, the mitigation of violent behavior could potentially influence overall mortality and the incidence of suicide. The necessity for the prevention of alcohol and drug use is indeed justified.

The discovery indicates that governing bodies and health care systems might prioritize the prevention of violent behavior, potentially mitigating the risk of future suicides. Moreover, psychiatric patients who have experienced victimization exhibited a sevenfold increased risk of mortality compared to the general population, underscoring the significance of addressing violent victimization as a critical risk factor in clinical practice.

Furthermore, the findings highlight the profound influence of violence on both longevity and the disparities in lifespan. By concentrating on a definitive public health objective aimed at diminishing crime rates, the nation has the potential to enhance its overall longevity while simultaneously addressing disparities in lifespan. In order to mitigate the adverse consequences of criminal activities, it is imperative to implement innovative public health strategies. Another implication is to emphasize the significance of rehabilitating offenders. It can be contended that successful rehabilitation serves a dual purpose: it diminishes crime rates within society while simultaneously enhancing the well-being and longevity of offenders. This examination paves the way for subsequent significant inquiries and evaluations to elucidate the degree and trajectory of the relationship between life expectancy and crime through qualitative methodologies.

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