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HARM REDUCTION APPROACH FOR DRUG USERS: BENEFICIAL OR DETRIMENTAL TO PUBLIC SAFETY?

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Abstract:

This article delves into the question of whether harm reduction strategies for drug users, particularly Methadone Maintenance Therapy (MMT) programme and Needle and Syringe Exchange Programme (NSEP), are beneficial or detrimental to public safety. Two primary public concerns are examined: the proliferation of crime and the accumulation of syringes in public spaces. The theoretical rationale and empirical data from countries such as Malaysia, the United Kingdom, the United States, and Australia are significantly examined in the article. Despite the scepticism of many individuals, a comprehensive examination of global evidence demonstrates that harm-reduction strategies have the potential to reduce crime, rather than increase it. Research suggests that MMT participants exhibit significantly reduced criminal activity, particularly in the context of drug-related and property offences. Similarly, contrary to community concerns, research indicates that NSEPs with appropriate return policies do not accumulate abandoned needles in public areas; instead, they contribute to their reduction through user education and organised collection systems. These encouraging results are further supported by recent data from 2000–2025 studies conducted in Canada, Australia, Southeast Asia and others. The paper concludes that harm reduction policies have beneficial effects on public safety when implemented with adequate support and community engagement. The author recommends the inclusion of local stakeholders, the implementation of ongoing monitoring, and the development of context-specific modifications in conjunction with housing, employment, and mental health services. The article reveals the dearth of understanding regarding the impact of harm-reduction policies on communities and encourages further research in this area.

Keywords:

Criminal Justice, Drug Policies, Harm Reduction, Intervention, Public Health, Public Safety

Introduction

The harm reduction approach becomes a natural one, aimed at reducing the negative impacts of drug use. The public health community believes that persons who wish to take drugs may be able to mitigate the negative implications of their actions. To reduce drug-related risks, such as Human Immunodeficiency Virus (HIV) infection, the harm reduction approach employs a variety of measures, including the distribution of sanitised needles and syringes and the provision of methadone, a type of replacement medicine. The strategy's long history may be supported by opiate prescribing policies in the United Kingdom dating back to the 1920s. However, the notion was reintroduced in the mid-1980s as a result of the HIV/AIDS crisis. In the context of drug use, harm reduction strategies have quickly expanded across all continents. The notion of "Harm Reduction," developed by Russell Newcombe at the end of the 1980s, has played a significant role in the representation of drug use, drug users, and drug policy in general.

Against the backdrop of high HIV cases caused by drug users, governments in several countries, including the United Kingdom, the United States of America, France, India, China, Indonesia, and Malaysia, emphasised the harm reduction approach, notably the Methadone Maintenance Therapy Programme (hereinafter referred to as MMT) and the Needle and Syringe Exchange Programme (hereinafter referred to as NSEP), as critical interventions for limiting HIV spread among drug users. Notably, the MMT and the NSEP are intended to reduce HIV spread through syringe use by providing drug addicts with methadone replacement pills in liquid form as well as adequate sterile needle supplies. Methadone, taken as a syrup or a tablet, may alleviate withdrawal symptoms, block heroin and other opiate pleasurable effects, and maybe decrease opiate cravings, which lead to continued opiate use (Leventelis et al., 2025; Fareed et al., 2010). Adding more new syringes per injecting drug user over time, as well as increasing the amount of syringes evacuated from circulation through exchange practice, may alter the NSEP's syringe circulation patterns and timing.

With widely utilised approaches such as MMT and NSEP to lessen the negative health and social repercussions of drug use, the harm reduction strategy remains a cornerstone of current drug policy in many countries. Recent global trends, particularly after the COVID-19 pandemic, have highlighted the need for evidence-based harm reduction initiatives for public health, public safety, and social cohesion. However, there is still substantial debate, particularly whether the national government should approve the harm reduction approaches. Public safety, particularly concerns about increased crime and abandoned needles and syringes in public places, has been one of the areas of concern around the harm reduction approach in various nations, which may jeopardise its effectiveness.

Strategies for harm reduction for drug users face two main public safety-oriented criticisms. First, the perceived link between harm reduction strategies and criminal activity raises a basic worry among communities and politicians. Public anxiety that MMT and NSEP could allow ongoing drug use while neglecting related criminal activities helps to highlight this problem.

Recent studies by Wild et al. (2021) and Stuikeyte (2021) show that this viewpoint is still common in many different areas. Public resistance or stigma usually points to possible immoral, deviant behaviours and crime rising as a significant complaint. Researchers such as Carlon et al. (2025) voiced public worries related to possible rises in criminal activity near harm reduction facilities. Further, the possible spread of discarded injection needles in public areas poses a real public health risk that causes tremendous societal backlash. The study of Winter and Månsson (2024) found that needle disposal is still a significant cause of community opposition to harm reduction efforts, illustrating this issue in modern contexts. As examined in Johnson et al. (2022), a thorough study of worldwide drug policy methods, these concerns essentially pertain to more general inquiries about whether harm reduction is a good public health strategy, or unintentionally increases public safety concerns or goes against existing drug prohibition policies.

Therefore, this article will discuss whether harm reduction methods, including the MMT and NSEP, might contribute to such adverse outcomes. Specifically, it aims to analyse whether harm reduction approaches for drug users, specifically MMT and NSEP, contribute positively to public safety or generate unintended negative consequences such as increased crime and discarded needles in public spaces.

Methodology

This article uses a documentary analysis of harm reduction initiatives throughout Malaysia and other nations. The data sources are government reports, program evaluations, peer-reviewed studies from academic databases (PubMed, Scopus, Web of Science), and international health organisation publications (WHO, UNAIDS) published between 2000 and 2025. Excluding research with notable methodological flaws, selection criteria prioritised longitudinal studies, meta-analyses, and evaluations with rigorous techniques. The analytical process followed four sequential phases: (1) systematic document identification and retrieval using predefined search terms related to MMT, NSEP, crime, and public safety; (2) critical assessment of empirical evidence using a standardised quality evaluation matrix; (3) thematic categorisation of findings related to criminal activity and needle disposal patterns; and (4) comparative analysis of outcomes across various geographical and socio-cultural contexts. Particular emphasis was placed on differentiating program effects from confounding factors; triangulation of several data sources was employed to improve validity and dependability of findings.

Theoretical Frameworks

Several complementary theoretical frameworks providing analytical lenses for harm reduction strategies underpin this article. Emphasising practical health outcomes over abstinence-based values, Newcombe's Harm Reduction Theory (1987) offers the fundamental conceptual framework, distinguishing between drug-related harms at individual, community, and societal levels. Rhodes' Risk Environment Framework (2002) complements this view by placing drug use within physical, social, economic, and political contexts, either supporting or reducing possible consequences. Pawson's Realist Evaluation method (2005), which assesses "what works, for whom, in what circumstances," structures the analysis of evidence, allowing for nuanced evaluation of program efficacy across various geographical and socio-cultural settings. The Public Health vs. Criminal Justice paradigm tension (Marlatt, 1996) also highlights the historical and philosophical foundations of opposition to harm reduction projects, hence framing important stakeholder issues around crime and public safety. These approaches together help to thoroughly investigate how harm reduction policies interact with

public safety issues, advancing evidence-based evaluation of contextual results beyond simple dichotomies.

Public Concerns Relating to Increased Crimes and Discarded Needles

Worry about a Rise in Criminal Acts

The local community's concern over decreased crime due to the harm reduction plan has prompted them to doubt the services. According to Paul's report, medical doctor Musa Jantan, who works on Malaysia's MMT, the disturbance is caused by public perception of the programme's allowing of drug use, which drives criminal activity in the region (Paul, 2009). This scenario is also mentioned in the recent scholarly writings, including by Hayle (2025). This suggests that in certain countries, people are concerned about the potential consequences of a rise in crime. One plausible explanation is that the national media have consistently connected drug use to an increase in the incidence of public-place crime, such as theft and bag snatching. This leads to unfavourable sentiments toward drug users and cynicism about non-prohibition drug policy. Similar difficulties exist in other nations (Fameetha, 2024; Khazae-Pool et al., 2018; Koo et al., 2015).

From an evidence-based standpoint, the prediction of rising crime rates due to harm reduction measures is doubtful, given the lack of convincing supporting data. Some sceptics mention national crime statistics. EURAD (Europe against Drugs) (2013), for example, emphasises the crime rate in the UK in 2005/2006, when 178,502 drug-related offences were recorded, representing a 23 per cent increase from 2004/2005. Gyngell (2011) goes on to suggest that since 2007, the rate of drug-related offences has increased by 2.9 per cent and that each drug user in the UK commits an average of 2.6 crimes each year. There is no attempt to place the data in a statistical context, including evaluating factors that may impact the current data and the translation of data into rates. Therefore, this statistical information cannot substantially support the critics' allegation.

A few overseas studies have also produced results that give less support for the MMT's impact on crime reduction. For example, a research in London comparing self-reported crime among MMT clients and non-client drug users found no significant differences in the overall number of violent or acquisitive offences (Best et al., 2001). The study's authors assert that "our data offer yet another difficulty to the notion that there is a straightforward, mechanical link between [...] substitute prescribing and criminal desistance". Given that the researchers used self-report data, the claim that there is no association between the factors may be less plausible. A recent study by Kelly and colleagues (2020) indicated that the MMT in jail had no significant influence on further arrests within 12 months after release. According to reports, over 50 per cent of the 212 participants experienced rearrest occurrences. Nonetheless, the study's findings are less surprising given its small sample size (about 200), making it impossible to generalise the MMT's impact on crime decrease.

Contradictory statistics help to counteract the perception of increased crime. An overwhelming body of empirical evidence contradicts the premise. Norsiah and colleagues (2010) revealed that a minuscule number of Malaysian MMT participants committed drug-related offences after participating in the experiment. According to the study's authors, the programme reduces drug-related offences. Consistently, there are several further evaluation articles in Malaysia, such as those by Li et al. (2024), Ali et al. (2018) and Devi et al. (2012), that validate the assumption

that the MMT does not increase crime but instead reduces it. Other studies found no convincing evidence that the NSEP caused an increase in criminal behaviour (Ibrahim, 2008).

Malaysian research yields results that are consistent with global investigations. MMT in New South Wales, Australia, were investigated, and a correlation was discovered between the strategy and reduced criminal behaviour. The study used methadone prescriptions over the previous two years to generate a large and reasonably representative sample of 8,154 people. A 12-month MMT resulted in 12 fewer robberies, 57 fewer break-ins, and 56 fewer motor vehicle thefts per 100 persons (Lind et al., 2005). The Cochrane meta-analysis also found that the MMT had a decent, if non-significant, connection to crime reduction (Mattick et al., 2009). Other large-scale research and evaluations, such as Zhang and colleagues (2019), Havnes and others (2012), Trajanovska and Ivanovska (2024), and Amirzadeh-Gougheri and Manzari-Tavakoli (2025), reinforce the findings that the MMT reduces crime rates.

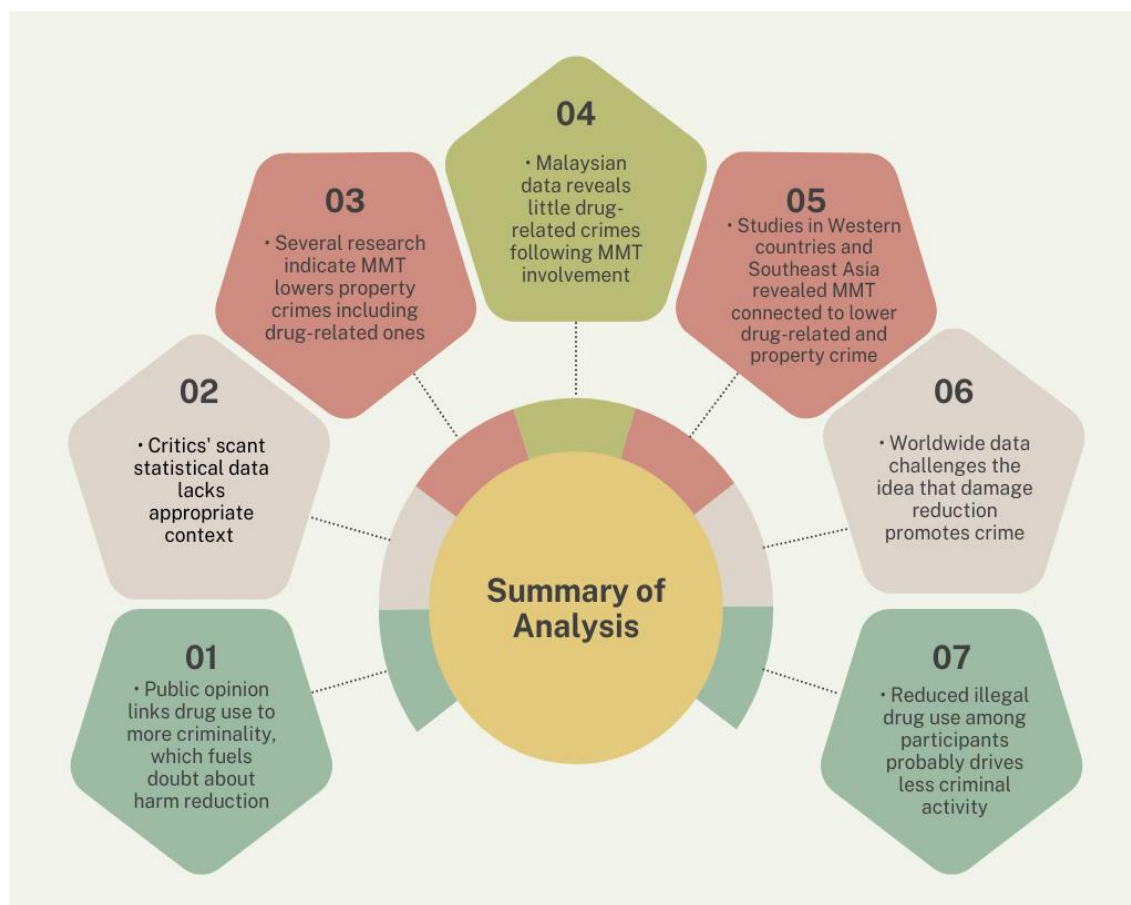
Furthermore, global research has demonstrated that NSEPs do not increase crime or violence, but rather reduce it. For example, research in Los Angeles, California, USA revealed no link between proximity to NSEP services and criminal activity (Stopka et al., 2014). Dolan and colleagues (2005) state that "there is no evidence to suggest that the NSEP increases crime or violence" after reviewing data from multiple studies. Harm reduction measures do not influence growing crime; instead, they affect its decrease.

Some people remain concerned that a harm reduction programme may result in public disorder or criminal activity. On the other hand, recent peer-reviewed research suggests that these therapies may help reduce crime rather than exacerbate it. A multi-site study in the United States (2023) found no link between NSEPs and growing local crime rates; instead, areas with established programme reported stable or decreased rates of drug-related and acquisitive crimes (Bonn et al., 2023). Furthermore, a detailed research of harm reduction programmes in Southeast Asia, encompassing Malaysia and Indonesia, discovered that MMT and NSEPs were linked to decreases in property and drug-related crime, with no evidence of increased public disturbance (Garcia et al., 2023). Furthermore, Dietze and colleagues' (2023) Australian cohort study found that expanding harm reduction programme did not raise violent or acquisitive crime rates in the surrounding districts. These findings disprove the notion that harm reduction jeopardises public safety, demonstrating that a well-integrated programme may stabilise communities and reduce the burden on law enforcement.

Harm reduction measures do not increase criminal activity. Hence, an MMT or an NSEP provides no evidence of a direct relationship. In contrast, the therapies had a considerable reduction in criminal activities. Empirical evidence suggests that most drug users who participate in harm reduction projects have significantly lower levels of criminal behaviour, particularly property and drug-related crime, than those who do not. This result is most likely driven by the efforts' success in lowering illicit drug usage. A staggering number of studies employing diverse research approaches have discovered a correlation between MMT attendance and decreased drug use. Wang and colleagues (2014), for example, revealed the impact of MMT in lowering drug usage in a long-term outcomes study with 2662 Chinese individuals. Furthermore, multiple studies, including one conducted by Kidorf and colleagues (2018), have shown that the NSEP can serve as a referral point to drug treatment and other harm reduction initiatives, therefore lowering drug usage. Drug users who use drugs less often are less likely to engage in drug trafficking and acquisitive crimes to sustain their drug use.

The following Figure 1 illustrates the summary of all the analyses presented above:

Figure 1: Summary of Analysis: Harm Reduction Programmes and Criminal Activity Outcomes



(Source: The authors' Analysis)

Concerns of an Increase in Discarded Needles

Furthermore, the public and law enforcement authorities will undoubtedly be concerned about the iatrogenic effect of more discarded needles and syringes near the programs' locations (Terry & John-Baptiste, 2016; Md Isa, 2015; Zorn, 2013). Many states find the issue of abandoned needles less problematic than increased crime. One plausible cause is that electronic or printed publications seldom document the incidents. Except in hidden settings such as abandoned structures, public spaces contain fewer spent needles and syringes. Nonetheless, the growing concern should not be underestimated since it might become a significant issue influencing public health activities, as it has in other nations (Livingstone, B., 2015; Norman, 1995). The argument over this issue has occasionally resulted in the closure of NSEPs. Broadhead and others recall the story of a NSEP operation in Windham, Connecticut, which was halted in 1997. The four-year NSEP service was terminated due to a district attorney-led campaign and public outcry after a toddler was stabbed with a discarded needle (Broadhead et al., 1999). In 2018, West Virginia, USA, reported that the initiative had ended due to public concerns (Davis et al., 2019).

More discarded needles raise the risk of inadvertent needle-stick injuries and blood-borne infections. However, without convincing proof, even greater fear lacks a strong foundation. Some attempt to validate the hypothesis with limited and mediocre empirical data, even though many critics provide no supporting evidence. Christian (2011) believes that because no decline has been observed, harm reduction strategies, including needle distribution, do not result in fewer discarded needles in Sydney. According to the Municipal Health Service, unintended needle-stick injuries increased after the NSEP began in Amsterdam. However, considering a possible reporting bias due to the public's increased awareness of blood-borne infections, this finding does not provide a reasonable rationale for the NSEP's negative impact (Verster, 1992).

The other counterargument is that the NSEP's one-for-one standards may theoretically remove injectable equipment from circulation, reducing the number of abandoned products. Proponents of a one-for-one NSEP, such as Abdala and others (1999) and Doherty et al. (1997), say that the number of returned needles will equal the number of prescription needles, preventing needle disposal. The NSEP's additional actions may also assist in mitigating the impact of abandoned injection items. Aside from providing injection tools, it also teaches correct disposal, collects old injection items, provides containers and disposal bins, and cleans up areas with unused syringes. These facts support the idea that the NSEP might help minimise the number of abandoned injection tools in public locations. Local reports stating that the agency has collected a large number of used needles lend credence to this claim. According to Malaysia's Ministry of Health, 61.6 per cent of the total distribution of 42,000 needle NEPs had been returned by the end of December 2006. The return rate rose to 64 per cent in 2011 and 70.4 per cent in 2017 (Malaysian AIDS Council, 2012; Sulaiman & Tze, 2019).

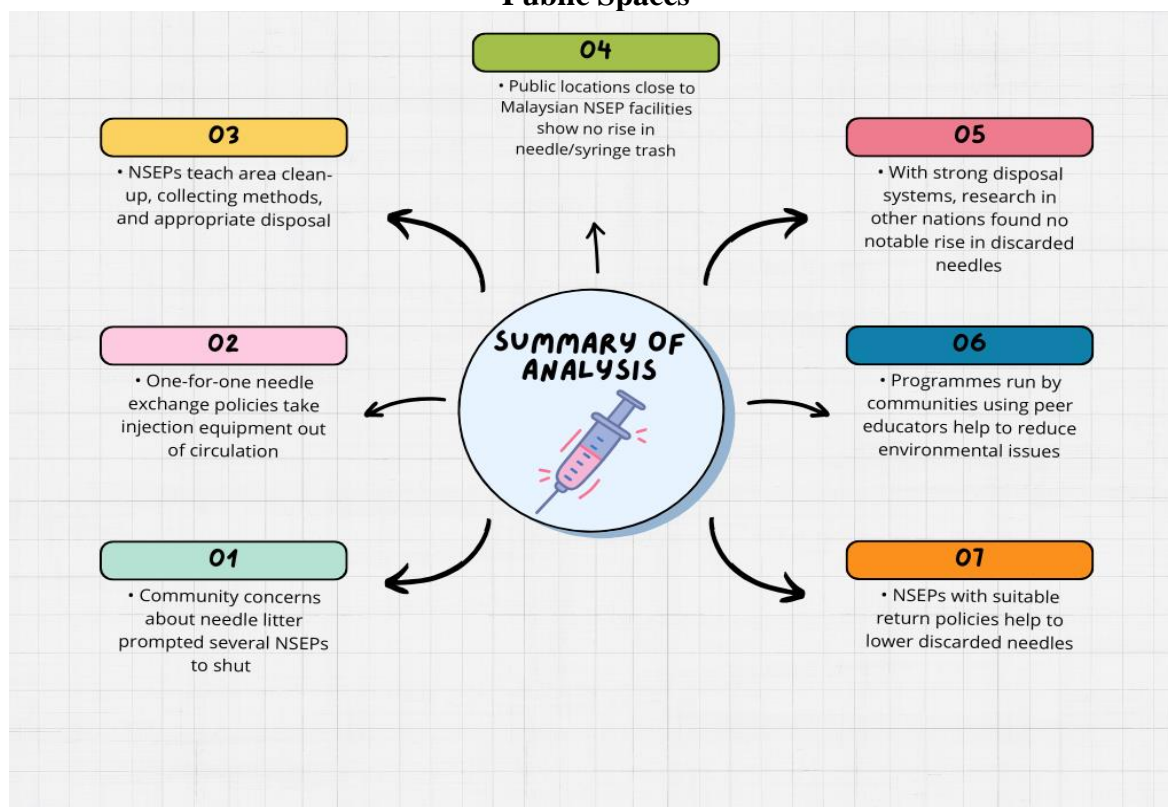
The theoretical explanation is supported by direct empirical data that there has been no rise in abandoned needles in public settings after the NSEP was implemented in numerous nations. The research findings on Malaysia's pilot NSEP show that the total return rate gradually increased, reaching nearly 60 per cent, and there was no increase in needle and syringe litter in public areas near service sites after the first year of operation (Ibrahim, 2008). This result is consistent with global research that demonstrates that the introduction of the NSEP reduces the quantity of needles and syringes discarded in the neighbourhood (Centres for Disease Control and Prevention, 2018; Ksobiech, 2004). Broadhead et al.'s (1999) study, which analysed local people's condemnations of the iatrogenic impacts of NSEP, which resulted in their termination in Windham, found that the adverse perceptions were unfounded. The discontinuation of NSEP did not result in a decrease in wasted needles and syringes. Research findings from Vancouver also point to a distinct relationship between the NSEP and safer syringe disposal (Wood et al., 2003). Given that the data contradicts the hypothesised greater discard, the prognosis for such an event is poor.

The basic issue is still public concern over abandoned needles. Recent research offers a more complicated perspective. In 2023, a Canadian study using geospatial data found no significant increase in inappropriately discarded needles in towns using NSEPS, provided that disposal facilities and community communication were robust (Marshall et al.). A review in the *International Journal of Drug Policy* showed that NSEPs, when paired with targeted education and disposal campaigns, significantly reduced the incidence of needle litter compared to areas without such programs (Bonn et al., 2022). Southeast Asian studies back this up, demonstrating that community-based harm reduction programmes that incorporate peer educators and local

engagement minimise environmental concerns while improving public safety perception (Garcia et al., 2023).

The following Figure 2 shows a summary of all the aforementioned analyses:

Figure 2: Summary of Analysis: NSEP Impact on Needle Disposal and Public Spaces



(Source: The authors' Analysis)

Conclusion

Harm reduction measures have not had unintentional negative consequences such as increased crime or needle litter. Ignoring substantial and persuasive facts invalidates the relevant concerns. The theoretical analysis and empirical data reveal that harm reduction efforts will likely produce the opposite consequence. The most current research supports the conclusion that harm reduction methods, such as MMT and NSEPs, do not increase needle pollution or crime in public places. In contrast, when implemented with enough assistance and community engagement, these initiatives have been connected to reduced drug-related harm, increased public safety, and improved social well-being. To improve public health and safety outcomes, policymakers should prioritise extending and integrating harm reduction initiatives that are well-evaluated and adaptive to local conditions.

Given the presence of strong supporting empirical data and persuasive exposition for negative study findings, a few discouraging research findings do not affect the positive impact of MMT and the NSEP on the reduction of criminal activity among drug users and discarded needles. As a result, the benefits of harm reduction strategies must be explicitly highlighted in policy

and legislative discussions (Md Isa, 2015). Recent investigations have highlighted a variety of practical concerns. Linking harm reduction programs to housing, employment, and mental health services improves their efficacy by boosting their positive effects. Stigma is best combated by open communication and involvement of residents, law enforcement, and drug user networks, as well as explicit engagement of locals. Adaptive management and public accountability rely on ongoing monitoring, which includes real-time data on environmental outcomes and crime rates. Every nation's MMT and NSEP must contain all of these measures. However, considering the significant disparities in public amenity indices between nations, including socio-cultural and drug usage practices, caution should be exercised when transferring data from one jurisdiction to another. This study discovered a scarcity of studies in many countries, particularly those analysing the inadvertent negative implications of harm reduction strategies on communities. Further investigations on the effects are required; appropriate solutions should be developed if they are discovered.

In summary, this article meets its aim of examining whether harm reduction policies (MMT and NSEP) help or hurt public safety. Through the study of theoretical rationales and actual data from several nations, it investigates the two main public worries—crime rates and discarded needles. The article synthesises research covering 2000-2025, offering a fair evaluation that responds to both critiques and supportive data. This paper offers numerous important contributions: By refuting misunderstandings with data, it closes a vital knowledge gap about the community influence of harm reduction. It offers data-driven rationale for including harm reduction into public health systems for legislators. The article emphasises the need for community involvement and complementary services—housing, job, mental health—for best results. Perhaps most importantly, this article shows that well-implemented harm reduction strategies not only handle public health issues but also actively improve public safety. This conclusion could change drug policy development all across Southeast Asia and beyond, so lowering stigma of evidence-based treatments.

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