



# Cross-country Comparison of Treatment Policies Facing the Drug Abuse in Five Selected Countries

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## Original Article

### Abstract

**Background:** Drug abuse is one of the main problems of human's life; thus communities have been thinking about the solution of this problem. The present study aimed to compare the general features of drug abuse treatment policies, war on drugs (WOD), and harm reduction (HR), in the selected countries.

**Methods:** The present study was a comparative and desk research that sought to compare context, stewardship, financing, type of substance abuse treatment services, reasons of paradigm shift, and executive challenges of treatment policies in the selected countries (China, Malaysia, Germany, Netherland, and Iran). The necessary data for comparison of the countries were collected through valid databases, review of documents, and reports of international organizations.

**Findings:** Context conditions were better in the HR countries. In most countries, the central government played a key role in the stewardship, financing, and service providing. In WOD countries, the presence of judicial structure was higher in the treatment of drug abuse. The policy-making approach was ideological in WOD countries, but evidence-based in HR countries.

**Conclusion:** It seems that performance of HR countries is better than WOD countries.

**Keywords:** Drug misuse; Harm reduction; Drug and Narcotic Control; Drug dependence; Needle-exchange programs

**Citation:** Mehrolhassani MH, Yazdi-Feyzabadi V, Hajebi A, Mirzaei S. **Cross-country Comparison of Treatment Policies Facing the Drug Abuse in Five Selected Countries.** *Addict Health* 2019; 11(2): 81-92.

Received: 28.11.2018

Accepted: 06.02.2019

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## Introduction

Drug abuse is considered as one of the fundamental problems of human's life. It is nearly one century that communities have been thinking about the solution of this problem widely and in a determined way. Due to spread diseases like the human immunodeficiency viruses (HIV) and hepatitis through injection, and also because of worries about harmful medical, social, legal, and health effect, drug abuse has been posed as a significant policy issue all over the world. The countries in response to this problem used different policies. One of the policies used for many years in the world to solve drug abuse problem is war on drugs (WOD).<sup>1</sup>

WOD is a policy used for the first time by American Federal Government aiming at drug's prohibition using military and police interventions to reduce manufacturing, illegal trade, and drug use. By WOD, intensity increased and United States pressured on United Nations (UN) to globalize WOD movement; the United Nations General Assembly introduced 1991 to 2000 as drug campaign decade. This movement culminated in United Nation General Assembly Special Session (UNGASS) in 1998 that United Nations committed itself to a drug free world by 2008.<sup>2,3</sup> During the years following this movement, most countries considered this policy in their agenda. Based on this policy, strict programs and actions such as imprisonment and death penalty were considered for buying, selling, and using drugs in the countries.<sup>4</sup> Many studies in the world were conducted about the results of this policy. The results showed that despite the expectations, strict approach did not have positive results about abuse and relapse reduction, and they also created some other problems.<sup>5</sup> On the other hand, the studies show that injection drug abuse contributes to infectious diseases transmitted like HIV significantly. Therefore, all these evidences result in highlighting another policy in drug abuse domain called harm reduction (HR).<sup>6</sup>

HR is a concept refers to interventions aiming at health behavior negative effects reduction without the necessity to put out the problematic health behavior completely or constantly.<sup>7</sup> HR emphasize the negative consequences rather than drug use as the aim of intervention.<sup>8</sup> HR strategies

include needle and syringe programs (NSP), supervised injection facility (SIF), overdose prevention policies, and opioid substitution treatment (OST). HR as an approach stands in opposition to the traditional medical model of addiction which considers drug use as a mistake and as a result illegal.<sup>7</sup> This policy has also some critics who believe this method causes people encouragement to use more drugs while the results of systematic studies show that such methods are cost-effective to prevent spread HIV and also increase people's access to medical and social services.<sup>7,9</sup> This caused many countries turning towards HR policy. However, some countries also continue WOD approach or move towards HR aiming at drug use reduction not negative consequences reduction due to many reasons including the criticism about HR policy.<sup>10</sup> Therefore, this study has been conducted aiming at comparing the general features of drug abuse treatment policies, WOD, and HR, in the selected countries.

## Methods

This study is a desk research done with cross-sectional method in order to identify information resources related to drug abuse treatment such as national and international documents, international databases, and scientific articles in 2019. Data collection tools were fish cards and data extraction form. We used fish cards to collect information from the published articles, reports, and documents.

Information extraction form designed based on World Health Organization (WHO) framework<sup>11</sup> to respond the research questions. To measure information extraction form's validity, expert panel was held. Comparative variables were countries' context features, some welfare remarkable rankings, stewardship of service providing, financing of provided services, type of treatment services, reasons of countries' paradigm shift, and executive challenges of policies. These variables were confirmed by the research team.

In this study, Iran was selected together with four other countries to compare drug abuse policies. The selection process is as follows:

To select and group the countries under study, report of HR in 2018<sup>12</sup> was used for selecting HR countries and the report of death penalty for drug offences in 2018<sup>13</sup> was used for selecting WOD countries which both were published by Harm

Reduction International. China and Malaysia were selected from the group of WOD that prohibitionist and punitive approaches to drugs for the study; these two countries are among the countries that have the highest rate of strict approach in drugs according to death penalty report. Germany and the Netherlands were also selected as countries with HR policy. The selection criterion of HR countries for the study was having at least one operating program of needle and syringe, one operating program of drug substitution and a drug consumption room, and the country's background in the field of HR. To compare the findings of selected countries with Iran, the data of this country was also examined.

The required data to compare the countries were collected through the credible databases like PubMed, Scopus, and Web of Science, and by reviewing the important documents and reports like the report of Harm Reduction International, International Drug Policy Consortium, WHO, Legatum report, human development statistical report 2018, and statistics time by using keywords such as HR, WOD, treatment policy, etc. 31 documents which had relevant information to aim of study, and were published after 2007 were selected.

Selection of related documents was done based on Jupp quadruple considerations including authenticity (being original and genuine), credibility (accuracy), representativeness (being representative of the totality of the documents in

their class), and meaning (what they say).<sup>14</sup>

### Results

The findings of context conditions (political, economic, and social) are compared in table 1. As shown, type of government in Germany, China, and Iran is republic while in Malaysia and the Netherlands, it is constitutional monarchy.<sup>15</sup> Among the examined countries, the best rank of governance belonged to Germany and after that, Malaysia, China, and Iran, respectively.<sup>16</sup> China had the highest gross domestic product (GDP) rank and Iran had the lowest.<sup>17</sup> In terms of economic rank, Germany and the Netherlands had better status than other countries.<sup>16</sup> In terms of income indicator, Germany and the Netherlands were among the countries with high income, and the others had the upper-middle rank.<sup>17</sup> The highest total health expenditure (THE) per capita belonged to HR countries.<sup>18</sup> The most populated countries were China, Germany, Iran, Malaysia, and the Netherlands, respectively.<sup>18</sup> In terms of the human development index (HDI)<sup>19</sup> and health ranking<sup>16</sup>, HR countries had better status than WOD countries. In terms of the drug-related deaths, WOD countries had worse status than HR countries.<sup>16</sup> Among WOD countries, Iran had the worst status in terms of this index.<sup>16,19-21</sup> Opioid in China and Iran, cocaine in Germany, tranquilizers and sedatives in the Netherlands, and amphetamine-type stimulants (ATS) in Malaysia were drugs as primary cause of death.<sup>20</sup>

**Table 1.** Comparison of contextual properties of studied countries

Context	Country	HR			WOD	
		Germany	The Netherlands	China	Malaysia	Iran
Governance	Type of government	Republic	Constitutional monarchy	Republic	Constitutional monarchy	Islamic republic
Economy	Governance ranking (2018)	5	10	118	47	126
	GDP ranking (2018)	4	18	2	29	43
	THE per capita (Intl \$) (2019)	5182	5202	731	1040	1082
	Economic ranking (2018)	11	6	27	22	94
	GNI per capita (2019)	High income	High income	Upper-middle	Upper-middle	Upper-middle
Social	Population (million) (2019)	81	16	1411	31	80
	Life expectancy (year) (2019)	83/79	83/80	78/75	78/73	77/75
	HDI ranking (2018)	4	10	86	57	61
	health ranking (2018)	24	11	54	38	62
	Drug-related deaths per million population aged 15-64 years	22.82 (2014)	11.1 (2015)	25.85 (2016)	24.28 (2016)	55.88 (2016)
	Ranking of drugs as primary cause of death	Cocaine	Tranquilizers and sedatives	Opioids	ATS	Opioids

GDP: Gross domestic product; THE: Total health expenditure; GNI: Gross national income; HDI: Human development index; WOD: War on drugs; HR: Harm reduction; ATS: Amphetamine-type stimulants

The structure of drug abuse treatment service providing is shown in table 2. Stewardship of service providing in Malaysia<sup>22</sup> and Iran<sup>23</sup> was by central government, in the Netherlands<sup>24</sup> and China<sup>25</sup> was by local officials, and in Germany by a combination of both.<sup>26</sup> All examined countries used public budget for financing.<sup>10,24,26,27</sup> In Germany,<sup>26</sup> China,<sup>28</sup> and Iran,<sup>29</sup> the private sector was responsible for financing besides the public budget. Only in Germany<sup>26</sup> and the Netherlands,<sup>24</sup> social insurances participated in these services' financing. In China<sup>30</sup> and Malaysia,<sup>31</sup> donors were responsible for part of the financing and finally, in Germany<sup>9</sup> and Iran,<sup>29</sup> non-governmental organizations (NGOs) contributed to these services' financing.

In service providing, the private and public sectors contributed significantly in all countries<sup>10,26,31-33</sup> while in Malaysia,<sup>34</sup> the private sector did not participate in this domain. In the Netherlands, municipalities contributed to this domain significantly.<sup>33</sup> Germany<sup>26</sup> and Malaysia<sup>34</sup> used general practitioner structure to provide services while in the Netherlands,<sup>33</sup> China,<sup>10</sup> Malaysia<sup>34</sup> and Iran,<sup>32</sup> police and judicial structure contributed to treatment. Germany,<sup>26</sup> the Netherlands,<sup>33</sup> China<sup>10</sup> and Iran<sup>32</sup> used psychiatrists to provide services. China was the only country which did not provide HR services in prisons.<sup>10</sup> Germany<sup>26</sup> and the Netherlands<sup>33</sup> used the help of charities for service providing. All countries except for the Netherlands<sup>33</sup> used the NGOs for service providing.<sup>10,26,32,34</sup>

The general features of drug abuse treatment policy and the reasons of paradigm shift from WOD to HR are shown in table 3. Policy making in drug abuse domain in Germany<sup>26</sup> and the Netherlands<sup>33</sup> was mostly evidence-based while in China<sup>35</sup> and Malaysia,<sup>36</sup> it was mostly ideological approach-based.<sup>10,22,27,28</sup> However, in Iran, it was affected by both approaches.<sup>37</sup> Treatment approach in Germany<sup>38</sup> and the Netherlands<sup>24</sup> emphasized more on medical and psychological treatments while in Malaysia<sup>22</sup> and Iran,<sup>37</sup> medical and psychological treatments would be complemented by religious treatment. In China, the treatment approach was just medical.<sup>35</sup> The general viewpoint of this domain's policies in Germany<sup>39</sup> and the Netherlands<sup>33</sup> was more based on community health promotion emphasizing personal responsibility while in China,<sup>27</sup> Malaysia<sup>27</sup> and Iran,<sup>32</sup> despite regarding

community health promotion, free drug society viewpoint was dominant on this domain's policies and therefore, more emphasis on law enforcement and punishing approaches was observed.

The reasons for paradigm shift from WOD to HR in China,<sup>10</sup> Malaysia,<sup>40</sup> and Iran<sup>41</sup> included HIV prevalence increase through drug injection pattern, international pressures, and no efficiency of prohibition approach. Besides these cases, in Malaysia<sup>22</sup> and Iran,<sup>41</sup> religious groups' supported of HR approach, and also medical specialist support of this approach was effective in Iran.<sup>41</sup> However, in Germany<sup>39</sup> and the Netherlands,<sup>42</sup> drug-related deaths, HR success and medical specialist support of HR were effective in this paradigm shift.

The challenges of HR in the selected countries are shown in table 4. One of the challenges of HR domain in Germany<sup>39</sup> and the Netherlands<sup>42</sup> was the limitation of providing HR services in prisons in a way that although these countries had HR services, they were not provided in all prisons of these countries. Moreover, in Germany, service providing in different cities was not the same and in big cities, more complete services were provided.<sup>26</sup> In addition, stimulant drug use increase was one of the challenges in Germany<sup>26</sup> and Malaysia.<sup>34</sup> In the Netherlands<sup>33</sup> and China,<sup>30</sup> one of the challenges was lack of financial resources. In China,<sup>30</sup> Malaysia,<sup>36</sup> and Iran,<sup>41</sup> insurance structures did not support much of treatment, and addiction was posed as a stigma in these countries. Lack of medical trained specialists and HR limitations, low effectiveness, and low quality treatment were the challenges in Malaysia<sup>36</sup> and China.<sup>30</sup> In China, little psychological and social treatment services were provided<sup>30</sup> and in Iran, it was also limited.<sup>41</sup>

Different types of drug abuse treatment services are shown in table 5. OST and NSP were executed in all examined countries.<sup>10,24,26,34,37</sup> SIF, naloxone programs, and heroin-assisted treatment (HAT) were executed in HR countries.<sup>43</sup> In Germany, abstinence-based treatment with psychosocial counselling and detoxification were provided in addition to aforementioned services.<sup>26</sup> In addition to Germany, detoxification was executed in all WOD countries.<sup>10,31,41</sup> In China, voluntary treatments, community-based treatment, compulsory isolated treatment, and community-based rehabilitation were provided.

**Table 2.** The structure of substance abuse treatment service providing in studied countries

Country	Stewardship		Financing					Service providing									
	Central government	Local official	Public budget	Private sector	Social insurance	Donors	NGO	Public sector	Private sector	Municipality	General practitioner	Police	Judicial official	Psychiatrists	Prison	Charities	NGO
Germany	*	*	*	*			*		*	*	*		*	*	*	*	*
The Netherlands		*	*	*		*		*	*	*			*		*	*	
China	*			*	*	*			*	*		*		*	*	*	
Malaysia	*		*			*	*			*		*			*		*
Iran	*		*	*		*			*	*	*		*	*	*		*

NGO: Non-governmental organization

**Table 3.** General features of drug abuse treatment policies and the reasons of countries' paradigm shift

Country approach	Country	General features of policies							Reasons of countries' paradigm shift									
		Policy making		Treatment approach			Focus on		General approach		Increase of HIV prevalence	Increase of drug-related deaths	Ineffectiveness of the prohibition approach	Inappropriate conditions of drugs abusers	Success of the harm reduction approach	International pressure	Religious groups support from Harm Reduction	Specialist groups support from Harm Reduction
		Ideological	Evidence-based	Medical treatment	Psychological treatments	Religious treatment	Individual responsibility	Law enforcement, compulsory, punishment, and stigma	Community health promotion	Free drugs society								
HR	Germany		**	**	**		**		**		*	*	*	**			*	
	The Netherlands		**	**	**		**		**	*	*		**				*	
WOD	China	**		*				**	*	**	**	*			**			
	Malaysia	**		*	*	**		**	*	**	**	*		**	*			
	Iran	*	*	**	*	*	*	*	*	*	*	*		**	*	*	*	

\*Usual, \*\*Intensive

HIV: Human immunodeficiency viruses; WOD: War on drugs; HR: Harm reduction

**Table 4.** Executive challenges of policies

Country	Little psychological and social treatment services	HR limitations, low effectiveness, and low quality treatment	Lack of financial resources	Lack of medical trained specialists	Drug abuse as a stigma	Different coverage of services	Lack of insurance support	Limitation of providing HR services in prisons	Stimulant drug use increase	Low access to HAT
Germany						*		*	*	
The Netherlands			*					*		*
China	*	*	*	*	*		*			
Malaysia		*		*	*		*		*	
Iran	*				*		*			

HR: Harm reduction; HAT: Heroin-assisted treatment

**Table 5.** Types of substance abuse treatment services providing

Country	NSP	OST	SIF	NA	Cure and Care	TC	Naloxone programs	Detoxification	Abstinence-based treatment with psychosocial counselling	HAT	Voluntary treatment	Community-based treatment	Compulsory isolated treatment	Community-based rehabilitation	Psychological and social treatments	Outpatient and inpatient treatment centers	Middle-term accommodation center	Peer group self-help accommodation center
Germany	*	*	*				*	*	*	*								
The Netherlands	*	*	*				*			*								
China	*	*					*				*	*	*	*				
Malaysia	*	*		*	*		*								*			
Iran	*	*		*		*	*									*	*	*

NSP: Needle and syringe program; OST: Opioid substitution treatment; SIF: Supervised injection facility; NA: Narcotics anonymous; HAT: Heroin-assisted treatment; TC: Therapeutic community

Voluntary treatment was recognized for the first time as part of drug national policy with the passing of the 2008 Anti-Drug Law. People participating in voluntary treatment were protected against arresting by police. Community-based treatment tried to lead a wide range of social resources towards returning drug-dependent people to the community without stigma, suffering from imprisonment, and or social deprivation. Community-based treatment could be applied for any people arrested for drug use and not registered in voluntary treatment. Those failed in community-based treatment or did not tend to receive this treatment or use drug during or after community-based treatment entered compulsory isolated treatment (CIT) by police. After freedom from CIT, the person had to tolerate three years of community-based rehabilitation (CBR) by force. CBR was almost equal to CBT; the difference was that it was compulsory and included consulting skills. If a person disobeyed the CBR laws, she/he might be brought back to CIT.<sup>10</sup>

In Malaysia<sup>34</sup> and Iran,<sup>32</sup> narcotics anonymous (NA) were provided. In addition, in Malaysia, cure and care and social-psychological interventions were also provided. For many years, those with positive drug test in Malaysia were arrested and sent to compulsory drug detention centers (CDDCs) for a compulsory period of two years without legal record and against their personal tendency. CDDC compulsory treatment methods due to reasons such as unlimited arrest and the outbreak of substance use disorders (SUD) among prisoners were criticized. Finally, in 2010, several CDDCs were changed into cure and care centers by the government providing drug comprehensive and voluntary treatment services. The new method concentrated on medical, psychological, and clinical treatments.<sup>34</sup> In Iran, in addition to aforementioned treatment methods, outpatient treatment centers (providing medical and non-medical treatment services for drug users) and hospitalization (providing detoxification and relapse prevention services and non-medical treatments while hospitalized), middle-term accommodation center [voluntary and middle-term (1 to 3 months) accommodation center], and peer group self-help accommodation center (voluntary and middle-term accommodation center based on the approach of

detoxification and recovered addicted participation) were also provided.<sup>44</sup>

## Discussion

According to the study findings, countries with better political, economic, and social status follow HR policy more. Based on the ranking of WHO health systems, the Netherlands and Germany in comparison with China, Malaysia, and Iran have better performance and better ranks.<sup>45</sup> Moreover, the study by Lievens et al. shows that Germany is one of the countries that have the highest rate of hospital costs for drug abuse treatment.<sup>38</sup> The findings also show that the rate of drug-related deaths in Germany and the Netherlands is less than the other countries, and this shows the success of these countries in drug abuse management.<sup>39</sup>

In drug abuse treatment services stewardship in HR countries, the local officials contribute while in WOD countries, central government is responsible for it, and this can be due to governmental structure of these countries. In the Netherlands, regarding decentralized governmental structure, the local officials have the stewardship of these services<sup>46</sup> while in Malaysia and Iran, regarding concentrated governmental structure, central government is responsible for this stewardship.<sup>47</sup> In Germany, that has also concentrated governmental structure, both the central government and local officials have the stewardship to improve service providing.<sup>46</sup> In China, despite concentrated governmental structure, the local officials are responsible for this stewardship, and this can be due to the high population of the country and the difficulty of policy making concentration on this domain, and also no complete support of HR policies by the central government.<sup>25</sup>

In the countries with HR strategy, one of financing methods to provide such services are health social insurances while in the countries with WOD strategy, regarding having no priority for such programs, health social insurances have no active roles. It has been demonstrated by the study by Ebrahimi that one of the challenges and problems of drug abuse treatment program in Iran is no insurance coverage for these services.<sup>41</sup> But it should be remembered that the countries under study in the group of HR countries have

suitable economic status that can be due to insurance coverage of these services in these countries; on the other hand, one of drug abuse treatment financing methods in China and Malaysia is donors; this can be due to low THE per capita rate and weak economic status of WOD countries.<sup>18</sup>

In WOD countries, one of the structures that has active role in drug-dependence treatment is police and judicial structure while in Germany and the Netherlands, these structures are not generally used in treatment. This can be due to the basic way of thinking in these countries that the dominant philosophy and viewpoint is based on consumption avoidance because drug use is considered as a moral deviation; therefore, judicial structure makes part of the treatment. For instance, in China, the responsibility of evaluating person's dependency on drug is by police instead of a clinical specialist, and this can lead to inefficient treatment.<sup>10</sup> On the other hand, the criminality viewpoint and police actions can cause human rights violation.<sup>34,48</sup>

In all studied countries, one important substance abuse treatment services providing is NGOs that shows governments' interest in using community capacities. Regarding the paradigm shift from WOD to harm reducing, the role of NGOs seems to be more highlighted.<sup>31</sup>

The countries are different in the types of substance abuse treatment services providing in a way that in HR countries, services like SIF, naloxone programs, and HAT are provided while in WOD countries, despite evidence of effectiveness,<sup>43,49</sup> there is no such services, and this can be due to having no infrastructure and political resistances<sup>21</sup> and also zero tolerance approach in these countries.<sup>40</sup>

In WOD countries, HIV outbreak increase, international pressures, and no efficiency of prohibition approach are the most important reasons of paradigm shift to HR in these countries. However, the general viewpoint of these countries is drug abuse eradication and having a community without drug. So policy making in these countries is ideological-based, and emphasizes medical treatment. Drug use is a stigma, and the policy approach is prohibition. These countries were not only unsuccessful in reducing the number of addicted people,<sup>50</sup> but also according to global studies, law enforcement

regarding drug use in these countries can result in increased violence, opportunity cost, and number of prisoners.<sup>43</sup> However, in HR countries, the most important reasons of paradigm shift have been HR success and increasing drug-related deaths. The general viewpoint is community health promotion. Therefore, addiction is not posed as a stigma. For instance, the Netherlands is one of the countries that impose little sanctions for drug possession for personal use.<sup>51</sup> In these countries, policy making is evidence-based, and pays attention to both medical and psychological treatments. Generally, in Germany and the Netherlands, the policy concentration is more on treatment and rehabilitation while in China and Malaysia, despite applying HR methods, the emphasis is still on consumption avoidance and full withdrawal.<sup>27</sup>

HR limitation and low quality treatment is one of the challenges in WOD countries. In China, the threats to arrest drug users,<sup>35</sup> weak coverage, and low quality of methadone maintenance treatment (MMT) services, lack of financial and human resources of MMT program,<sup>45</sup> compulsory treatment,<sup>52,53</sup> stigma, accidental inspections by police, and little psychological treatment<sup>10</sup> are some reasons to low effectiveness of HR. HR limitations in Malaysia are also due to aiming at drugless community,<sup>54</sup> emphasis on full withdrawal, lack of medical trained specialists,<sup>40</sup> and believing firmly in consumption avoidance in Muslim community,<sup>54</sup> and in Iran, more emphasis on punishment-oriented and consumption avoidance,<sup>23</sup> stewardship delegation to many ministries (health and welfare),<sup>41</sup> little paying attention to social-psychological treatments, pure medical attitude towards addiction treatment, no comprehensive assessment of treatment outcomes, lack of insurance support of treatment,<sup>37</sup> and lack of social supports after treatment<sup>41</sup> are some reasons to low effectiveness and low quality treatment. Generally, in WOD countries because of ideological viewpoint, they emphasize more on consumption avoidance and punishment-oriented viewpoint about drug users. The study conducted by Chu and Sung also shows that counselors' perceptions of faith-based try more to use religious models in treatment interventions while secular consultants use disease model.<sup>55</sup>

## Conclusion

According to the present study that compared



drug abuse treatment policies in the selected countries, the context of HR countries had a better status than other countries. In terms of stewardship and financing, HR countries had more tendency to decentralization. International pressures seemed to be important reasons for the paradigm shift in WOD countries where the HR services were provided with a drug abuse eradication approach. However, the evidence-based effectiveness of this approach was the reason for the paradigm shift in HR countries.

According to the findings, Iran has no desirable condition in context conditions among the countries, and it is more like WOD countries. Furthermore, it has unfavorable conditions in drug abuse disorders. Despite taking steps toward the HR approach, Iran's policymaking, stewardship, and services providing are similar to WOD countries.

According to the UN Convention on Narcotic

Drugs, which considers the human health and well-being protection as the main goals of policymaking in this field, as well as the fewer drug-related deaths in HR countries and based on other findings, it seems that the performance of HR countries is better than WOD countries. It seems to achieve better health condition and more effectiveness in this area, different countries including Iran require to apply evidence-based policy making.

### Conflict of Interests

The Authors have no conflict of interest.

### Acknowledgements

This study was extracted from a PhD thesis by Saeid Mirzaei and was supported by a grant (No. 97-5) from Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran.

### References

1. Throckmorton DC, Gottlieb S, Woodcock J. The FDA and the next wave of drug abuse - proactive pharmacovigilance. *N Engl J Med* 2018; 379(3): 205-7.
2. Coyne CJ, Hall AR. Four decades and counting: The continued failure of the war on drugs. *Policy Analysis* 2017; 811. [Online]. [cited 2017 Apr 12]; Available from: URL: <https://www.cato.org/publications/policy-analysis/four-decades-counting-continued-failure-war-drugs>
3. Cohen PT. Symbolic dimensions of the anti-opium campaign in Laos. *Aust J Anthropol* 2013; 24(2): 177-92.
4. Des Jarlais DC. Harm reduction in the USA: the research perspective and an archive to David Purchase. *Harm Reduct J* 2017; 14(1): 51.
5. Daosodsai P, Bellis MA, Hughes K, Hughes S, Daosodsai S, Syed Q. Thai war on drugs: Measuring changes in methamphetamine and other substance use by school students through matched cross sectional surveys. *Addict Behav* 2007; 32(8): 1733-9.
6. Go JR. Of choices, changes, and challenges: The Philippines in 2016. *Philipp Polit Sci J* 2017; 38(1): 48-73.
7. Hawk M, Coulter RWS, Egan JE, Fisk S, Reuel FM, Tula M, et al. Harm reduction principles for healthcare settings. *Harm Reduct J* 2017; 14(1): 70.
8. Ball AL. HIV, injecting drug use and harm reduction: A public health response. *Addiction* 2007; 102(5): 684-90.
9. Cook C, Bridge J, Stimson GV. The diffusion of harm reduction in Europe and beyond. In: Rhodes T, Hedrich D, editors. *Monographs 10: Harm reduction: Evidence, impacts and challenges*. 2010. Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction; P. 37-58.
10. Tibke P. Drug dependence treatment in China: A policy analysis [Online]. [cited 2017 Feb]; Available from: URL: [http://fileserver.idpc.net/library/IDPC-briefing-paper\\_China-drug-treatment.pdf](http://fileserver.idpc.net/library/IDPC-briefing-paper_China-drug-treatment.pdf)
11. World Health Organization. *The world health report 2000: Health systems: Improving performance*. Geneva, Switzerland: WHO; 2000.
12. Stone K, Shirley-Beavan S. *Global state of harm reduction 2018* [Online]. [cited 2018]; Available from: URL: <https://www.hri.global/global-state-harm-reduction-2018>
13. Sander G. *The Death Penalty for Drug Offences: Global Overview 2017* [Online]. [cited 2018 Mar]; Available from: URL: <https://www.hri.global/files/2018/11/13/HRI-Death-Penalty-Report-2018-v2.pdf>
14. Sapsford R, Jupp V. *Data collection and analysis*. Thousand Oaks, CA: SAGE Publications; 2006.
15. CIA World Factbooks. *Countries Compared by Government > Government type* [Online]. [cited 2019]; Available from: URL: <https://www.nationmaster.com/country-info/stats/Government/Government-type>
16. Legatum Institute Foundation. *The Legatum Prosperity Index™ 2018: Creating the Pathways from Poverty to Prosperity* [Online]. [cited 2018]; Available from: URL:

- <https://www.prosperity.com/rankings>
17. The World Bank Group. Countries and Economies [Online]. [cited 2019]; Available from: URL: <https://data.worldbank.org/country>
  18. World Health Organization. Countries [Online]. [cited 2019]; Available from: URL: <https://www.who.int/countries/en/>
  19. United Nations Development Programme. Human Development Reports [Online]. [cited 2018]; Available from: URL: <http://hdr.undp.org/en/2018-update/download>
  20. United Nations Office on Drugs and Crime. World Drug Report 2018 [Online]. [cited 2018]; Available from: URL: <https://www.unodc.org/wdr2018/>
  21. Ritchie H. Substance Use - Our World in Data [Online]. [cited 2018]; Available from: URL: <https://ourworldindata.org/substance-use>
  22. Seghatoleslam T, Habil H, Hatim A, Rashid R, Ardakan A, Esmaili MF. Achieving a spiritual therapy standard for drug dependency in Malaysia, from an Islamic Perspective: brief review article. *Iran J Public Health* 2015; 44(1): 22-7.
  23. Rahimipoor I, Habibzadeh MJ, Mohaghegh Damad M, Farajihha M, Omidi J. A comparative study of Iran legislative policy with Portugal and Canada. *Comparative Law Researches* 2016; 20(3): 84-110. [In Persian].
  24. Schatz E. The Dutch Treatment and Social Support System for Drug Users: Recent Developments and the Example of Amsterdam [Online]. [cited 2011 Aug 15]; Available from: URL: <https://ssrn.com/abstract=1908913>
  25. Li J, Ha TH, Zhang C, Liu H. The Chinese government's response to drug use and HIV/AIDS: A review of policies and programs. *Harm Reduct J* 2010; 7: 4.
  26. European Monitoring Centre for Drugs and Drug Addiction. Germany, Country Drug Report 2017 [Online]. [cited 2017 Jun]; Available from: URL: [http://www.emcdda.europa.eu/publications/country-drug-reports/2017/germany\\_en](http://www.emcdda.europa.eu/publications/country-drug-reports/2017/germany_en)
  27. Kanato M, Leyatikul P, Choomwattana C. ASEAN drug Monitoring Report 2016 [Online]. [cited 2017 Nov 15]; Available from: URL: <https://asean.org/wp-content/uploads/2016/10/Doc6-ADM-Report-2016-as-of-15-November-2017-FINAL.pdf>
  28. Lu L, Fang Y, Wang X. Drug abuse in China: Past, present and future. *Cell Mol Neurobiol* 2008; 28(4): 479-90.
  29. Mojtahedzadeh V, Razani N, Malekinejad M, Vazirian M, Shoaee S, Saberi Zafarghandi MB, et al. Injection drug use in rural Iran: Integrating HIV prevention into Iran's rural primary health care system. *AIDS Behav* 2008; 12(4 Suppl): S7-S12.
  30. Yang M, Zhou L, Hao W, Xiao SY. Drug policy in China: Progress and challenges. *Lancet* 2014; 383(9916): 509.
  31. Vicknasingam B, Mazlan M. Malaysian drug treatment policy: An evolution from total abstinence to harm reduction. *Malaysian Anti-Drugs Journal* 2008; 107-21
  32. Alam-Mehrjerdi Z, Abdollahi M, Higgs P, Dolan K. Drug use treatment and harm reduction programs in Iran: A unique model of health in the most populated Persian Gulf country. *Asian J Psychiatr* 2015; 16: 78-83.
  33. European Monitoring Centre for Drugs and Drug Addiction. Netherlands: Country Drug Report 2018 [Online]. [cited 2018]; Available from: URL: [http://www.emcdda.europa.eu/countries/drug-reports/2018/netherlands\\_en](http://www.emcdda.europa.eu/countries/drug-reports/2018/netherlands_en)
  34. Krishnan A, Brown SE, Ghani MA, Khan F, Kamarulzaman A, Altice FL. Pretreatment drug use characteristics and experiences among patients in a voluntary substance abuse treatment center in Malaysia: A mixed-methods approach. *Subst Abuse* 2016; 37(4): 542-9.
  35. Meng J, Burris S. The role of the Chinese police in methadone maintenance therapy: A literature review. *Int J Drug Policy* 2013; 24(6): e25-e34.
  36. Lunze K, Lernet O, Andreeva V, Hariga F. Compulsory treatment of drug use in Southeast Asian countries. *Int J Drug Policy* 2018; 59: 10-5.
  37. Nikpour G. Drugs and drug policy in the Islamic Republic of Iran. *Middle East Briefs* 2019; 119: 2-7.
  38. Lievens D, Vander LF, Christiaens J. Public spending for illegal drug and alcohol treatment in hospitals: An EU cross-country comparison. *Subst Abuse Treat Prev Policy* 2014; 9: 26.
  39. Michels II, Stover H. Harm reduction--from a conceptual framework to practical experience: the example of Germany. *Subst Use Misuse* 2012; 47(8-9): 910-22.
  40. Kamarulzaman A, Mcbrayer J. Compulsory detention as drug treatment and the impact on HIV outcomes. Proceedings of UNODC Scientific Event Science Addressing Drugs and Health: State of the Art; 2014 Mar 11; Vienna, Austria.
  41. Ebrahimi S. Evaluation of the Coping Policies of the Islamic Republic of Iran in Combating Drugs and Reducing Addiction. Tehran, Iran: University of Tehran; 2007. [In Persian].
  42. Norden L, van Veen M, Lidman C, Todorov I, Guarita B, Kretzschmar M, et al. Hepatitis C among injecting drug users is two times higher in Stockholm, Sweden than in Rotterdam, the Netherlands. *Subst Use Misuse* 2013; 48(14): 1469-74.
  43. International Drug Policy Consortium. IDPC Drug Policy Guide. 3<sup>rd</sup> ed. London, UK: IDPC; 2016
  44. Iran Drug Control Headquarters. Legislation for drug

- treatment and harm reduction centers [Online]. [cited 2010]; Available from: URL: <http://qavanin.ir/Law/TreeText/202008>
45. World Health Organization. World Health Organization's Ranking of the World's Health Systems. Geneva, Switzerland: WHO; 2000
46. Euchner EM, Heichel S, Nebel K, Raschzok A. From 'morality' policy to 'normal' policy: Framing of drug consumption and gambling in Germany and the Netherlands and their regulatory consequences. *J Eur Public Policy* 2013; 20(3): 372-89.
47. Lake I. The 10<sup>th</sup> Asian Informal Drug Policy Dialogue [Online]. [cited 2019 May 2]; Available from URL: <https://www.tni.org/en/publication/the-10th-asian-informal-drug-policy-dialogue>
48. United Nations. JOINT Statement Compulsory Drug Detention and Rehabilitation Centre [Online]. [cited 2012 Mar]; Available from: URL: [https://www.who.int/hhr/JC2310\\_joint\\_statement\\_20120306final\\_en.pdf?ua=1](https://www.who.int/hhr/JC2310_joint_statement_20120306final_en.pdf?ua=1)
49. Strang J, Metrebian N, Lintzeris N, Potts L, Carnwath T, Mayet S, et al. Supervised injectable heroin or injectable methadone versus optimised oral methadone as treatment for chronic heroin addicts in England after persistent failure in orthodox treatment (RIOTT): A randomised trial. *Lancet* 2010; 375(9729): 1885-95.
50. United Nations Office on Drugs and Crime. World Drug Report 2015 [Online]. [cited 2015]; Available from: URL: <https://www.unodc.org/wdr2015/>
51. European Monitoring Centre for Drugs and Drug Addiction. 2011 Annual report on the state of the drugs problem in Europe [Online]. [cited 2011 Nov]; Available from: URL: [http://www.emcdda.europa.eu/publications/annual-report/2011\\_en](http://www.emcdda.europa.eu/publications/annual-report/2011_en)
52. Degenhardt L, Mathers BM, Wirtz AL, Wolfe D, Kamarulzaman A, Carrieri MP, et al. What has been achieved in HIV prevention, treatment and care for people who inject drugs, 2010-2012? A review of the six highest burden countries. *Int J Drug Policy* 2014; 25(1): 53-60.
53. Strang J, Groshkova T, Uchtenhagen A, van den Brink W, Haasen C, Schechter MT, et al. Heroin on trial: systematic review and meta-analysis of randomised trials of diamorphine-prescribing as treatment for refractory heroin addiction. *Br J Psychiatry* 2015; 207(1): 5-14.
54. Narayanan S, Vicknasingam B, Robson NM. The transition to harm reduction: understanding the role of non-governmental organisations in Malaysia. *Int J Drug Policy* 2011; 22(4): 311-7.
55. Chu DC, Sung HE. Causation of drug abuse and treatment strategy: A comparison of counselors' perceptions of faith-based and secular drug treatment programs. *Int J Offender Ther Comp Criminol* 2014; 58(4): 496-515.

## مقایسه تطبیقی سیاست‌های درمان سوء مصرف مواد در پنج کشور منتخب

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### مقاله پژوهشی

### چکیده

**مقدمه:** سوء مصرف مواد، یکی از معضلات اساسی زندگی بشر به شمار می‌رود و جوامع بشری مصمم به چاره‌اندیشی در مورد این معضل می‌باشند. پژوهش حاضر با هدف مقایسه ویژگی‌های کلی سیاست‌های درمان سوء مصرف مواد در کشورهای منتخب از دو سیاست جنگ علیه مواد و کاهش آسیب انجام شد.

**روش‌ها:** این مطالعه از نوع تطبیقی و به دنبال مقایسه ویژگی‌های بافتاری، تولید، تأمین مالی، نوع خدمات ارائه شده درمانی، دلایل تغییر پارادایم کشورها و چالش‌های اجرایی سیاست‌های درمانی در کشورهای منتخب (چین، مالزی، آلمان، هلند و ایران) بود. داده‌های مورد نیاز جهت مقایسه کشورها از طریق پایگاه‌های داده‌ای معتبر، مرور اسناد و گزارش‌های مؤسسات بین‌المللی جمع‌آوری گردید.

**یافته‌ها:** شرایط بافتاری در کشورهای کاهش آسیب وضعیت بهتری را نشان داد. در اغلب کشورهای مورد بررسی، دولت مرکزی نقش کلیدی در تولید، تأمین مالی و ارائه خدمات بر عهده داشت. در کشورهای جنگ علیه مواد، حضور کارکنان قضایی در درمان سوء مصرف مواد پررنگ بود. رویکرد سیاست‌گذاری کشورهای جنگ علیه مواد، بر مبنای ایدئولوژی و در کشورهای کاهش آسیب، بر مبنای شواهد بود.

**نتیجه‌گیری:** به نظر می‌رسد که عملکرد کشورها با رویکرد کاهش آسیب بهتر می‌باشد.

**واژگان کلیدی:** سوء مصرف مواد، کاهش آسیب، کنترل مواد مخدر، وابستگی به مواد، برنامه‌های تبادل سوزن و سرنگ

**ارجاع:** مهرالحسنی محمدحسین، یزدی فیض‌آبادی وحید، حاجبی احمد، میرزائی سعید. **مقایسه تطبیقی سیاست‌های درمان سوء مصرف مواد در پنج**

**کشور منتخب.** مجله اعتیاد و سلامت ۱۳۹۸؛ ۱۱ (۲): ۸۱-۹۲.

تاریخ پذیرش: ۱۳۹۷/۱۱/۱۷

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