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HIV-Related Stigma and Discrimination (S&D) among Healthcare Workers (HCW) in Government Healthcare Facilities in Malaysia: Is It Real?

Zailatul Hani Mohamad Yadzir[1], Mazliza Ramly[1] & Anita Suleiman[1]

[1] HIV/STI/Hep C Sector, Disease Control Division, Ministry of Health Malaysia, Federal Government Administrative Centre, Putrajaya, Malaysia

Correspondence: Zailatul Hani Mohamad Yadzir, HIV/STI/Hep C Sector, Disease Control Division, Ministry of Health Malaysia, Level 4, Block E10, Complex E, Federal Government Administrative Centre, 62590 Putrajaya, Malaysia.

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Abstract

Stigma and discrimination (S&D) undermine quality of life of people living with HIV (PLHIV) and their access to health services. In this context, an understanding of current stigmatizing attitudes among HCW towards PLHIV from the perspective of Malaysia healthcare setting is crucial to plan for service delivery improvement that is non-stigmatizing and non-discriminatory. The objective of this study was to examine and measure the level of S&D towards PLHIV among HCW in selected government facilities.

A cross-sectional study was undertaken from July to August 2020 in five government hospitals and six government health clinics in Malaysia. Two sets of a validated self-administered questionnaires, one for HCW and another one for PLHIV were used to assess HIV-related S&D. This survey was conducted via web-based platform.

Overall, 3880 HCW and 1173 PLHIV participated in this study. This study found significant proportion of HCW were having stigmatizing attitudes towards PLHIV. This includes fear of taking blood from PLHIV (87%) and double gloving when attending PLHIV (64%) probably due to fear of contracting HIV. In addition, 45% of HCW agreed that women living with HIV (WLHIV) should be prohibited from having children. Although HCW have fears for contracting HIV, their consciences and integrity allowed them to display some positive attitudes towards PLHIV with the majority of HCW 84% and 79% stated that they having observed others in their facility expressed willingness to care and providing good care to PLHIV. On PLHIV experience, only 12% of them reported that they had ever experienced stigma when accessing health services.

The findings of this study shared a worrying magnitude of stigma towards PLHIV among HCW in Malaysia. Nevertheless, ethics and professionalism are upheld through giving good care and services to PLHIV. However, stigma reduction intervention programmes are still needed for HCW to ensure continuous excellent service delivery.

Keywords: Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), stigma and discrimination (S&D), healthcare workers (HCW), people living with HIV (PLHIV), women living with HIV (WLHIV)

1. Introduction

Despite global progress in the treatment and care of human immunodeficiency virus (HIV), PLHIV still continue to report experiencing HIV-related S&D within the healthcare setting (Vorasane et al., 2017). The S&D that a PLHIV experienced at a healthcare setting resulted in lower access to HIV treatment, low utilization of HIV care services, poorer antiretroviral therapy (ART) adherence and thus poorer treatment outcomes (Pitasi et al., 2018; Tran et al., 2019).

Reducing HIV-related S&D in healthcare setting is paramount because they are the first line of care, treatment and support services that PLHIV can access to help them manage their response to HIV (Houstan et al., 2019). Aside from access to services, other critical reasons for reducing HIV-related S&D is the negative effect on self-esteem and mental health (Vorasane et al., 2017). Anxiety, depression, suicidal ideation, emotional health, psychological

well-being, life satisfaction and quality of life have all been reported to be negatively impacted by S&D (Vorasane et al., 2017; Houstan et al., 2019).

Research has shown that HIV-related S&D in healthcare setting may occur in many different forms, including: denial of care to a PLHIV (Ogden & Nyblade, 2005), verbal abuse to a PLHIV (Mukasa, 2006; Nyblade, Stangl, Weiss & Ashburn, 2009), lower standards of care to a PLHIV (Maluwa, Aggleton & Parker, 2002; Chambers et al., 2015), placement of a PLHIV at the end of a queue (Ogden & Nyblade, 2005), disclosure of a patient's HIV status to colleagues/family members without consent, irrespective of when PLHIV arrived at the facility and gossiping about the patient (Mukasa, 2006).

In this context, an understanding of current stigmatizing attitudes among HCW towards PLHIV from the perspective of Malaysia healthcare setting is crucial to plan for service delivery improvement that is non-stigmatizing and non-discriminatory. The objective of this study was to examine and measure the level of S&D towards PLHIV among HCW in selected government facilities.

2. Methods

2.1 Study Setting and Sample Size

This study was a cross-sectional study using a validated self-administered questionnaire survey which was conducted from July to August 2020 via online. Five government hospitals and six government health clinics were selected from six states; Penang, Selangor, Kuala Lumpur, Johor, Melaka and Pahang. The six states were selected as 70% of the 2019 reported new HIV cases were contributed from these states (Malaysia Global AIDS Monitoring, 2020). All the eleven selected study sites provided HIV/AIDS care services to the public.

There were two target subjects for this study which were HCW and PLHIV. The inclusion criteria for HCW included: worked for at least six months in the selected study sites, directly involved in care of PLHIV and agreed to participate in the study voluntarily. PLHIV were enrolled according to the predetermined inclusion criteria: age 18 years and above, registered as patient in the selected study sites, living with HIV, able to understand Malay or English language and willing to provide informed consent. No personal information was asked to maintain anonymity.

For the recruitment of potential HCW, a recruitment message with a hyperlink or QR code to the online survey website was disseminated via email or smart phone messenger apps (e.g., Whatsapp, Telegram), while PLHIV were approached by clinic staff or case worker during their scheduled appointments.

Sample size was calculated to be 3675 consisting of 1904 HCW and 1771 PLHIV assuming 95% confidence level with 5% margin error and 50% response rate.

2.2 Survey Tool

The instrument used in this study is a self-administered online questionnaire survey via web-based platform. Two sets of a questionnaires, one for HCW and another one for PLHIV were used to assess HIV-related S&D. The questionnaire for HCW was adapted from a globally standardised tool for measurement of HIV-related stigma among health facility staff (Nyblade et al., 2013) and the questionnaire for PLHIV experience was adapted from similar study in Thailand (Srithanaviboonchai et al., 2017).

The HCW questionnaire consisted of two main parts. The first part consisted of socio-demographic section which intended to discover the demographic namely gender, HIV/AIDS training and experience of working with PLHIV. The second part consisted of five sections; infection control, health facility environment, health facility policies, opinions about PLHIV and antenatal care, prevention of mother-to-child transmission and delivery wards. While the questionnaire for PLHIV included information on patient experience at the healthcare facility.

2.3 Ethical Considerations

The study received ethical approval from the Medical Research and Ethics Committee, Ministry of Health Malaysia and this study was registered under Malaysia National Medical Research Registry (NMRR) with the identification number NMRR-20-1932-55728.

2.4 Statistical Analysis

Statistical analysis was done using the Statistical Package for Social Sciences (SPSS 26.0) software. Data was entered, cleaned and checked before data analysis. Frequencies and simple associations were calculated. *P*-value less than 0.05 was taken as the significance level for all analyses.

3. Results

3.1 Demographic Characteristics

In total, 3880 HCW and 1173 PLHIV participated in this study. HCW were predominantly female 3300 (85%) with 1: 5.96 male and female sex ratio. Of the 3880 HCW, 3086 (80%) worked in hospitals and 794 (20%) in health clinics. While for PLHIV, 767 (65%) receiving care in hospitals and 406 (35%) in health clinics. More than two-thirds of the HCW 2581 (67%) had attended training on HIV/AIDS and 2037 (53%) HCW claimed having experience in working at hospital/clinic/department that specialized in HIV care and treatment.

3.2 Infection Control Concerns in Regards with a PLHIV in Health Facility

The findings in this section are shown in Table 1. Eighty seven percent (87%) and 84% of the HCW responded fear of taking blood and dressing the wounds of a PLHIV, respectively. However, the differences were not statistically significant. More than half (64%) of HCW stated that they wore double gloves when attending PLHIV with a significant difference. Sixty three percent (63%) of HCW also indicated that they always wear gloves during all aspects of the care and services for a PLHIV with a significant difference. Seventy three percent (73%) of HCW responded using additional specific infection measures when attending PLHIV, however, the difference was not statistically significant.

Table 1. Infection control concerns in regards with a PLHIV in health facility

Item			Worried		Not Worried		*P*-value
			n	%	n	%	
1	How worried would you be if you touched the clothing of a PLHIV?	(N = 3618) *	1949	54	1669	46	0.000
2	How worried would you be if you dressed the wounds of a PLHIV?	(N = 3407) *	2846	84	561	16	0.663
3	How worried would you be if you taking blood from a PLHIV?	(N = 3302) *	2867	87	435	13	0.578
4	How worried would you be if you took the temperature of a PLHIV?	(N = 3451) *	1161	34	2290	66	0.006
Item			Yes		No		*P*-value
			n	%	n	%	
5	Do you avoid physical contact when providing care or services to PLHIV?	(N = 3488) *	1077	31	2411	69	0.010
6	Do you wear double gloves when providing care or services to PLHIV?	(N = 3476) *	2226	64	1250	36	0.011
7	Do you always wear gloves during all aspects of the care and services when providing care or services to PLHIV?	(N = 3507) *	2207	63	1300	37	0.003
8	Do you use any specific infection measures for PLHIV which you do not use for other patients?	(N = 3426) *	2508	73	918	27	0.081

* Total number of HCW minus who answered Not Applicable

3.3 Health Facility Environment in Regards with a PLHIV

The findings from this section are shown in Table 2. Majority of HCW 84% and 79% reported having observed others in their facility expressed willingness to care and providing good care to PLHIV with a significant differences. HCW were also unconcerned about stigmatization from family members and friends for providing care to PLHIV (all the P values < 0.05). Sixty five percent (65%) of the HCW were also comfortable to work with colleagues living with HIV.

Table 2. Health facility environment in regards to a PLHIV

Item			Yes		No		*P*-value
			n	%	n	%	
1	In the last 12 months, have you provided service to PLHIV in your health facility?	(N = 3880)	2388	62	1492	38	0.000
2	In the last 12 months, have you observed healthcare provider unwilling to care for a patient living with or thought to be living with HIV at your health facility?	(N = 2388) *	382	16	2006	84	0.005
3	In the last 12 months, have you observed healthcare providers who provide poorer quality of care to a people living with or suspected to be living with HIV, compared to other patients at your health facility?	(N = 2388) *	505	21	1883	79	0.000
4	In the last 12 months, have you observed healthcare providers talking badly about people living with or suspected to be living with HIV at your health facility?	(N = 2388) *	682	29	1706	71	0.014
Item			Worried		Not Worried		*P*-value
			n	%	n	%	
5	How worried are you of people talking badly about you because you provide care for PLHIV?	(N = 3880)	1128	29	2752	71	0.000
6	How worried are you of friends and family avoiding you because you provide care for PLHIV?	(N = 3880)	1333	34	2547	66	0.003
7	How worried are you of colleagues avoiding you because you provide care for PLHIV?	(N = 3880)	1028	26	2852	74	0.000
8	In your opinion, how reluctant are healthcare provider in your facility, to work with colleagues living with HIV, regardless of their profession?	(N = 3880)	1343	35	2537	65	0.989

* Total number of HCW who answered Yes in Item 1

3.4 Health Facility Policies in Regards with a PLHIV

The findings in this section are shown in Table 3. Eighty two percent (82%) of the HCW disagreed with testing patients for HIV infection without consent with a statistically significant. Majority of HCW (97%) agreed that their facility has standardised procedures/protocols on HIV that reduce risk of infection. More than two-thirds (68%) of HCW also agreed that their facility has written guidelines to protect PLHIV from discrimination. However, the differences were not statistically significant.

Table 3. Health facility policies in regards to a PLHIV

Item			Agree		Disagree		*P*-value
			n	%	n	%	
1	In my facility, it is not acceptable to test a patient for HIV without their knowledge	(N = 3880)	3177	82	703	18	0.031
Item			Yes		No		*P*-value
			n	%	n	%	
2	I will get into trouble at work if I discriminate against PLHIV	(N = 3880)	2036	52	1844	48	0.597

Item			Agree		Disagree		*P*-value
			n	%	n	%	
3	There are standardised procedures/protocols in my health facility that reduce my risk of becoming infected with HIV	(N = 3880)	3774	97	106	3	0.252
Item			Yes		No		*P*-value
			n	%	n	%	
4	My health facility has written guidelines to protect PLHIV from discrimination	(N = 3880)	2637	68	1243	32	0.631

3.5 Opinions about PLHIV

The findings from this section are shown in Table 4. Slightly more than half (53%) of the HCW agreed that those infected with HIV because they engaged in irresponsible behaviours with a significant difference. As for reproductive right, 55% of HCW agreed that WLHIV should be allowed to get pregnant.

Table 4. Opinions about PLHIV

Item			Agree		Disagree		*P*-value
			n	%	n	%	
1	Most PLHIV do not care if they infect other people	(N = 3880)	884	23	2996	77	0.642
2	PLHIV should feel ashamed of themselves	(N = 3880)	613	16	3267	84	0.357
3	Most PLHIV have had many sexual partners	(N = 3880)	1449	37	2431	63	0.775
4	People get infected with HIV because they engage in irresponsible behaviours	(N = 3880)	2039	53	1841	47	0.033
5	HIV is punishment for bad behaviours	(N = 3880)	751	19	3129	81	0.002
6	Women living with HIV should be allowed to get pregnant if they wish	(N = 3880)	2119	55	1761	45	0.003
7	If I had choice, I would prefer not to provide services to people who inject illegal drugs	(N = 3880)	1569	40	2311	60	0.042
8	If I had choice, I would prefer not to provide services to men who have sex with men	(N = 3880)	1264	33	2616	67	0.009
9	If I had choice, I would prefer not to provide services to female sex workers	(N = 3880)	979	25	2901	75	0.830

3.6 Antenatal Care, Prevention of Mother-to-Child Transmission and Delivery Wards

The findings in this section are shown in Table 5. Majority of HCW (81%) stated that they were worried when assisting during labor and delivery of WLHIV, however, the difference was not statistically significant. Seventy percent (70%) of HCW agreed that family of pregnant WLHIV has a right to know her HIV status with a significant difference. More than half (62%) of HCW agreed that WLHIV should not get pregnant if they already have children.

Table 5. Antenatal care, prevention of mother-to-child transmission and delivery wards

	Item		Yes		No		*P*-value
			n	%	n	%	
1	Are you involved with pregnant women during antenatal care, prevention of HIV transmission from mother-to-child, in the wards or labor rooms?	(N = 3880)	1396	36	2484	64	0
	Item		Worried		Not Worried		*P*-value
			n	%	n	%	
2	How worried are you about assisting in labor and delivery if the woman living with HIV?	(N = 1334) *	1087	81	247	19	0.639
	Item		Yes		No		*P*-value
			n	%	n	%	
3	In the last 12 months, have you observed other healthcare providers performing an HIV test on a pregnant woman without her informed consent?	(N = 1396) ‡	265	19	1131	81	0.002
4	In the last 12 months, have you observed other healthcare providers neglecting a woman living with HIV during labor and delivery because of her HIV status?	(N = 1396) ‡	90	6	1306	94	0.110
5	In the last 12 months, have you observed other healthcare providers using additional infection-control procedures (e.g., double gloves) with a woman living with HIV during labor and delivery because of her HIV status?	(N = 1396) ‡	962	69	434	31	0.000
6	In the last 12 months, have you observed other healthcare providers disclosing the status of a pregnant woman living with HIV to others without her consent?	(N = 1396) ‡	166	12	1230	88	0.142
7	In the last 12 months, have you observed other healthcare providers impose compulsory use of family planning methods as a requirement to enable a woman living with HIV to receive HIV treatment?	(N = 1396) ‡	819	59	577	41	0.174
	Item		Agree		Disagree		*P*-value
			n	%	n	%	
8	If a pregnant woman is HIV positive, her family has a right to know	(N = 3880)	2735	70	1145	30	0.000
9	Pregnant women who refuse HIV testing are irresponsible	(N = 3880)	3549	91	331	9	0.070
10	Women living with HIV should not get pregnant if they already have children	(N = 3880)	2406	62	1474	38	0.479
11	It can be appropriate to sterilize a woman living with HIV, even if this is not her choice	(N = 3880)	1141	29	2739	71	0.512

* Total number of HCW minus who answered Not Applicable;

‡ Total number of HCW who answered Yes in Item 1.

3.7 PLHIV Experience

On PLHIV experience, only 12% of them reported that they had ever experienced stigma when accessing health services, however, the difference was not statistically significant (Table 6).

Table 6. PLHIV experience

Item			Yes		No		*P*-value
			n	%	n	%	
1	Was information about your health explained clearly?	(N = 1173)	1158	99	15	1	0.231
2	Was the clinic welcoming and friendly?	(N = 1173)	1152	98	21	2	0.735
3	Were you treated with respect during your visit to this particular health facility?	(N = 1173)	1156	99	17	1	0.277
4	Were privacy and confidentiality protected during your visit to this particular health facility?	(N = 1173)	1113	95	60	5	0.294
5	Did you experience discrimination from a healthcare provider or other staff member?	(N = 1173)	141	12	1032	88	0.734
6	Were you involved with decision-making about your care and treatment?	(N = 1173)	1056	90	117	10	0.758
7a	Did your doctor spend enough time with you during your visit?	(N = 1165) *	1132	97	33	3	0.042
7b	Did your paramedic (nurse/medical assistant) spend enough time with you during your visit?	(N = 1134) *	1109	98	25	2	0.001

* Total number of PLHIV minus who answered Not Applicable.

4. Discussion

The current study noted a relatively high prevalence of HIV-related stigma among HCW in the country. In this study, 34-87% of HCW were worried about performing various day-to-day duties i.e., touching clothing, dressing wounds, drawing blood and taking temperature for PLHIV. This study also revealed that majority of HCW (81%) involved in the wards or labor rooms were worried when assisting during labor and delivery of WLHIV. Findings in this study are slightly higher compare to other research; in Thailand, 32-66% of 738 HCW were worried about similar duties, while 23-67% of more than 1000 HCW from multiple countries were similarly concerned (Nyblade et al., 2013; International Health Policy Program Thailand, 2014).

In term of HIV-related practices, 63-73% of HCW indicated that they wore double gloves, wearing gloves during all aspects of the care and services and using additional specific infection measures when attending PLHIV. However, these practices are not in line with the national Policies and Procedures on Infection Prevention and Control, in which double gloving is only recommended during some Exposure Prone Procedures (EPPs) e.g., orthopaedic and gynaecological operations or when attending major trauma incidents (Policies and Procedures on Infection Prevention and Control, 2019). Similar to the findings of this study, a study in Ghana found 65.7% of nurses put on gowns and gloves with any contact with PLHIV emanating from fear of contracting HIV during clinical practice (Boakye & Mavhandu-Mudzusi, 2019). This finding highlights a lack of understanding regarding the primary principle underlying Standard/Universal Precautions i.e., the precaution applies universally and not selectively. The value of Standard/Universal Precautions is that they protect HCW and patients against infection with a range of pathogens, not just HIV (Yasin, Fisseha, Mekonnen, & Yirdaw, 2019).

Stigma often leads to the discriminatory attitudes and avoidance of duties. However, in this study, majority of HCW reported having observed others in their facility being willing to care and providing good care to PLHIV. Majority of HCW (94%) also stated that they never observed others in their facility neglecting WLHIV during labor and delivery. Moreover, HCW were also unconcerned about stigmatization from family members and friends for providing care to PLHIV. At the same time, 65% of the HCW in this study were comfortable to work with colleagues living with HIV. These findings were also confirmed through the PLHIV experience where only a small percentage of them had ever experienced stigma when seeking health care (12%). Many of them also indicated that the clinic was welcoming and friendly and they were treated with respect when accessing health services. This was quite encouraging and commendable, considering HCW demonstration of fear of infection through day-to-day duties. The findings of this study are in corroborated with studies conducted by Boakye & Mavhandu-Mudzusi (2019) and Ledda et al. (2017), that although HCW have fears for contracting HIV, their consciences and integrity allowed them to overcome their fear and display some positive attitudes when attending to PLHIV.

It was good to observe that the majority of HCW in this study disagreed that HIV test can be done without the

knowledge or permission of the patients. This belief is in keeping with the current practice in Malaysia, which follows the guidelines issued by the World Health Organization (WHO) in 2007 where explicit consent must be obtained from the patient before HIV testing can be done. In critically ill or unconscious patients who may not be able to provide informed consent to HIV testing and counselling, consent should be obtained from the patient's next-of-kin, guardian or other care given. Only in the absence of such a person, healthcare providers should act according to the best interests of the patient concerned (WHO, 2007).

Similar to other studies conducted by Lui, Sarangapany, Begley, Coote & Kishore (2014) and Ledda et al. (2017), this study found that a fraction of HCW had negative or prejudicial attitudes towards PLHIV. Slightly more than half of the HCW (53%) opined that people get infected with HIV because they engage in irresponsible behaviours. Despite, ethics and professionalism are upheld through their services. More than half of the HCW have no issues on providing services to key populations i.e., people who inject illegal drugs, men who have sex with men and female sex workers.

This study revealed that 45% of the HCW did not agree with the idea of WLHIV having the right to procreate and 62% of the HCW also agreed that WLHIV should not get pregnant if they already have children. Similar findings were reported in a multinational study of over 1000 HCW, 40% were against WLHIV having the right to procreate (Srithanaviboonchai et al., 2017). This is unfortunate, considering that the availability of effective ART to suppress viral load which allows WLHIV to get pregnant without risk of HIV being passed on to their baby. In addition, the rights to have children is the women to choose, regardless of HIV status.

In this study, 70% of HCW opined that family of pregnant WLHIV has a right to know her HIV status. Nevertheless, 88% of HCW reported that they never observed others in their facility disclosing the status of a WLHIV to others without her consent. These findings were also compatible with the PLHIV experience where 95% of them stated that their privacy and confidentiality was protected during their accessed to health services. This is consistent with the current practice in Malaysia where the HIV status of a patient can only be revealed with the explicit consent of a PLHIV.

This study had several limitations that should be taken into account in interpreting the results. Similar to studies in this area, these findings relied on self-reported responses and are subject to reporting and social desirability biases. Moreover, the study assessed only HCW employed in the government sector, with variable responses across governorates. As such, those working in the private sector may have different views and attitudes.

5. Conclusion

The findings of this study shared a worrying magnitude of stigma towards PLHIV among HCW in Malaysia. This stigma, however was not demonstrated in a form of discriminatory action in providing care and services towards PLHIV. Ethics and professionalism are upheld through giving good care and services to PLHIV. Nevertheless, stigma reduction intervention programmes are still needed to ensure continuous excellent service delivery in order to achieve "Three Zeros goals: Zero new HIV infection, Zero AIDS-related deaths and Zero HIV-related S&D".

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Authors' Contributions

Analysis and interpretation of the data: ZHMY, MR

Drafting of the article: ZHMY

Critical revision of the article for important intellectual content: MR, AS

Final approval of the article: AS

Competing Interests Statement

The authors declare no conflicts of interest. The authors further declare that the study received no funding from any organizations or persons.

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