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Environmental situation of drop in centers for high risk population on HIV/AIDS prevention in Dhaka, Bangladesh

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Abstract: This paper investigates the existing environmental situation of drop in centers for HIV/AIDS vulnerable people (sex workers and injection drug users) in Dhaka, Bangladesh. The condition of house setup of drop in centers 51% unsatisfactory, 31% satisfactory and 18% partial where sites were assessed according to its elevation from ground, independent access to street of adequate width, drainage system and open space. The entire drop in centers had poor space according to crowding, minimum space for HIV infection center and setting or lying comfortability. Ventilation & Lighting were unsatisfactory where 60% poor, 30% good and 10% average considering the number of windows, height of windows not more than 3 feet above ground and sufficient ventilators and fans. Water supply and sanitation was poor found 50% unsatisfactory, 36% satisfactory and 14% partial based on availability of water, supplied of safe drinking water, personal hygiene. The surrounding environment was unsatisfactory found 78% poor, 12% good and 10% average considering pleasing surroundings, industrial setup and waste dumping around. Finally study revealed the poor condition 60%, good 26% and 14% average after total analysis of both drop in centers of sex worker and injecting drug users.

INTRODUCTION

Drop in centers is one of the interventions for HIV/AIDS prevention in Bangladesh where health services are provided for HIV/AIDS high risk group. (1) The first fixed Drop in centers were established in Bangladesh by CARE –Bangladesh and its 64 partners from 1996-2005 through a project called SHAKTI funded by DFID, UK and managed 182 DICs in 30 districts (2). Drop in centre is a safe place where clients (IDU or female sex workers) can gather without fear of prejudice and discrimination for getting STI management, discussion about their problems, receive IEC materials on safer sex, condoms and lubricants, consultation on reproductive health, limited General Health (GH) services, abscess management, sharing each other's views, counseling, bathing and recreational facilities, toilet facilities etc. DIC is also used for providing training to the target people on HIV, STI and other issues (e.g. adult literacy, IGA etc.) (3)

OBJECTIVES OF THE STUDY

General objective: Assessment of existing environmental conditions and find out the recommendations to ensure healthy environmental conditions.

Specific objectives:

- To find out the physical situation in DICs.
- To determine physical variables with standards.
- To understand the major factors those degrade the environmental qualities of DICs.
- To find out the risk factors associated with existing environment.

METHOD & MATERIAL

This is an observational study as the sample size is small was designed to investigate the existing environmental situation of Drop in centers and to find out the impact of existing hazardous environment and to learn about how to aware, prevent and control it. This study was conducted in 10 Drop in centers in different places situated in urban area of Dhaka city. Environmental checklists were used to collect the information.

RESULT

The grading used to categories the conditions was followed in accordance with the set guidelines of housing health and safety rating system developed by WHO and the guidelines of Health service center developed by the National Institute of Preventive and Social Medicine, Bangladesh. (4) In severity grading of environmental checklist, A= Satisfactory, B=Unsatisfactory, C= partial. An average grade then is calculated for each respective category. This way, the average grade has been calculated for the each area. Where there is no information under a sub-category or the sub-category is not attempted at all, 'N' is placed to keep the record. (5)

House setup: The conditions of house setup assessed by its elevation, independent access to street of adequate width, drainage system and open space etc. The conditions of grading were categorized by physical observation. Following percentage of satisfactory levels were found

Table 1: levels of household condition of sex worker (SW) drop in centers

Level	Percentage
Good	48%
Poor	40%
Average	12%

Table 2: levels of household condition of injecting drug users (IDUs) drop in centers

Level	Percentage
Good	40%
Poor	44%
Average	16%

After totally analysis of house setup condition both SW and IDU DICs, following percentages were found

Space: Assessing the condition of space according to its crowding situation, minimum space for HIV risk people and setting or lying comfortability of clients. Following results were found

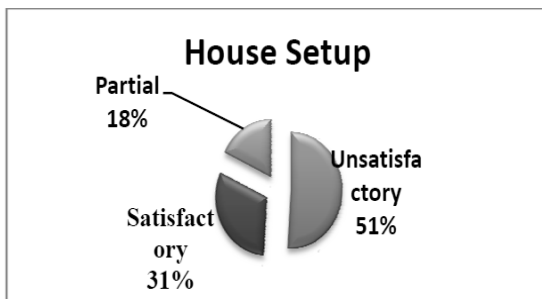


Figure 1: House setup condition of both SW and IDUs drop in centers

Table 3: Space condition of sex worker (SW) drop in centers

Level	Percentage
Good	0%
Poor	100%
Average	0%

Table 4: Space condition of injecting drug users (IDUs) drop in centers

Level	Percentage
Good	0%
Poor	100%
Average	0%

After totally analysis of the Space situation both SW and IDU DICs, following percentages were found

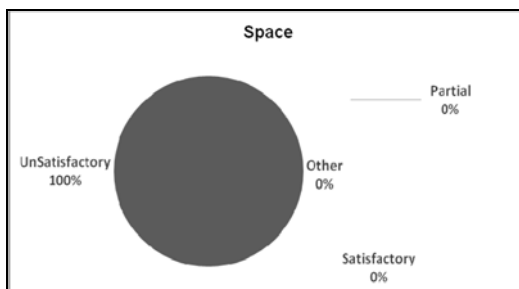


Figure 2: Featuring the percentage distribution of the Space situation.

Ventilation and lighting: The condition of Ventilation & Lighting were assessed by the number of windows, circulation of light and air, height of windows above ground and existence of the sufficient ventilators and fans.

Table 5: Ventilation & Lighting condition of sex worker (SW) drop in centers

Level	Percentage
Good	35%
Poor	55%
Average	10%

Table 6: Ventilation & Lighting condition of injecting drug users (IDUs) drop in centers

Level	Percentage
Good	25%
Poor	65%
Average	10%

After totally analysis of the Ventilation & Lighting condition both SW and IDU DICs, following percentages were found

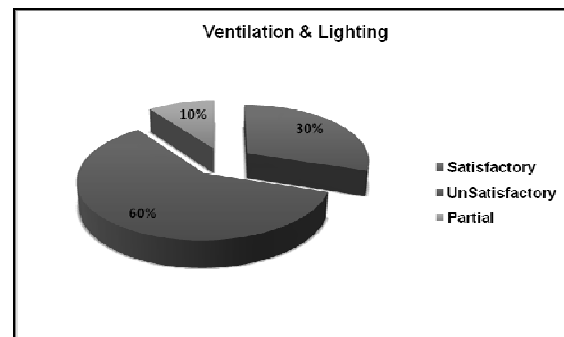


Figure 3: Featuring the percentage distribution of the Ventilation & Lighting condition.

Water supply and sanitation: The situation of Water supply and sanitation were assessed by the availability of water, supplied of safe drinking water, personal hygiene, condition of toilet etc. Following results were found

Table 7: Water supply and sanitation condition of sex worker (SW) drop in centers

Level	Percentage
Good	48%
Poor	36%
Average	16%

Table 8: Water supply and sanitation condition of injecting drug users (IDU) drop in centers

Level	Percentage
Good	24%
Poor	64%
Average	12%

After totally analysis of the Water supply and sanitation condition both SW and IDU DICs, following percentages were found

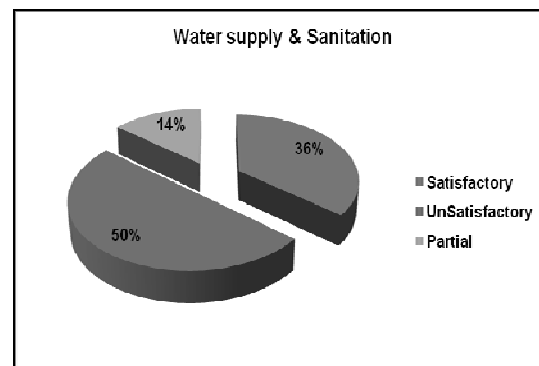


Figure 4: Featuring the percentage distribution of water supply and sanitation.

Surrounding environment : Assessing of surrounding environment through its pleasing surroundings, industrial setup, excessive noise and waste dumping around etc. Following conditions were found

Table 9: Surrounding environmental condition of sex worker (SW) drop in centers

Level	Percentage
Good	20%
Poor	70%
Average	10%

Table 10: Surrounding environmental condition of injecting drug users (IDU) drop in centers

Level	Percentage
Good	5%
Poor	85%
Average	10%

After totally analysis of the Surrounding environmental condition both SW and IDU DICs, following percentages were found

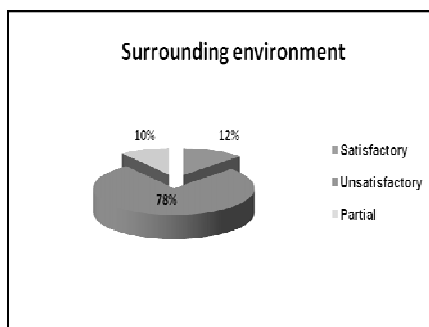


Figure 5: Featuring the percentage distribution of the Surrounding environmental condition.

After total analysis for environmental situation both SW and IDU DICs using total variables in environmental checklist, it was found that the poor condition was 60%, good was 26% and 14% was average situation.

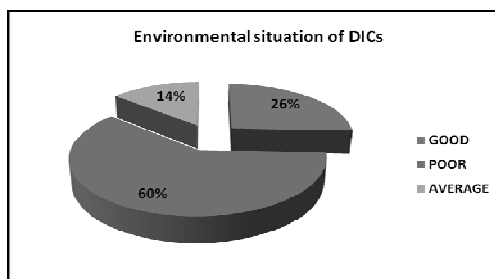


Figure 6: Representing the environmental situation of DICs both SW and IDU using total variables in checklist

CONCLUSION

It could be clearly stated that the environmental conditions of drop in center greatly affected on the physiological and psychological health of IDUs and SWs. Although the health conditions of IDUs and SWs were not so good and if such condition drop in center continues, it will be havoc on the overall situation of public health and will be failed the planning and strategy for reduction of HIV/AIDS in Bangladesh

REFERENCES

- [1] Bhuyain, Z. 2000 HIV Sero and Behavioural Surveillance in Bangladesh 1998-1999 and 1999-2000 Presented at Monitoring the AIDS Pandemic (MAP) Symposium, Network Consultative Meeting, 07/5-7, Durban, South Africa.
- [2] Islam, N., T. Azim, C. Jenkins, et al. 2000 Report on the Sero-Surveillance and Behavioural Surveillance on STD and AIDS in Bangladesh 1998-1999 AIDS and STD Control Programme, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh, June, report.
- [3] National AIDS/STD Programme (NASP) and Save the children-USA, Field draft of Minimum standards for Drop in Centers, Female sex worker and injecting drug users interventions for HIV prevention and care in Bangladesh, August, 2008
- [4] Right Guidelines for healthy housing Copenhagen: WHO Regional Office for Europe, 193d. EURO Environmental Health Series ; 31 (E)
- [5] Standard and IOM, OHS report, 2000. www.iom.ohs/pub, Accessed on 17 Jan, 2009