Breaking HIV News to Clients: SPIKES Strategy in Post-Test Counseling Session

Hamid Emadi Koochak[1,2], Farhad Yazdi[1], Mahboubeh Haji Abdolbaghi[1,2], Mohammad Reza Salehi[1], Behrang Shadloo[3], and Afarin Rahimi-Movaghar[3]

[1] *Iranian Research Center for HIV/AIDS, Iranian Institute for Reduction of High-Risk Behavior, Tehran University of Medical Sciences, Tehran, Iran*

[2] *Department of Infectious Diseases, Tehran University of Medical Sciences, Tehran, Iran*

[3] *Iranian National Center for Addiction Studies (INCAS), Iranian Institute for Reduction of High-Risk Behavior, Tehran University of Medical Sciences, Tehran, Iran*

Received: 14 Feb. 2015; Accepted: 26 Dec. 2015

Abstract- Breaking bad news is one of the most burdensome tasks physicians face in their everyday practice. It becomes even more challenging in the context of HIV$^+$ patients because of stigma and discrimination. The aim of the current study is to evaluate the quality of giving HIV seroconversion news according to SPIKES protocol. Numbers of 154 consecutive HIV$^+$ patients from Imam Khomeini Hospital testing and counseling center were enrolled in this study. Patients were inquired about how they were given the HIV news and whether or not they received pre- and post-test counseling sessions. Around 51% of them were men, 80% had high school education, and 56% were employed. Regarding marital status, 32% were single, and 52% were married at the time of the interview. Among them, 31% had received the HIV news in a counseling center, and only 29% had pre-test counseling. SPIKES criteria were significantly met when the HIV news was given in an HIV counseling and testing center (*P*.value<0.05). Low coverage of HIV counseling services was observed in the study. SPIKES criteria were significantly met when the HIV seroconversion news was given in a counseling center. The need to further train staff to deliver HIV news seems a priority in the field of HIV care and treatment.

Acta Med Iran, 2016;54(5):313-317.

Keywords: Breaking bad news; HIV counseling and testing; SPIKES

Introduction

Physicians, in their everyday practice, inevitably face situations where they have to break bad news to their patients (1). Breaking bad news regarding hard-to-treat conditions makes the patients psychologically vulnerable and could result in maladaptive psychological and behavioral responses. Upon hearing bad news, clients usually respond in denial, anger, anxiety or depressive emotional states. Therefore, physicians are relatively reluctant in accepting this challenge and usually lack the required skills to do so (2-4). The way a patient learns about his/her, health condition might even determine the future of his/her therapeutic relationship with the health-care team and thus affect the treatment outcome (5,6).

Conveying the news of HIV infection will even add to the challenges of this burdensome task. HIV infection is associated with high levels of stigma (7-9). Modes of HIV transmission, such as injecting drug use and unprotected sex, are looked down upon in almost all societies and those who engage in such high-risk behaviors face major stigma and discrimination (10). In order to cover all these issues and the need to address high-risk behaviors in clients, HIV testing and counseling are integrated into a single service in many countries and patients typically receive at least two counseling sessions consisting of pre-test and post-test counseling (11).

In order to help the physician carry out the task of breaking bad news, SPIKES protocol has been developed (12). SPIKES protocol is frequently

Corresponding Author: B. Shadloo
Iranian National Center for Addiction Studies (INCAS), Iranian Institute for Reduction of High-Risk Behavior, Tehran University of Medical Sciences, Tehran, Iran
Tel: +98 912 3781559, Fax: +98 21 55421155, E-mail address: behrang.shadloo@gmail.com

implemented in patients with a terminal illness or malignancy. A lot of attention has been paid to the efficacy of SPIKES in these settings (5,12-15). Unfortunately, little is known about how the SPIKES strategy would help clients in the field of HIV testing and counseling (8,16,17). The aim of the current study is to assess how HIV patients learned about their serostatus according to SPIKES protocol.

Materials and Methods

A hundred and fifty-four HIV+ patients were studied in this cross-sectional study. Participants were registered adult HIV+ clients of Imam Khomeini VCT center and were consecutively included in the study. In order to minimize the recall bias, cases must have received their HIV diagnosis within three years from the time of the study. Exclusion criteria consisted of being under the age of 18, lack of consent and being unable to communicate with the interviewer in Farsi language, either due to ethnic background or a cognitive disorder. The study was approved by the Ethics Committee of the Tehran University of Medical Sciences in Iran.

Demographic data, consisting of age, marital status and level of education were gathered, and then the participants were inquired about how they learned about their HIV status. SPIKES protocol, pre- and the post-test counseling session were assessed using a researcher-developed questionnaire with Likert-scale answers. Content validity and reliability of the questionnaire were studies during the pilot phase of the study. A single question was allocated for each of the SPIKES criteria and elements of an efficient pre- and post-test counseling session. Those who scored 4 or more (out of 7) in the SPIKES questionnaire were considered as meeting the SPIKES criteria, and those who scored 7 or more (out of 12) in the post-test counseling questionnaire were considered as receiving adequate post-test counseling.

The interviewer was a clinical psychologist with a good clinical expertise in the field of HIV counseling and testing. The field work was carried out in 2013 at the Imam Khomeini Voluntary Counseling and Testing (VCT) Center, Tehran, Iran. Gathered data were entered using the SPSS (v 19) software for further analysis. In order to assess the correlation of the dependent variables, Analysis of Variance with a 95% confidence interval was performed.

Results

A total 154 respondents participated in the study. Around 51% of them were men, 80% had high school education, and 56% were employed. Regarding marital status, 32% were single, 52% were married, and the rest were "previously married" at the time of the interview. **Table 1** shows the demographic variables based on whether the person has received his/her HIV news in a VCT center or not.

Table 1. Demographic Variables of the two groups

Variables		Received HIV news in a VCT center (N=47)	Did not receive HIV news in a VCT center (N=107)	*P*.Value
Gender	Male	23 (49%)	52 (49%)	0.484
	Female	24 (51%)	55 (51%)	0.485
Education	Primary School	24 (51%)	42 (39%)	0.086
	High School	19 (41%)	44 (41%)	0.467
	College/University Degree	4 (8%)	21 (20%)	0.042*
Marital Status	Single	13 (28%)	36 (34%)	0.231
	Married	28 (60%)	52 (49%)	0.104
	Previously Married	6 (12%)	19 (17%)	0.219
Employment	Unemployed	22 (47%)	46 (43%)	0.330
	Employed	25 (53%)	61 (57%)	0.330

When asked about hearing the HIV news, all of them perfectly remembered the situation. Around 95% preferred to be alone at the time of breaking the HIV news. Only 18% considered the timing and 22% considered the physical environment of the VCT center to be appropriate. Among them, 66% mentioned that they were told the HIV news without priorly being asked, and 69% felt that their emotional state was not

appropriately attended. Six percent of the clients mentioned hearing the HIV news over the phone.

Provider-initiated testing was mentioned by 53 (34%) and the rest had received voluntary testing. Almost all of the participants mentioned reactive psychiatric symptoms upon hearing the HIV news with depressive symptoms (81%) contributing as the most prevalent psychiatric feature.

Although 66% had voluntarily referred for testing, the majority (71%) did not receive pre-test counseling, and only 32% mentioned adequate prior knowledge about HIV and its routes of transmission. Similar results were observed regarding high-risk behaviors, and around 60% were not asked about condom use or shared injection. Suicidal ideation was reported by 33% of the participants after hearing about their seroconversion; however, 91% mentioned that they were not inquired about their suicidal thoughts or plans. Table 2 shows the comparison of pre-test variables among participants whether they received the HIV news in a VCT center or not. As demonstrated in the table, all pre-test elements were significantly provided in a VCT center. Among those who were not tested in a VCT center, only 7.5% reported having received pre-test counseling.

Table 2. Comparison of pretest variables among participants whether they received the HIV news in a VCT center or not

Pretest Variables	Received HIV news in a VCT center (N=47) n(%)	Did not receive HIV news in a VCT center (N=107) n(%)	*P*.Values
Did you receive pre-test counseling?	39 (83)	8 (7.5)	0.001
Did you have adequate prior information about HIV virus and its modes of transmission?	40 (85)	10 (9)	0.001
Were the concepts of positive and negative results explained to you?	8 (17)	2 (2)	0.001
Did you know about the window period?	34 (72)	7 (6.5)	0.001
Have you been asked about your sexual activity and condom use?	41 (87)	22 (20.5)	0.001
Did you receive training regarding correct method of condom use?	4 (8.5)	2 (2)	0.05
Did you receive information regarding free condom distribution?	35 (74)	4 (4)	0.001
Were you asked about injecting or non-injecting drug use?	40 (85)	20 (19)	0.001
Were you asked about the potential of bringing harm to yourself or others?	9 (19)	6 (6)	0.009
Was it recommended to you to disclose your test results to someone you trust?	30 (64)	10 (9)	0.001
Was it recommended to you to disclose your test results to your spouse or sexual partner?	32 (68)	8 (7)	0.001

Less than a third of the participants were tested in a VCT center. The majority of HIV testing (35%) was ordered by either a specialist or a general practitioner in a private office, followed by a counselor in a VCT center (22%). When inquired about the person who informed the participant of his/her HIV seropositivity, 27% mentioned the lab staff, 43% by a physician and 30% mentioned a counselor at the VCT center. More participants recognized the physical setting of rather than the timing to be appropriate. Table 3 demonstrates the comparison between SPIKES criteria whether the participant received the HIV news in a VCT center or not. As seen in the table, except for the setting, all other criteria have been significantly met in a VCT center.

Among those who had received the HIV news in a VCT center, 31 (66%) and 37 (79%) were SPIKES+ and post-test counseling+; i.e. had fulfilled more than half of the criteria. Corresponding numbers for those how had not received the HIV news in a VCT center were 17 (2%) and 12 (11%), respectively which are significantly different (*P*.values<0.001 and 0.002 for SPIKES and post-test, respectively). Table 4 shows SPIKES variables according to the person who provided the test results. As seen in the table, except for the setting criterion, all other criteria have been significantly considered to be appropriate when the results were provided in a VCT center. The table shows the number of the participants who believed that the criteria were appropriately met. For each criterion, there was a significant number of participants (with a mean just above 50%) who had no comment upon the answer.

Among those who received the HIV news in a VCT center (N=47), 79% mentioned that the majority of post-test counseling elements were provided, i.e. were post-test counseling^{+}. However, the corresponding rate for those who did not receive the HIV news in a VCT center

was 11%. The physician or the counselor of the VCT center was prominently the person in charge of delivering the HIV news (87%).

Table 3. Breaking HIV news in the post-test session, comparison of SPIKES variables in different settings

SPIKES Variables	Received HIV news in a VCT center (N=47)	Did not receive HIV news in a VCT center (N=107)	*P*.Value
	Number of participants who believed that the criteria have been appropriately met (%)	Number of participants who believed that the criteria have been appropriately met (%)	
Setting (timing)	13 (27.7)	15 (14)	0.2
Setting (location)	25 (53.2)	41 (38.3)	0.1
Perception	30 (63.8)	16 (15)	0.00
Invitation (preparing)	24 (51.1)	29 (27.1)	0.004
Invitation (privacy)	40 (85.1)	68 (63.6)	0.007
Knowledge	33 (70.2)	21 (19.6)	0.00
Empathy	18 (38.3)	7 (6.5)	0.00

Table 4. Breaking HIV news in the post-test session, comparison of SPIKES variables based on the person delivering the result

SPIKES Variables	Lab Staff (N=35)	Nurse (N=7)	GP (N=33)	Specialist (N=34)	VCT Staff* (N=45)	*P*.Value
	Number of participants who believed that the criteria have been appropriately met (%)	Number of participants who believed that the criteria have been appropriately met (%)	Number of participants who believed that the criteria have been appropriately met (%)	Number of participants who believed that the criteria have been appropriately met (%)	Number of participants who believed that the criteria have been appropriately met (%)	
Setting (timing)	8 (22.9)	2 (28.6)	2 (6.1)	3 (8.8)	13 (28.9)	0.07
Setting (location)	10 (28.6)	5 (71.4)	15 (45.5)	13 (38.2)	23 (51.1)	0.5
Perception	7 (20)	1 (14.2)	7 (21.2)	5 (14.7)	26 (57.8)	0.00
Invitation(preparing)	10 (28.6)	2 (28.6)	13 (39.4)	6 (17.6)	22 (48.9)	0.05
Invitation (privacy)	25 (71.4)	2 (28.6)	27 (81.8)	16 (47.1)	38 (84.4)	0.00
Knowledge	8 (22.9)	1 (14.3)	7 (21.2)	8 (23.5)	30 (66.7)	0.00
Empathy	2 (5.7)	0 (0)	1 (3)	5 (14.7)	17 (37.8)	0.00

* Either a physician or a counselor in a VCT center

Discussion

The study was conducted to assess the SPIKES criteria while delivering HIV seroconversion news to 154 HIV^+ patients of Imam Khomeini Hospital VCT center. Overall, 71% of the patients had not received pre-test counseling. Among those who had received the HIV news in a counseling center, SPIKES criteria and counseling elements were significantly met. In addition, those with college/university education tend to seek HIV testing away from a VCT center (*P*=0.04). The gender distribution of the participants was also of interest and women consisted 49% of the study participants. This might indirectly imply either a surge in the number of infected HIV or more access to HIV treatment and care among women.

Low coverage of counseling services was seen in the study. Although meeting SPIKES criteria and pre-test counseling elements were significantly higher in those who received HIV news in an HIV counseling and testing center, the number of participants who believed that the criteria were appropriately met ranged from 27.7% to 85.1% for timing and privacy, respectively. This was also seen in the high number of participants with “no comment” as an answer to these questions. Authors believe that this could imply either lack of understanding of the question by the respondent or lack of the component in the counseling service.

High rates of psychiatric symptoms and low attendance to these psychiatric complications upon hearing the HIV news was another finding of the study. Empathic responses from the staff, although observed significantly higher in a counseling center, were only reported by 6.5% and 38.3% of the participants in a

non-VCT and VCT centers, respectively. Similarly, low rate of post-test counseling was reported by the participants.

Training staff for the required and necessary skills for communicating HIV news seems to be a major priority in order to reach better standards in HIV treatment and care. Although, the findings of the current study indicate more appropriate measures in HIV counseling and testing centers, reaching optimal standards still requires further training of the staff. Further expanding of the coverage rates of HIV testing and counseling is another implication of the current study.

The current study was limited to a single VCT center in Tehran. Reaching higher sample sizes and more diverse and systematically random groups could contribute to better understanding and further generalizing the findings of the study. To author's knowledge, the current study was the first to assess the quality and components of HIV counseling session according to SPIKES protocol.

References

1. Fallowfield L, Jenkins V. Communicating sad, bad, and difficult news in medicine. The Lancet. 2004;363(9405):312-9.
2. Buckman R. Breaking bad news: why is it still so difficult? British medical journal (Clinical research ed). 1984;288(6430):1597.
3. Cegala DJ, Lenzmeier Broz S. Physician communication skills training: a review of theoretical backgrounds, objectives and skills. Medical education. 2002;36(11):1004-16.
4. Tavakol M, Torabi S, Lyne OD, Zeinaloo AA. A quantitative survey of intern's knowledge of communication skills: an Iranian exploration. BMC medical education. 2005;5(1):6.
5. Fallowfield L, Jenkins V. Effective communication skills are the key to good cancer care. European Journal of Cancer. 1999;35(11):1592-7.
6. Barnett MM. Effect of breaking bad news on patients' perceptions of doctors. Journal of the Royal Society of Medicine. 2002;95(7):343-7.
7. Crawford AM. Stigma Associated With AIDS: A Meta Analysis1. Journal of Applied Social Psychology. 1996;26(5):398-416.
8. Laryea M, Gien L. The Impact of HIV-Positive Diagnosis on the Individual, Part 1 Stigma, Rejection, and Loneliness. Clinical Nursing Research. 1993;2(3):245-63.
9. Greeff M, Phetlhu R, Makoae LN, et al. Disclosure of HIV status: experiences and perceptions of persons living with HIV/AIDS and nurses involved in their care in Africa. Qualitative Health Research. 2008;18(3):311-24.
10. Mill JE. Shrouded in secrecy: breaking the news of HIV infection to Ghanaian women. Journal of Transcultural Nursing. 2003;14(1):6-16.
11. Wanyenze RK, Hahn JA, Liechty CA, et al. Linkage to HIV care and survival following inpatient HIV counseling and testing. AIDS and Behavior. 2011;15(4):751-60.
12. Baile WF, Buckman R, Lenzi R, et al. SPIKES—a six-step protocol for delivering bad news: application to the patient with cancer. The oncologist. 2000;5(4):302-11.
13. Parker PA, Baile WF, de Moor C, et al. Breaking bad news about cancer: patients' preferences for communication. Journal of Clinical Oncology. 2001;19(7):2049-56.
14. Ptacek J, Ptacek JJ. Patients' perceptions of receiving bad news about cancer. Journal of Clinical Oncology. 2001;19(21):4160-4.
15. Mitsuya H. Telling the Truth to Cancer Patients and Patients with HIV□1 Infection in Japan. Annals of the New York Academy of Sciences. 1997;809(1):279-89.
16. Ishaque S, Saleem T, Khawaja F, et al. Breaking bad news: exploring patient's perspective and expectations. JPMA The Journal of the Pakistan Medical Association. 2010;60(5):407.
17. Cusick L. The process of disclosing positive HIV status: findings from qualitative research. Culture, Health & Sexuality. 1999;1(1):3-18.