

## **Knowledge, Attitude and Practice of First Year Students Regarding HIV/AIDS at SMU**

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### ***Abstract***

*HIV/AIDS has been a global challenge since its advent in the 1980's. The pandemic has even been greater in the third world with Sub-Saharan Africa being hit hard. Ethiopia as one of the countries in the region was not an exception. The country had more than 800,000 people living with the virus with a national HIV/AIDS prevalence rate of 1.5%. Knowledge, attitude and practice of students regarding HIV/AIDS are of paramount importance in the prevention and control of the epidemic. This study tried to assess SMU's freshman students (2013/14 entry) knowledge, attitude and practice regarding HIV/AIDS. The study revealed that the majority of the students have good knowledge, desirable attitudes and good practices concerning the issue. However, 42.5%, 32% and 38.5% of the respondents are found to have no knowledge about the facts that not having sex with CSW and abstinence can prevent oneself from HIV/AIDS and that a healthy looking person can be HIV/AIDS positive, respectively. Undesirable attitude was observed among 49.5% regarding living and working/learning with PLWHA. Similarly, 29.5% of the students disagreed on the preventive role of being loyal to ones sexual partner. Likewise, 36% of them do not believe that anyone can be infected by the virus. Concerning practice, 54.5% of the respondents do not want to be seen holding condoms. Despite the 97.5% agreement of the respondents on the importance of VCT, 58.5% of them had never utilized the service. Unsafe sexual practices such as sex with CSW, sex after alcohol/drug consumption and sex after watching pornography were observed among 7%, 13% and 6.5% of the respondents, respectively.*

**Key words:** HIV/AIDS, CSW, PLWHA, VCT, MSP, knowledge, attitude, practice

## **1. Introduction**

Since its first advent in 1981 in the United States of America, HIV/AIDS has been one of the major global challenges affecting billions of people directly and indirectly. According to UNAIDS (2011) AIDS epidemic update report, there were 34.0 million people living with HIV. The same report also mentioned the occurrence of 2.7 million new HIV infections as well as 1.8 million deaths due to AIDS related sicknesses (MoE, 2013).

The greatest burden of HIV/AIDS is seen in Sub-Saharan Africa where 68% of the people living with HIV/AIDS globally reside. The region also accounts for 70% (1.9 million) of the new infections occurring worldwide (ibid).

In Ethiopia, the first case of HIV/AIDS was reported in 1984 and the first two AIDS cases were treated in 1986 in the capital. In the following years the pandemic has widely spread in the country with its peak occurring in the middle of 1990's. The results of EDHS (2011) indicated that there were 800,000 people living with HIV/AIDS in the country. The report also revealed that 1.5% of the adults aged between 15 and 49 years of age were infected with HIV. The current HIV prevalence rate in the country is 1.9% among females while it is 1.0% among the males. With greater disparities in prevalence rates across various variables, the urban prevalence rate is 4.2% (5.2% for females and 2.9% for males) and the rate in the rural areas is 0.6% (0.8% for females and 0.5% for males (MoE, 2013).

The 2007 CSA census report of Ethiopia reported that 63% of the total population of the country as below 25 years of age. According to some studies, over half of all new infections worldwide occur among young people between the ages of 15 and 24. Every day, 6,000 young people become infected with HIV. Hence, meeting the health and economic needs of the youth of today is found to be critical since they constitute the succeeding generation of a population.

Risky sexual behaviours like unprotected sex, multi sexual partnership, no or inconsistent use of condoms and drug abuse are extremely determinant to the health of adolescents putting them at high risk to HIV/AIDS and other sexually transmitted diseases (STDs). It is reasonably possible to think that University students are educated, inspired, able to practice upon the information they receive and as a result, they are among a low risk population. However, results of previous studies showed that most sexual risk behaviours among College and University students might have been acquired through a period of campus life and hence they are likely to be at the risk of contracting HIV/AIDS. Therefore, preventing the transmission and the acquisition of HIV must focus upon behaviour and behavioural changes among university students and others.

Knowledge is very important to acquiring optimum health. Attitude formation is not essentially a function of the amount of information one receives but a function of how that information was acquired and used. Moreover, increasing knowledge about HIV/AIDS can be a powerful means to foster the development of positive attitudes and building safe practices among young people. Hence, a clear understanding about knowledge, attitude and practices (KAPs) among any population is very important to control and/or prevent the spread of HIV. That is why it is sensible to conduct this study among St. Mary's University (SMU) students in order to discover their knowledge, attitude and practices regarding HIV/AIDS. Thus, it is with this intention that the study intends to examine first year students' knowledge, attitude, and practices regarding HIV/AIDS in SMU.

## **2. Statement of the Problem**

HIV/AIDS is one of the major contemporary global challenges and problems that the human race has ever faced. The challenge is extremely severe in the third world. Ethiopia, as one of the third world countries in Sub-Saharan Africa, is among those states that have been hit hard by the problem. Hence, the country has made the prevention and control of

HIV/AIDS part of its national policies and programs regarding HIV/AIDS.

One of the strategies that are meant to prevent and control HIV/AIDS is raising citizens' awareness about the causes, modes of transmission and prevention of HIV/AIDS, changing their attitudes towards those that could positively affect the prevention and control of HIV/AIDS and promoting their practices in applying the prevention and control strategies. Studies conducted in different areas on the issue indicate that there exists a gap in peoples' knowledge, attitude and Practice regarding HIV/AIDS.

As part of the general population, assessing students' Knowledge, Attitude and Practice on issues related with HIV/AIDS in the university is of a paramount importance in recognizing the students' level of knowledge, attitude and practice as well as the existing gaps. This would help the university to take possible measures to adjust the existing situations. It is with this intention that this study has been conducted.

### **3. Research Questions**

The research tries to answer the following basic research questions.

1. How far are first year regular students' knowledgeable about HIV/AIDS?
2. What are the attitudes of freshman students on matters related with HIV/AIDS?
3. How far do first year students' implement their knowledge and realize their attitude in the prevention and control of HIV/AIDS?
4. What are the existing gaps in the students' knowledge, attitude and practice regarding HIV/AIDS?

### **4. Objectives of the Study**

The ultimate objective of this study is to explore the knowledge, attitude and practice of SMU's freshman students regarding HIV/AIDS and examine existing gaps in their KAP as well as to assess needs for information, education and communication for freshman students of the

university on HIV/AIDS. In this regard, the research tries to address the following specific objectives.

- Assessing students' level of knowledge about the causes, modes of transmission and control/prevention of HIV/AIDS;
- Identifying existing knowledge gaps regarding HIV/AIDS among students;
- Identifying students' attitude concerning issues related with HIV/AIDS;
- Assessing students' practice regarding the prevention and control of HIV/AIDS; and
- Suggesting intervention strategies/recommendations in light of local circumstances and other influencing factors to based on the findings of the research that could be applied to properly address the identified issues.

## **5. Research Design and Methodology**

This is a descriptive research that tries to explore and describe first year students' KAP concerning HIV/AIDS.

### **5.1. Sample Population**

A total of 200 students were randomly selected from freshman students (2013/14 entry) of all the faculties of the university. Hence, every student had equal chance of being included in the study. The samples are from the regular division and this was done deliberately to see how far these students are familiar with the causes, modes of transmission and control/prevention of HIV/AIDS. First year students were made the target of the study to make the effect of interventions that will be introduced based on the findings of the study easily measurable/comparable after conducting impact assessment after two years of implementation.

## **5.2. Data Sources**

Data for this study was gathered from primary and secondary sources. Primary data was collected from the sample population through a structured self-administered questionnaire that contained three parts of objective questions. The first part was used to assess students' level of knowledge by using eleven true or false questions. The second part contained nine questions of agree/disagree options to see students' attitude. In the last part, nine yes or no questions were included to examine students' practice concerning HIV/AIDS. Likewise, secondary data was collected from different published and unpublished documents including internet sources that are able to provide relevant information to further substantiate the study.

## **5.3. Data analysis: scoring**

For knowledge, each right response was given a score of 1 while a wrong response was scored 0. Total knowledge scores ranged between 0.45 - 1. Taking the mean score as a landmark, Knowledge scores from 0 to 0.77 are considered as not- knowledgeable while knowledge scores more than 0.77 was considered as knowledgeable regarding HIV/AIDS. Attitude towards HIV/AIDS was assessed using a 10-item questionnaire. Attitude scores ranged between 0.3 and 1. And scores between 0 and 0.76 were considered as unfavourable attitude, and scores ranging from 0.76 to 1 were considered as favourable attitude based on the mean score. Practice towards prevention of HIV/AIDS and risk of HIV infection was assessed using a nine-item questionnaire where the scores were ranging from 0.44 - 1.00. Scores less than 0.76 was considered as poor practice where as practice scores of greater than 0.75 was considered as good practice.

## **6. Significance of the Study**

The study is believed to provide some information about freshman students' knowledge, attitude and practice regarding HIV/AIDS to the university and other stake-holders. It will specifically serve as an input to the HIV/AIDS mainstreaming into the university's curriculum that is undergoing.

## 7. Data Presentation and Analysis

### 7.1. Population Characteristics

Of the 200 sample students taken for this research, 101(50.5%) students were from the accounting department. The remaining students were 34 (17%) from marketing, 32 (16%) from Computer Science, 29 (14.5%) from management and 5 (2.5%) from tourism departments. Concerning their gender, 88 (44%) respondents were male. In their marital status, only 11 (5.5%) were married. The majority of the respondents, i.e. 168 (84%) students were of age 20-24.

### 7.2. Students' Knowledge Regarding HIV/AIDS

The students' level of knowledge regarding HIV/AIDS was assessed by using a part in the questionnaire that contained 11 objective questions of true or false type. The questions tried to explore how far the students are knowledgeable on issues related with HIV/AIDS with greater emphasis on matters like the nature of HIV/AIDS, its modes of transmission and prevention & control.

*Table 1: Freshman Students' Knowledge Regarding HIV/AIDS*

S.N	Knowledge based question items	True		False	
		Freq	%	Freq	%
1	There is no difference between HIV and AIDS	42	21	158	79
2	AIDS is a curable disease	40	20	160	80
3	HIV can be transmitted by sharing meals, clothes and latrines	13	6.5	187	93.5
4	Genital sores increase the risk of getting infected with HIV	152	76	48	24
5	Proper use of condom minimizes the risk of HIV/AIDS	176	88	24	12
6	Not having sex with commercial sex workers minimizes the risk of contracting HIV/AIDS	115	57.5	85	42.5
7	Abstinence is one of the preventive ways of HIV/AIDS	136	68	64	32
8	HIV positive people may or may not show any sign and symptom	123	61.5	77	38.5
9	ART drugs should be taken trough out one's life time	152	76	48	24
10	Mosquito bite transmits HIV/AIDS	62	31	138	69
11	Sharing sharp tools and needles/syringes may expose us to HIV/AIDS	190	95	10	5

Mean score= 0.77 (max. 1, min. 0.45) Overall knowledge status: Knowledgeable = 168 (84%); not knowledgeable = 32 (16%)

As can be seen in the above table, the mean knowledge score of study participants about HIV/AIDS was found to be 0.77 and their level of knowledge ranged from 0.45 to 1.0. Of the total respondents, the majority, i.e. 79% and 80% of the respondents, know about the fact that HIV and AIDS are different and that HIV is a non-curable disease, respectively. With respect to the causes and modes of transmission of the virus, 152 (76%) of participants knew that genital sores could potentially increase the risk of getting infected with the virus (HIV). The majority (93.5%) of the respondents replied that HIV cannot be transmitted through sharing of meals, clothes and latrine. Likewise; 69% of the respondents know that mosquito bite does not transmit HIV. Similarly, 95% of the participants are found to be knowledgeable about the fact that sharing of sharp tools and needles/syringes with others would increase the risk of getting infected with the virus.

Concerning modes of prevention and control, 88% of the respondents agree that proper use of condom can reduce the risk of contracting HIV. Likewise; 57.5% and 68% of the respondents know that not having sex with commercial sex workers and abstinence from sex are good ways to prevent oneself from contracting the virus, respectively. Here, it can be seen that a good part of the study participants i.e. 42.5% and 32% of them do not know these facts, respectively.

It was also revealed that 61.5% of the respondents know that an HIV positive person may or may not show any sign and symptom. This indicates that the students know the fact that not all healthy looking people are actually free from HIV/AIDS. Concerning ART (anti-retroviral therapy) and its duration, 76% of the respondents were found to be knowledgeable about the fact that it has to be taken throughout one's lifetime.

### **7.3. Respondents Attitude towards HIV/AIDS**

Students' attitude towards HIV/AIDS was assessed with part of the questionnaire that contained 10 questions of agree/disagree type. The questions asked respondents about their roles in the prevention and control of HIV/AIDS, risk behaviours, modes of transmission of the



virus, condom use, and other related issues and thereby tried to assess the students' attitude.

*Table 2: Participants Attitude towards HIV/AIDS*

S N	Attitude based question items	Agree		Disagree	
		Freq.	%	Freq u	%
1	You are one of the role players in the fight against HIV/AIDS	166	83	34	17
2	It is difficult to check/control the spread of HIV/AIDS	70	35	130	65
3	Having multiple sexual partners increases the risk of contracting HIV/AIDS	141	70.5	59	29.5
4	Use of condom is almost an insult to your sexual partner	32	16	168	84
5	Anyone can get infected with HIV/AIDS	128	64	72	36
6	Even if you have only one sexual partner, you can still be infected with HIV/AIDS	170	85	30	15
7	Anyone can get condom anywhere and any time	162	81	38	19
8	I'm willing to live and work/learn together with someone who is HIV positive	101	50.5	99	49.5
9	It is useless to educate or train people who are HIV positive	30	15	170	85
10	Utilizing VCT is important to control the spread of HIV/AIDS	192	97.5	5	2.5

Meanscore=0.76(max.1.mim.0.3)

Overall attitude status: - Favourable = 165 (82.5%); unfavourable = 35 (17.5%)

Accordingly, it was found that 83% of the respondents agree that they are important role players in the fight against HIV/AIDS and believe that they could have some contribution in the prevention and control of the spread of the virus. Similarly, 65% of the respondents agree that it is possible to check/control the spread of the pandemic, with their counterparts claiming that it is difficult to control the epidemic. The majority of the respondents, 70.5%, have agreed that having multiple sexual partners could increase the risk of getting infected with HIV. Regarding students' attitude towards accessibility and use of condoms, 81% and 84% of the respondents have shown desirable attitudes and they believe that they can get condoms anywhere and anytime and that using condom is not against the dignity/respect of one's sexual partner, respectively.

Regarding the students' attitude towards the degree of exposure to the virus, 85% of the respondents agree that they can be at risk of getting infected with the virus even if they are loyal to their partner (have only one sexual partner). Similarly, 64% of the respondents agree that anyone can be infected by the virus showing the fact that no one is free from the risk of HIV/AIDS.

Concerning the students' attitude towards people living with HIV/AIDS (PLWHA), it was learnt that only 50.5% of the respondents were found to be willing to live and work/learn with people who are HIV-positive. Here, a significant portion of the respondents, i.e. 49.5% of the respondents do not have the desired attitude towards living and working/learning with people who are HIV-positive. However, the lion's share of the respondents (85%) has demonstrated their agreement regarding the importance of educating and training people living with the virus.

Respondents' attitude towards the utilization of VCT was found to be significantly high with 97.5% of them showing their agreement on the importance of VCT in the prevention and control of HIV/AIDS.

#### **7.4. Respondents' Practice Regarding Prevention of HIV/AIDS**

The assessment of students' practice regarding HIV/AIDS was done by incorporating nine questions of a yes/no response in the survey questionnaire. The questions tried to explore how far that the respondents apply their knowledge and desirable attitudes towards the prevention and control of HIV/AIDS.

*Table 3: Participants' practice regarding HIV/AIDS*

Sr.N <sup>o</sup>	Practice based question items	Yes		No	
		Frequency	%	Frequency	%
1	Have you ever seen condom?	163	81.5	37	18.5
2	Are you confident to be seen holding condom?	91	45.5	109	54.5
3	Are you willing to learn through demonstration about condom use?	139	69.5	61	30.5
4	Have you ever committed unsafe sex?	27	13.5	173	86.5

5	Do you have more than one sexual partner?	27	13.5	173	86.5
6	Have you ever had sex with commercial sex workers?	14	7	186	93
7	Have you ever had sex after having alcohol and/or drugs?	26	13	174	87
8	Have you ever had sex after watching pornographic films?	13	6.5	187	93.5
9	Have you ever utilized VCT?	83	41.5	117	58.5
Mean score = 0.76 (max. 1, min. 0.44)					
Overall practice: - good practice = 124 (62%); poor practice = 76 (38%)					

It was learnt from the study that 81.5% of the respondents have seen condom. However, it is only 45.5% of the respondents who are found to be confident on being seen holding condoms. On the other hand, 69.5% of the respondents are willing to practically teach/learn about condom use.

Regarding practices towards the prevention and control of HIV/AIDS, it was learnt that 13.5% of the respondents had unsafe sex and/or multiple sexual partners. Likewise, it is only 7% of the total number of respondents who reported as having ever had sex with commercial sex workers. By the same token, 13% and 6.5% of the respondents have reported that they have ever had sex after taking alcohol and/or drugs and after watching pornographic movies, respectively.

With respect to the utilization of VCT, a relatively lower result was found. As indicated in table 3, it is only 41.5% of the respondents who have reported as having tested for HIV/AIDS voluntarily. The majority of the respondents (58.5%) have reported that they have never been tested for the virus despite their positive attitude towards VCT and its role in the prevention and control of HIV/AIDS.

## **8. Discussion**

### **8.1. Knowledge**

As indicated in table 1, 84% of the respondents found to be knowledgeable about HIV/AIDS. Comparable reports were found in

Gondar which stated that 86.3% and 85.4% of knowledgeable score towards HIV/AIDS in tertiary level educational institutions (Shiferaw , Alemu , Girma et al. 2011) ; and high school students in Addis (Yalew , Shiferaw et.al 2013) respectively. Moreover, though the degree of awareness varies, reports from Nigeria Aleude , Imhonde , Maliki , Alutu (2005) stated a good level of knowledge about HIV/AIDS among tertiary school students.

The majority (79%) of students participated in this study had information on the difference between HIV and AIDs. Moreover, 80 % of participants stated that AIDS as a non-curable disease. These findings are in line with the behavioural surveillance conducted in 2002 by the Ethiopian Ministry of Health. Similar findings (81.9% and 90.3%, respectively) were reported in a study conducted in Bahir Dar University. Furthermore, similar comparable result also reported in studies done in Gondar (Shiferaw, Alemu, Girma et al. 2011); and Ethiopian Civil Service College (Gile, 2013). The preventive role of not having sex with commercial sex workers, sexual abstinence and correct use of condom from HIV transmission were not recognized by 42.5 %, 32% and 12% of participating students, respectively.

There were also some misconceptions observed in this study that 6.5% and 5% of the study participants stated that sharing of meals, clothes and latrine with AIDS patients would transmit HIV and that sharing sharp tools and needles/syringes does not transmit HIV, respectively. This indicates that students need more information and education about some aspects of preventive methods of HIV/AIDS and routes of transmission. Again, similar misconceptions have been reported in other studies (Shiferaw, Alemu, Girma et al. 2011; Gashaw, Afework, Yigzaw , et al.20110 Gile, 2013).

## **8.2. Attitude**

Although it is everyone's consensus that all students need to have a favourable/desirable attitude towards the prevention and control of HIV/AIDS, it is 82.5 % of the study population that is found to have desirable attitude. Similar findings were reported in the studies conducted

among Bahir Dar University students as well as in studies conducted in Gonder (Addis , Yalew , Shiferaw . et.al 2013; Shiferaw , Alemu , Girma et al. 2011).

The majority of respondents (83% and 65%) believed that students are very important stake-holders to prevent HIV/AIDS and it is possible to prevent/control HIV/AIDS transmission, respectively. This is interesting and it should be encouraged as the involvement of youths especially students is of paramount importance in a society's effort to create behavioural change to prevent HIV/AIDS in the community. However, the observed gaps need to be addressed properly to achieve a better awareness levels.

It was learnt from the study that 36% and 29.5% of the respondents had undesirable attitude towards the fact that everyone is at the risk of HIV/AIDS and that multiple sexual partnership increases the risk of contracting HIV/AIDS, respectively. This dictates that more work should be done to influence students' attitude in these areas.

Almost half of the respondents (49.5%) replied that they are not willing to live and work/learn with people who are HIV-positive. In addition, 15% of the respondents showed their disagreement on the provision of access for education and training for people living with HIV/AIDS. This implies that a lot has to be done towards averting such unfavourable/undesirable attitudes regarding PLWHA. Regarding the Utilization of VCT, it was reported that 97.5% of the respondents had favourable attitude.

### **8.3. Practices**

The study revealed that 62% of respondents had good practice towards the prevention and control of HIV/AIDS. A study conducted on the KAPs of Bahir Dar University students showed that 41.7% of the respondents had good practice (Wendmagn , Bayeh , Mulat , 2014), and another study done in Gonder showed that 75% of students had good practice Shiferaw , Alemu , Girma et al. (2011). In this regard, the finding in SMU is found to be encouraging. With in mind, however, more

has to be done to further raise students' good practices with regard to the prevention and control of the spread of the pandemic.

Concerning the influence of alcohol and drug as well as pornographic films on risky behaviours, it was learnt from the study that 13% and 6.5% of the respondents had sex after consuming alcohol and/or drugs and after watching pornographic films, respectively. Similarly, 13.5% of the respondents had multiple sexual partners and another 7% had sex with commercial sex workers (CSWs) indicating that such risky behaviours can increase the students' risk of acquiring HIV/AIDS.

Regarding the utilization of VCT, the result was found to be very far from the students' attitude towards the service with 58.5% of the students reporting that they never utilized VCT. Unlike the 97.5% desirable attitude towards the importance of VCT in the fight against HIV/AIDS, it is only 41.5% of the respondents who actually utilized the service.

## **9. Conclusions and Recommendations**

This study sought to explore the knowledge, attitude and practices of first year students regarding HIV/AIDS at SMU. KAPs surveys are important tool for HIV prevention and control. In this regard, the study revealed that there exists a relatively higher level of knowledge, desirable attitude and good practices on matters regarding HIV/AIDS of 84%, 82.5% and 62%, respectively. The study highlighted some misconceptions about HIV prevention, and risky sexual practices, which need to be addressed. Accordingly, the following conclusions and recommendations are drawn.

### **9.1. Conclusion**

Taking the mean scores of knowledge, attitude and practice as a dividing line, it was found that:-

- 84% of the respondents are knowledgeable about HIV/AIDS;
- 82.5 % of the study population has desirable attitude;
- 62% of respondents had good practice towards HIV/AIDS.

- The preventive role of not having sex with commercial sex workers, sexual abstinence and correct use of condom from HIV transmission were unrecognized by 42.5 %, 32% and 12% of participating students, respectively.
- 6.5% and 5% of study participants stated that sharing of meals, clothes and latrine with AIDS patients would transmit HIV and that sharing sharp tools and needles/syringes does not transmit HIV, respectively;
- 31% of the respondents are found to have knowledge gaps in the modes of transmission of the virus replying that mosquitoes bite transmit the virus. Similarly, 38.5% of them also do not know that healthy looking people can be HIV positive.
- More than 20% of the respondents do not know that HIV and AIDS are different, AIDS is non-curable and that genital sores can increase the risk of HIV/AIDS.
- 83% and 65% believed that students are very important to prevent HIV/AIDS and it is possible to prevent HIV/AIDS transmission, respectively. Here, 35% of the respondents do not believe that HIV/AIDS can be controlled.
- 36% and 29.5% of the respondents had undesirable attitude towards the fact that everyone is at the risk of HIV/AIDS and that multiple sexual partnership increases the risk of contracting HIV/AIDS, respectively.
- Undesirable attitude was observed on the majority of the respondents with 49.5% of them replying that they are not willing to live and work/learn with people who are HIV-positive and 15% of the them disagreeing on the provision of access for education and training for PLWHA;
- Even if 97.5% of the respondents had positive attitude towards VCT, it was only 41.5% of them who actually utilized the service;

- significant proportion of the respondents (54.5%) are found to have no confidence on being seen holding condoms;
- although it seems low in percentage points, the proportion of those who had sex after consuming alcohol/drug and after watching pornographic movies is relatively high;

## **9.2. Recommendations**

- The university should further strengthen its efforts towards alleviating the HIV pandemic through GHAPCO;
- The identified gaps in students' knowledge, attitude and practice should be filled through the curriculum mainstreaming activities that the university has been undertaking;
- Utilizing potentially advantageous forum where students can be reached in groups like the Friday talk show of the University to discuss on matters regarding HIV/AIDS with specific emphasis on issues that are identified as weak in the study.

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