# Assessment Knowledge and Attitudes of Baghdad University Students' toward Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome

# تقييم معارف واتجاهات طلبة جامعة بغداد نحو فيروس نقص المناعة البشري/الإيدز

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**المستخلص:**

**الهدف:** لتقييم معارف واتجاهات طلبة جامعة بغداد نحوفيروس نقص المناعة البشري/ الايدز, واكتشاف العلاقة بين معارف واتجاهات طلبة جامعة بغداد وبعض المتغيرات الاساسية مثل ( الجنس, الحالة الاجتماعية والاقتصادية, الفرع الدراسي).

**المنهجية:** استخدمت دراسة وصفية تحليلية لتقييم معارف واتجاهات طلبة جامعة بغداد نحو فيروس نقص المناعة البشري/الايدز. وقد أجريت الدراسة من (١ تشرين الثاني ٢٠١٢ الى ١٥ تموز ٢٠١٣) . تم اختيار عينة غير احتمالية (عينة هادفه) من ٤٠٠ طالب (ذكور-١٣٨ وإناث-٢٦٢) من أربع كليات وكانوا في الصف الرابع, استخدمت طريقة احتمالية (عشوائية طبقية) لاختيار قسم الدراسة في أربع كليات في جامعة بغداد . وقد تم جمع البيانات لهذه الدراسة من خلال تقنية االتعبئة الذاتية بأستخدام الاستبانه التي صممت من قبل الباحثه. تم تحديد الصلاحية من خلال لجنة مكونة من (١٦) خبيرا وتحديد مصداقية الاستبانه من خلال الدراسة التجريبية.

**النتائج:** أظهرت نتائج الدراسة الحالية أنه غالبية عينة الدراسة كانت من الإناث ( ٦٥.٥٪)، (٤٥. ٪) منهم في سن ال ٢٢ عاما ، وغالبيتهم (٨٥.٨٪) غير متزوجين (اعزب)، نصف العينة (٥٠.٢٪) من الفرع العلمي، (٣٢٪) من قسم اللغة الإنكليزية,الغالبية العظمى منهم ( ٩٢.٨٪) يسكنون في المناطق الحضرية، غالبية العينة كانوا من ذوي الدخل المتوسط (٤١ %) و (٤١.٥٪) من الدخل العالي. لا يتأثر تقييم المعرفة من قبل الخصائص الديموغرافية ماعدا (فرع الدراسة، القسم، وكذلك مهنة الوالد). كما أظهرت النتائج آن معلومات الطلبة نحو مرض الإيدز كانت جيدة/ او كافية. أما بخصوص اتجاهاتهم تجاه المرضى المصابين بالإيدز كانت سلبية.

**التوصيات:** أوصت الدراسة إلى زيادة الوعي للطلبة من خلال وسائل الإعلام حول مخاطر هذا المرض وكيفية الوقاية منه. زيادة المحاضرات والمناقشات نحو مرض فيروس نقص المناعة البشري/الإيدز التي يمكن ان تزيد من معلومات الطلبة.

## Abstract:

**Objective(s):** To assess Baghdad University students' knowledge and attitudes toward HIV/AIDS, and to find out the relationship of Baghdad University students' knowledge and attitudes with certain variables (gender, socioeconomic status, field of study).

**Methodology:** A descriptive analytic study was used to assess the knowledge and attitudes of Baghdad University Students' toward HIV/AIDS. The study was conducted (November 1st 2012 to July 15th 2013). A non-probability (purposive sample) of 400 students (males-138 and females-262) were selected from four colleges and they were in the fourth class, a probability (stratified random) method was used to select four colleges at University of Baghdad as a study setting. The data was collected for the present study through the self-filling technique by using the questionnaire that designed by the researchers. Validity through a panel of (16) experts and the reliability of the questionnaire is determined through the pilot study.

**Results:** The findings of present study revealed that the majority of the study samples were female (65.5%), (45.0%) of them were at age 22 yrs. the majority of them (85.8%) were unmarried (single), (50.2%) of them were from scientific field, (32%) of them were selected from English language department, the vast majority (92.8%) of them were urban residency, the majority of them (41.5%) were from moderate & (41.0%) were from high socio economic class. The assessment of knowledge is not affected by demographic characteristic except (field of study, and department, as well as occupation of student's father). Also the results showed that students' knowledge about AIDS was good/ or adequate, as for their attitudes toward patients with AIDS were negative.

**Recommendations:** The study recommended to increased students' awareness through the mass media about the risks of this disease and how to prevent it. Increase lectures and discussions about HIV/AIDS that increase students' information.

**Keywords: Assessment, Knowledge, Attitudes, University students', HIV/AIDS.**

**Introduction:**

Youth is a transitional period when sexual fantasies are replaced by sexual experiences, and the boundaries of sexual life start to expand. The young are at risk for health problems caused by unsafe sexual intercourse such as sexually transmitted infections (STI), including HIV infection, and unintended pregnancy [(1)]. The HIV pandemic has become one of the most serious infectious disease challenges to public health. Entering its' third decade, virtually every country is affected by it [(2)]. HIV/AIDS has killed more than 25 million people since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history. The total number of people living with the virus in 2008 was more than 20% higher than the number in 2000 and roughly 3-fold higher than in 1990. Every day, over 6800 persons become infected with HIV and over 5700 die from AIDS, mostly because of inadequate access to HIV prevention and treatment services [(3)]. Injuries HIV occurred in Iraq at first time were in 1986 as a result of a number of Iraqi hemophiliacs patients had received blood factor (VIII) from France which is contaminated with HIV virus. At that time, Iraq had no HIV program for investigation and testing. So that Ministry of Health had established the first National AIDS program in Iraq. It is worth mentioning that Iraq was still low-endemic countries for AIDS, although the number of cases surviving until the end of 2012 is amounted to [72] infected registered among Iraqis [(4)].

**Methodology:**

A descriptive analytic study was used to assess the knowledge and attitudes of Baghdad University Students' toward HIV/AIDS. The study was conducted (November 1st 2012 to July 15th 2013). A non-Probability (Purposive sample) of 400 students (Males-138 and Females-262) were selected from four colleges and they were in the fourth class and probability (Stratified random) method was used to select four colleges at University of Baghdad as a study setting which include: College of Arts, College of Education for pure science/Ibn Al-Haytham, College of Administration and Economics, College of Ibn-Al Rushd Education. The process of selection was, the names of all colleges include (scientific and humanity) colleges except medical colleges were written on pieces of paper and put them in a jar to be mixed together. Then, each college had withdrawn its name randomly from the jar and as well as the same way the department was selected from each selected college. The purpose of this study was to assess knowledge and attitudes of Baghdad University students' toward HIV/AIDS, and to find out the relationship of Baghdad University students' knowledge and attitudes with certain variables (gender, socioeconomic status, field of study). Through the review of related literature and previous studies, the investigator constructed the questionnaire format, which comprised of four main parts, **Part One:** Socio-demographic characteristics, which include the following variables (age, gender, field of study, department, marital status, education level of father, education level of mother, occupation of father, occupation of mother, residency, socioeconomic status, and sources of students' knowledge about AIDS), **Part two:** knowledge of students about AIDS, it comprise of three domains which are: **Domain I:** General knowledge of students about HIV/ AIDS. It includes (3) items, total score is (3) marks and they are responded by Yes, (correct answer, scored 1 and incorrect 0), and No, (correct answer 1 and incorrect answer, scored 0). **Domain II:** Students' knowledge about the methods of transmission of HIV/AIDS. It includes (13) items, total score is (13) marks and they are responded by Yes, (correct answer, scored 1 and incorrect 0), No, (correct answer 1 and incorrect answer 0). **Domain III:** Students' knowledge about ways of preventing HIV/AIDS. It includes (3) items, total score is (3) marks and they are responded by Yes, (correct answer, scored 1), No, (incorrect answer 0), **Part three:** Students' attitudes toward people with AIDS, it comprise of (5) items, total score is (5) marks and they are

responded by Yes, (correct answer, scored 1), No, (incorrect answer, scored 0). Data was collected through utilization of the study instrument (questionnaire format) for the period from (31th January to the 30th of April in 2013). 10-15 minutes was consumed to fill the questionnaire. Evaluation the knowledge, attitude toward AIDS for the study group, was based on mean scores (MS) cut off point and as follows:

**Knowledge and Attitudes:**

Cut off point (0+1) / 2 = 0.5

Mean of Score above 0.5 means adequate knowledge and positive attitudes (pass).

Mean of Score below 0.5 means inadequate knowledge and negative attitudes (failure). The knowledge level assessed according to the followings: Too low (0-24), Low (25-49), Intermediate (50-74), High (75-100).

Data was analyzed through the application of descriptive and inferential statistical approaches, and all the statistical procedures were tested at P≤0.05.

**Results:**

**Table1.** Distribution of the Study Sample According to the Socio-Demographical Characteristics with Comparison Significant (N=400).

| Part One/ Socio-Demographics Variables | | Freq. | Percent | Cum. Percentage | C.S. (*) P-value |
|---|---|---|---|---|---|
| Age (yrs.) | 21 - | 76 | 19.0 | 19.0 | $\chi^2$= 233.08 P=0.000 HS |
| | 22 - | 180 | 45.0 | 64.0 | |
| | 23 - | 106 | 26.5 | 90.5 | |
| | 24 - | 35 | 8.8 | 99.3 | |
| | 25 - | 3 | 0.8 | 100 | |
| | Mean ± SD | 22.27 ± 0.89 | | | |
| Gender | Male | 138 | 34.5 | 34.5 | Binomial P=0.000 (HS) |
| | Female | 262 | 65.5 | 100 | |
| Field of study | Scientific | 201 | 50.2 | 50.2 | Binomial P=0.960(NS) |
| | Humanity | 199 | 49.8 | 100 | |
| Department | Chemistry | 100 | 25.0 | 25.0 | χ2= 16.260 P=0.001 HS |
| | Statistics | 101 | 25.3 | 68.0 | |
| | Arabic Language | 71 | 17.8 | 42.8 | |
| | English Language | 128 | 32.0 | 100 | |
| Marital Status | Single | 343 | 85.8 | 85.8 | $\chi^2$= 804.68 P=0.000 HS |
| | Married | 53 | 13.3 | 99 | |
| | Separated | 1 | 0.3 | 99.3 | |
| | Divorced | 3 | 0.8 | 100 | |

**Table 1. Continues**

| | | | | | |
|---|---|---|---|---|---|
| Educational level of Father | Illiterate | 9 | 2.3 | 2.3 | $\chi^2$= 201.83 P=0.000 HS |
| | Reads & write | 23 | 5.8 | 8.0 | |
| | Primary School | 29 | 7.3 | 15.3 | |
| | Intermediate School | 48 | 12 | 27.3 | |
| | Secondary School | 79 | 19.8 | 47.0 | |
| | Institute | 75 | 18.8 | 65.8 | |
| | College or above | 137 | 34.3 | 100 | |
| Educational level of Mother | Illiterate | 14 | 3.5 | 3.5 | $\chi^2$= 77.2558 P=0.000 HS |
| | Reads & write | 28 | 7.0 | 10.5 | |
| | Primary School | 59 | 14.8 | 25.3 | |
| | Intermediate School | 62 | 15.5 | 40.8 | |
| | Secondary School | 68 | 17.0 | 57.8 | |
| | Institute | 79 | 19.8 | 77.5 | |
| | College or above | 90 | 22.5 | 100 | |
| Occupation of Father | Employed | 167 | 41.8 | 41.8 | $\chi^2$= 115.18 P=0.000 HS |
| | Free job | 90 | 22.5 | 64.3 | |
| | Retired | 123 | 30.8 | 95 | |
| | Unemployed | 20 | 5.0 | 100 | |
| Occupation of Mother | Employed | 104 | 26.0 | 26.0 | $\chi^2$= 384.94 P=0.000 HS |
| | Free job | 5 | 1.3 | 27.3 | |
| | Retired | 33 | 8.2 | 35.5 | |
| | Unemployed/ Housewife | 258 | 64.5 | 100 | |
| Residency | Rural | 29 | 7.3 | 7.3 | Binomial P=0.000 (HS) |
| | Urban | 371 | 92.7 | 100 | |

**Freq.= Frequency; Cum.= Cumulative; C.S.= Comparison Significant.**

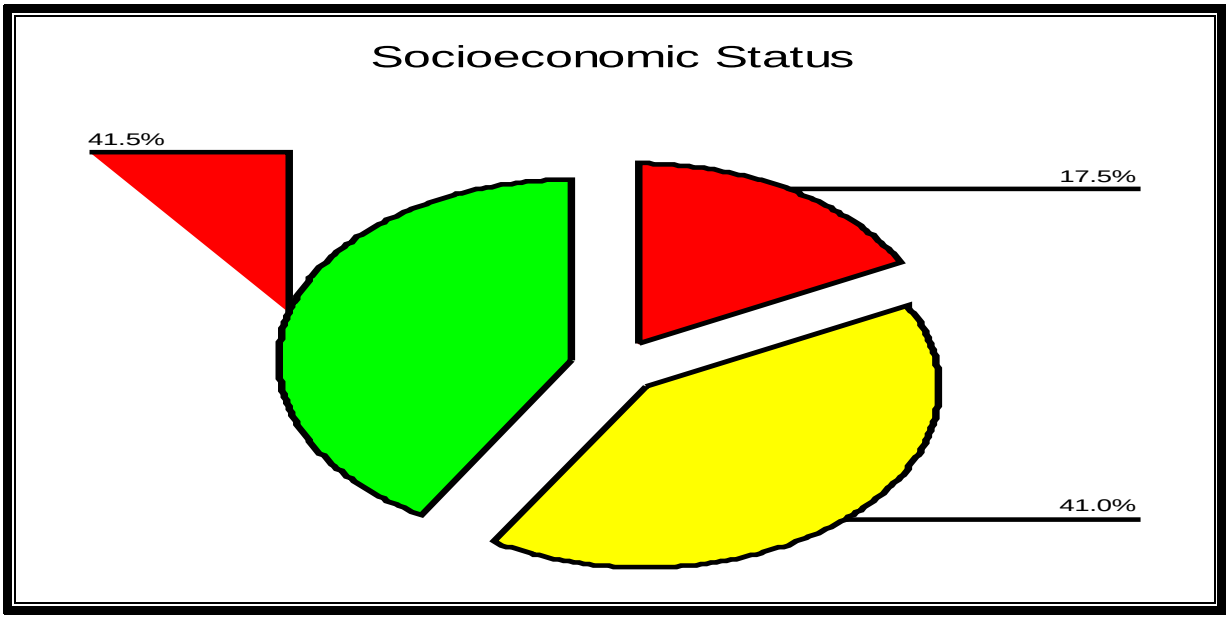


**Figure1.** Pie Chart for the Socioeconomic Status of the Study Sample

**Figure1.** Represents graphically the percentages of the preceding percentages of the three levels (Low, Moderate, and High).

This table shows the observed frequencies, percents of socio-demographical characteristics variables with their comparison significant, the results had indicated that there has been a highly significant at P<0.01 were reported among different studied levels of all variables except with the ''field of study'' variable which was recorded a non-significant different at P>0.05. The results of this table indicate that the

majority of the sample are aged (22) years (45.0%), most of them were female (65.5%), half of them from scientific field (50.2%), (32.0%) were from English language department , (85.8%) were unmarried, students father (34.3%) & mother (22.5%) educational level (college or above) respectively, (41.8%) of students father was employed and the most of student's mother were housewives (64.5%), the majority of the students was urban residency (92.8%), the majority of them (41.5%) were from high & (41.0%) from moderate socio economic class.

**Table2.** Distribution of the Study Sample According to Knowledge Sources about HIV/AIDS (N=400).

| Knowledge Sources | Freq. | Percentage |
|---|---|---|
| 1-Mass media | 335 | 83.8 |
| 2-Friends and Relatives | 169 | 42.3 |
| 3- Scholastic Curriculum | 258 | 64.5 |
| 4-Health Workers | 79 | 19.8 |

**Freq= Frequency.**

This table shows the observed frequencies, percent's of "knowledge sources" about HIV/AIDS. The highest percentage (83.8%) was accounted from mass media which include (television, radio, newspapers and magazines, internet) and the lowest percentage (19.8%) from health workers.

**Table3.** Knowledge and Attitudes of Baghdad University Students' toward HIV/AIDS

| Main Domains& Part three | No. | GMS | One Sample t-test (*) | Ass. |
|---|---|---|---|---|
| General knowledge of students about AIDS | 400 | 0.606 | 0. 000 HS | Pass |
| Students' knowledge about methods of transmission of AIDS | 400 | 0.614 | 0. 000 HS | Pass |
| Students' knowledge about AIDS prevention methods | 400 | 0.650 | 0. 000 HS | Pass |
| Knowledge | 400 | 0.623 | 0. 000 HS | Pass |
| Students' attitudes toward people with AIDS | 400 | 0.283 | 0. 000 HS | Failure |

**(*) Testing value is the Cutoff point (0.50); GMS= Global Mean Score; Ass.= Assessment.**

This table shows the summarizes of the subjects responding at the main domains and part three that are done by using the mean of score for the initial responding of questionnaire's items at each individuals (student), global mean of score (GMS), comparison significant through the testing one sample t-test according to cutoff point (0.50), and finally assessment due to under/upper cutoff point. Subjects' responses of knowledge of main domains, shows pass assessment and which accounted (0.623), since their global mean of score (GMS), were upper cutoff point. Subject's responses of students' attitudes toward people with AIDS show failure assessment and which accounted (0.283), since their global mean of score (GMS), were under cutoff point.

**Table 4.** Association Socio- Demographica Characteristics Variables with (Knowledge) Assessment

| Main Domain | Demographical Characteristics X Ass. Status | Contingency Coefficients | Approx. Sig. | C.S.(*) |
|---|---|---|---|---|
| Knowledge | Age Groups | 0.075 | 0.688 | NS |
| | Gender | 0.075 | 0.134 | NS |
| | Field of study | 0.212 | 0.000 | HS |
| | Department | 0.233 | 0.000 | HS |
| | Marital status | 0.101 | 0.249 | NS |
| | Educational level of Father | 0.147 | 0.181 | NS |

**Table 4. Continues**

| | | | | |
|---|---|---|---|---|
| | **Educational level of Mother** | **0.097** | **0.707** | **NS** |
| | **Occupation of Father** | **0.140** | **0.047** | **S** |
| | **Occupation of Mother** | **0.111** | **0.176** | **NS** |
| | **Residency** | **0.071** | **0.156** | **NS** |
| | **Socioeconomic Status** | **0.085** | **0.230** | **NS** |

**(*) NS: Non Sig. at P>0.05; S: Sig. at P<0.05; HS: Highly Sig. at P<0.01; C.S.= Comparison Significant; Approx. Sig.=Approximate Significant.**

This table shows the association socio- demographica characteristics variables with (knowledge) assessment to find out the relationship between (knowledge) and socio-demographic characteristics variables, correlation ship through the contingency coefficient of the contingency tables had been constructed in table (4). This table reveals that there is a high significant association between students' knowledge & field of the study & department (P=0.000) as well as a significant association with occupation of student's father (P=0.047).

**Table 5.** Association Socio-Demographical Characteristics Variables with (Attitudes) Assessment

| Main Domain | Basis Information and Demographical Characteristics X Ass. Status | Contingency Coefficients | Approx. Sig. | C.S.(*) |
|---|---|---|---|---|
| **Students' attitudes toward people with AIDS** | **Age Groups** | **0.147** | **0.066** | **NS** |
| | **Gender** | **0.100** | **0.045** | **S** |
| | **Field of study** | **0.009** | **0.859** | **NS** |
| | **Department** | **0.024** | **0.972** | **NS** |
| | **Marital status** | **0.123** | **0.107** | **NS** |
| | **Educational level of Father** | **0.138** | **0.254** | **NS** |
| | **Educational level of Mother** | **0.072** | **0.910** | **NS** |
| | **Occupation of Father** | **0.039** | **0.891** | **NS** |
| | **Occupation of Mother** | **0.071** | **0.562** | **NS** |
| | **Residency** | **0.000** | **0.999** | **NS** |
| | **Socioeconomic Status** | **0.005** | **0.995** | **NS** |

**(*) NS: Non Sig. at P> 0.05; S: Sig. at P<0.05; C.S.= Comparison Significant; Approx.Sig.=Approximate Significant.**

This table shows the association socio- demographical characteristics variables with (attitudes) assessment to find out the relationship between (attitudes) and socio-demographic characteristics variables, correlation ship through the contingency coefficient of the contingency tables had been constructed in table (5). This table reveals that there is a significant between students' attitudes & gender (P=0.045).

**Table 6.** Descriptive Statistics of Weighted an Overall Assessment's Groups for the Studied Sample with Comparison Significant

| Factor | Groups | Freq. | Percent | Cum. Percent | C.S.(*) [P-value] |
|---|---|---|---|---|---|
| **Weighted an Overall assessment's groups** | **Too low : 0 - 24** | **16** | **4** | **4** | **$\chi^2$= 308.06 P=0.000 HS** |
| | **Low : 25 - 49** | **105** | **26.3** | **30.3** | |
| | **Intermediate : 50 - 74** | **241** | **60.2** | **90.5** | |
| | **High : 75 - 100** | **38** | **9.5** | **100** | |
| | **Total** | **400** | **100** | **-** | |

**(*) HS: Highly Sig. at P<0.01; Freq. = Frequency; Cum.= Cumulative; C.S.= Comparison Significant; P-value= Probability Level.**

This table shows the observed frequencies, percent's and cumulative percent of weighted an overall assessment's groups within comparison significant. The majority of the study sample was within intermediate level and accounted for (60.2%).

**Discussions:**

**Socio-demographic Characteristics:-**

**Table (1) Age:** Forty-five percent of the study sample were within age of (22) years and accounted (45%) with mean and SD (22.27 ± 0.89) with high significant difference in between groups at P<0.01. The findings of this study agree with the study of knowledge, attitudes, behaviors, and perceptions of risk related to HIV/AIDS among Chinese University students in Hunan, China, which done by (Huang Jin et al., 2005) on 1326 undergraduate students. The results of the study reported that the vast majority of students was (98%) age 23 or younger (M =20.5, standard deviation [SD] =1.3) [(5).] **Gender:** The majority of the sample was reported at female and accounted (65.5%), while at male accounted (34.5%). The findings of this study agree with study of knowledge of college students in Baghdad and Mousel/ Iraq about AIDS which done by (Hussain, 2009) on 594 students (352 female and 242 male), and from the 2nd, third and 4th year. The study sample revealed that the female gender is more than male [(6).] **Field of study and Department:** The results of the study revealed that half of the sample was from scientific field (50.2%) and the other half from humanity field (49.8%). Concerning study department (32.0%) was from English language, (25.3%) from statistics, (25.0%) from chemistry, and the remainder (17.8%) was from Arabic language. The findings of the previous study (Hussain, 2009) reported that the study sample were from Medical colleges (27.5%) while the others (72.5%) were from Humanity colleges [(6).] **Marital Status:** The majority of the sample was single and accounted (85.8%). The findings of this study agree with study of Knowledge and attitude of college students in Kerala towards HIV/AIDS, sexually transmitted diseases and sexuality which done by (Lal S, 2000) this study consisted 625 undergraduate college students which were selected randomly. The finding reported that the majority of students (97.8%) were unmarried [(7).] **Educational level of father and mother:** The majority of student's parent, father& mother were educational level (college or above) and accounted (34.3%) and (22.5%) respectively. Many studies recognized that if pupils are to maximise their potential knowledge from schooling they will need the full support of their parents. Conclusions from these studies indicate that parental involvement in children's education has a powerful impact on their attainment and adjustment [(8).] **Occupation of Subjects' father and mother:** The majority of subjects' fathers (41.8) were employee, while subjects' mothers, most of them (64.5%) were housewives. **Residency:** The vast majority of the study sample residency was urban and accounted (92.8%). The finding of this study do not agree with what had been reported by (Huang, 2005) study of knowledge, attitudes, behaviors, and perceptions of risk related to HIV/AIDS among Chinese University students in Hunan, China who reported that of the students were lived in campus (96.2%) and more than half (56.4%) came from rural areas [(5).] **Socioeconomic Status:** The vast majority of the study sample is within high and moderate categories and accounted for (41.5%) & (41.0%). The findings of this study agree with study done by (Trajmani, 2003) Knowledge about STD/AIDS and sexual behavior on 945 among high school students in Rio de Janeiro, Brazil, the study reported that (97%) from students had a high family income [(9).]

**Knowledge Source:-**

**Table (2)** - shows the observed frequencies, percent's of "Knowledge's sources" about AIDS. The highest percentage (83.8%) was accounted from Mass media which include (Television, Radio, Newspapers and magazines, Internet) and the lowest percentage (19.8%) from Health Workers. The findings of this study agree with study done by (Oncel, 2012) Apprentices' Knowledge and Attitudes about Sexually

Transmitted Disease; this study indicated that most source of knowledge about STDs was by mass media (33.9%) [10]. In another study, the findings of this study agree with the study by (Tengia-Kessy, 2006) on 312 secondary school youth in Ilala district in Dares Salaam was the main source of information on STIs was the mass media, especially the television (75%) percent, over (60%) radio and newspapers [11].

**Knowledge of students about AIDS:-**

**Table (3)-** Reveals comparison significant of items responding for the students' knowledge about HIV/AIDS and assessment according to cutoff point (0.50) of the studied questionnaire items. The findings of this table indicate that there are a highly-significant differences at P<0.01 between the two categories responding (Yes, No) of the studied score which are pointed mostly within overall comparisons in all domains and part two which includes: **Domain1-** General knowledge of students about HIV/AIDS was reported pass assessment, since their global mean of score (GMS), was upper cutoff point (GMS=0.606). **Domain 2-** Students' knowledge about methods of transmission of HIV/AIDS, shows pass assessment, since their global mean of score (GMS), were upper cutoff point (GMS=0.614). **Domain 3-** Students' knowledge about Students' knowledge about AIDS prevention methods, shows pass assessment, since their global mean of score (GMS), were upper cutoff point (GMS=0.650). The result indicated that the overall assessment for all domains of knowledge shows pass assessment, since their global mean of score (GMS), were upper cutoff point (GMS=0.623). The finding of this study do not agree with what had been reported by (Al-Rabeei, 2012) Knowledge, attitude and beliefs towards HIV/AIDS among students of health institutes in Sana'a city, knowledge about HIV/AIDS was low for (75%), moderate for 24%, high for(<1%). Although (90%) knew main routes of infection, there were misconceptions about transmission, and only (31%) knew there is no vaccine and 34% no cure [3]. In another study (Huang, 2005) which conducted on 1326 university students in China, this study reported that the majority of students were knowledgeable about HIV can be transmitted during pregnancy and by breast-feeding. However, there were very low levels of knowledge about transmission of HIV by needle sharing and misconceptions about HIV transmission by (casual contact shaking hands, touching, kissing) and eating in a restaurant where a cook has HIV. The explanation of these finding, that the University students' may have good /or adequate information concerning HIV/AIDS [5]. **Part three:** Students' attitudes toward people with AIDS was reported (negative) assessment, since their global mean of score (GMS), were under cutoff point (GMS=0.283). The findings of this study agree with study done by (Al-Rabeei, 2012) which indicates that the overall, respondents' attitudes towards people living with HIV/AIDS were moderate and positive—the average proportion with good attitudes was (59.8%) but many students (40.2%) had negative attitudes toward HIV/ AIDS patients and only (35.2%) were willing to live in the same community with HIV/AIDS people and (41.0%) thought that people living with HIV/AIDS should be isolated. However, (64.0%) would agree to work with people living with HIV/AIDS, (66.2%) thought that children living with HIV/AIDS should attend school and (65.5%) would punish people with HIV/ AIDS. On the other hand, a high percentage of students (86.8%) would be willing to care for a patient with HIV/ AIDS in special health setting [3].

**Relationship between knowledge and socio-demographic characteristics:-**

**Table (4)–**To find out the relationship between (knowledge) and socio-demographic characteristics variables, the results has reported that the socio-demographic characteristics variables (age groups, gender, marital status, education level of father, education level of mother, occupation of mother, residency, and socioeconomic status) had no significant relationship with their overall (Knowledge) assessments according to "Under/Upper" Cutoff

point for the global mean of score values, since a non-significant correlation ships were obtained at P>0.05 except with some variables, such as, field of study, and department, as well as , with occupation of father. The findings of this study agree with the study which done by (Siziya, 2008) on 22,997 women who participated in the survey reported that only (49.9%) had heard of HIV/AIDS. Overall, (60.5%) did not know that HIV can be transmitted through blood transfusion. Meanwhile, (98.5%) of the respondents did not know that HIV can be transmitted from mother to child through breast milk. Only (0.7%) of the respondents reported that HIV cannot be transmitted through mosquito bites. The proportion of the respondents who had adequate knowledge on HIV/AIDS was (9.8%). Adequate knowledge of HIV/AIDS was negatively associated with being married, poor, having low education, and residing in rural areas [(12).]

**Relationship between attitudes and socio-demographic characteristics:-**

**Table (5)-** To find out the relationship between (Attitudes) and Socio-demographic characteristics variables. The results has reported that the Socio-demographic characteristics variables (Age Groups, Marital status, Education Level of Father, Education Level of Mother, Occupation of Father, Occupation of Mother, Residency, and Socioeconomic Status) had no significant relationship with their overall (Attitudes) assessments according to "Under/Upper" Cutoff point for the global mean of score values, since a non-significant correlation ships were obtained at P>0.05, as well as the studied basis information variables, such as (Field of study, and Department),except with gender, which recorded a significant difference at P<0.05, and we could conclude that the studied questionnaire" Attitudes " of Baghdad University students toward HIV/AIDS, can be amend for all individual's population whatever a differences with their (Socio-demographic characteristics variables) and their studied basis information variables .The findings of this study do not agree with study done by (Gan'czak, 2007) on 300 students from Arab University Students in United Arab Emirates, which indicates that attitudes toward people living with HIV (PLH) were neither friendly nor tolerant, including (97%) who felt all people entering UAE should be tested, 53% that PLH should be forced to live apart, and only (27%) who felt children with HIV should be allowed to attend school. Ninety-six percent stated that young people should be taught how to protect themselves and (57%) that teaching at school was insufficient [(13).]

**Overall assessment of groups within comparison significant:-**

**Table (6)** - Shows the observed frequencies, percent's and Cumulative percent's of weighted an overall assessment's groups within comparison significant. The majority of the study sample were within Intermediate level and accounted for (60.2%), then followed within Low level of assessment and they accounted for (26.3%), then followed within High level of assessment and they accounted for (9.5%) and the remaining were within too low level and accounted for (4%).

**Recommendations:**

1. Increased students' awareness through the mass media about the risks of this disease and how to prevent it.
2. Introduction of this subject in science curriculums at all educational levels (elementary, high school, college), to inform students about the risk factors and how to adapt preventive health behavioral lifestyle related to HIV/AIDS.
3. Increase lectures and discussions about HIV/AIDS that increase information's to students'.
4. The study recommended that all the colleges in Iraq should be includes instructional programs about HIV/AIDS.
5. In the future, the researchers should be made more studies about this problem at different Iraq Universities.

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