

**Measuring the Impact of the Bashy Bus HIV Prevention
Mobile Clinic in Jamaica**

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Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ARH	Adolescent Reproductive Health
ASRH	Adolescent Sexual and Reproductive Health
HIV	Human Immune-deficiency Virus
ISES	Institute of Social and Economic Studies
MOH	Ministry of Health
SRH	Sexual and Reproductive Health
STATIN	Statistical Institute of Jamaica
STD	Sexual Transmitted Disease
STI	Sexual Transmitted Infection
UNICEF	United Nations Children's Fund

An Abstract

The BASHY Bus is a mobile clinic that provides HIV/AIDS/STI information, skill-based counseling and services to vulnerable adolescents in Jamaica. Since 2006, this mobile clinic has been operating under the supervision of Children First Agency, in collaboration with the National HIV/AIDS Program and UNICEF Jamaica, in four communities in Jamaica; selected on the basis of high HIV/STI prevalence levels. Three other communities, characterized by a high proportion of adolescents showing signs of being sexually active, were also selected to constitute a control group. Both the experimental and the control communities were surveyed in 2006 and 2008, using the same survey instrument.

The main objective of this study was to measure the impact of the program on the knowledge, attitude and behavior of adolescents within the experimental communities in comparison with adolescents from control communities. The overall results were that adolescents surveyed in 2008 showed a great deal of improvement from those surveyed in 2006, implying that the impact of the program, over the two year period, has been positive.

Measuring the Impact of the Bashy Bus HIV Prevention Clinic in Jamaica

1. Introduction and Background

That the HIV/AIDS epidemic is a global concern is no longer in question. What is in question is why the epidemic has continued to spread despite the wide spread information on sexual and reproductive health. In Jamaica, for example, it is estimated that on the average 3 new cases of HIV/AIDS are diagnosed each day. Even worse, one in every ten of reported cases of AIDS in the island are people under the age of 19 years. These statistics, notwithstanding, risky sexual behavior among adolescents in Jamaica has continued unabated.

In response to the above challenges, Children First Agency (a non-governmental organization) in collaboration with the National HIV/AIDS Programme (of the Jamaica Ministry of Health) and UNICEF Jamaica initiated, in 2006, the Bashy Bus project. This project is a mobile reproductive health clinic, with emphasis on HIV prevention among vulnerable adolescents in high HIV/STI prevalent communities located across three parishes of St. Catherine, St. Ann and St. James.

The title of the project, “Bashy Bus”, was conceived as a positive response to the negative phenomenon “sex on the bus” believed to have prevailed among some youth in Jamaica. Thus, the Bashy Bus Project has been ably described as follows (Bashy Bus Baseline Study Report, 2006: 2):

a safe space where young people can learn about sex and sexuality in a wholesome environment, free of abuse and exploitation, and where they access essential sexual and reproductive health services at low or no cost. Instead of creating a service and expecting youth to utilize it, the aim of the initiative is to meet young people where they are.

In 2006, UNICEF commissioned a study to establish baseline data and a monitoring framework for the design and delivery of the Bashy Bus project. The findings of that baseline study included the following: about half the respondents (48%, n = 452) were sexually active, most having had sex before they were 15 years old; among the sexually experienced, 37% of the girls and 29% of the boys did not use a condom during the most previous sexual encounter; 28% indicated involvement with multiple sex partners and 10% reported having experienced forced sex; overall, 73% of the respondents showed gaps in their understanding of safer sex and/or held popular sexual myths.

2. Objectives of this study

2.1: Major objective: The major objective of this study is to assess the extent to which the Bashy Bus HIV Prevention Clinic has been effective in impacting on the knowledge, attitude and behaviours of adolescents and young people within the targeted communities in the parishes of St. Catherine, St. Ann and St. James in accordance with the performance framework established to monitor its impact.

2.2: Specific objectives: According to the performance framework of the Bashy Bus project, within two years of its establishment the following objectives should be attained (Bashy Bus Baseline Study Report, 2006: 2):

- Increase in proportion of adolescents who correctly identify two (2) methods of HIV prevention and who reject three (3) sexual myths
- Increase in proportion of adolescents who demonstrate good risk assessment, sexual decision making skills and sexual health practices
- Increase in proportion of adolescents who are aware of and use other sexual reproductive health (SRH) services available.

3. Methodology in Measuring the Impact of the Bashy Bus Project

Methodologically, there are two main models for evaluating the impact of social interventions. The first, **the before and after model**, is based on a comparison of the same group before and after a specified period of the intervention. The second, **the experimental model**, is based on a comparison between the control and the experimental groups after the latter has received the intervention for a specified period of time (Peter Rossi and Freeman, 1989: 225-270). This study has utilized both models, as indicated below.

3.1: The Before and After Model: Under this model, comparisons are made between information about the behaviour and/or condition being examined and similar information from an earlier time period (Rossi and Freeman, 1989: 229).

For this study, a cohort longitudinal study was conducted whereby respondents of the survey in 2008 were selected from the same sub-populations (cohorts) that had been utilized in the baseline Bashy Bus survey of 2006. As well, the same survey instrument was utilized in both surveys. The results from both surveys were then compared on the same indicators (identified in section 2.2 above), in order to establish whether or not there have been any changes within the studied sub-populations over the period of two years (2006-2008).

The sub-populations targeted by the 2008 survey were adolescents and young people from the following communities that had been surveyed in 2006 for the Bashy Bus baseline data: March Pen (St Catherine), Exchange and Bohemia (St. Ann) and Flankers (St. James). Adolescents from each of these four communities were interviewed by trained Interviewers from the reserve list of Statistical Institute of Jamaica (STATIN), on the basis of which data collected in 2008 were compared with data collected in 2006.

3.2: The Experimental Model: In this model, the comparison is made between the subjects that have experienced the interventions (**experimental group**) and an equivalent group of those subjects that have not experienced the intervention (**control group**).

In this study, the experimental groups were adolescents and young people from the four communities mentioned in 3.1 above (March Pen, Exchange, Bohemia and Flankers), which were “predetermined based on the routes planned for visits by the Bus along major transport routes and high HIV/STI prevalence locations” (Bashy Bus Baseline Study Report, 2006: 4). Thus, the experimental communities had had an exposure to the Bashy Bus services and facilities, since they are located on the routes of the Bus.

The control group was made up of adolescents and young people from communities that were also studied in 2006 during the collection of data for the Bashy Bus baseline survey. These communities included: York Town (Clarendon), Lawrence Tavern (St Andrew) and Springfield (St. Thomas).

As mentioned in the Bashy Bus Baseline Report (2006: 4), the selection of the above three communities was based on three criteria: a high proportion of young people in the community; a community in which residents have to leave in order to access basic services; and a community where young people show signs of being sexually active.

In each of these three communities, an attempt was made to interview about 86 adolescents and young people, using the same survey instrument utilized to interview respondents in the experimental group.

The major difference between the two groups was that the four experimental communities were all located on planned routes for visits of the Bashy Bus, while the three control communities were not on the Bashy Bus route. A comparative

analysis was made between data collected from the two groups in order to establish whether or not there were differences that might be explained by the Bashy Bus impact.

4. Analysis of Findings

4.1 Demographic Profile of Respondents in the Two Surveys

4.1.1 Location of respondents

Table 1: Location and Number of Respondents in the two Surveys

Location of respondents	2006 survey	2008 survey
March Pen (Spanish Town)	71	86
Exchange (Ocho Rios)	70	84
Bohemia (St. Ann rural)	70	86
Flankers (Montego Bay)	70	85
York Town (Clarendon)	70	85
Lawrence Tavern (St Andrew)	50	87
Springfield (St. Thomas)	51	87
Total	452	600

As indicated in Table 1, an attempt was made to increase the number of respondents from an average of 66 per studied community in 2006 to an average of 86 in the 2008 survey.

4.1.2 Gender and Age

Table 2: Gender Distribution of Respondents in Surveys of 2006 and 2008

Gender Identification	Gender distribution for the 2006 survey	Gender distribution for the 2008 survey
Male	211 (or 47%)	270 (or 45%)
Female	240 (or 53%)	330 (or 55%)
Total	451 (or 100%)	600 (or 100%)

As indicated in Table 2, females constituted the majority of respondents in both surveys, with an increase of two percentage points in the 2008 survey (55%) over the 2006 survey (53%).

Table 3: Age Distribution of Respondents in Surveys of 2006 and 2008

Age Range	2006 Age Distribution	2008 Age Distribution
Under 15 years	240 (or 53%)	140 (or 23%)
15 to 19 years	211 (or 47%)	460 (or 77%)
Total	451 (100%)	600 (100%)

Although majority of the respondents in the 2006 survey were under 15 years of age (53%), in the 2008 survey this age group accounted for only 23%; leaving the age group 15 to 19 years with 77% of the respondents.

The main explanation for the lower number of younger adolescents (as provided by field interviewers of the 2008 survey) was the constant fear of kidnapping among younger adolescents. At the time of the 2008 survey, there were several reports of kidnappings and murders of young adolescents across Jamaica. Because of that fear, both parents and their respective young adolescents avoided any involvement with people they did not know, including interviewers in the 2008 survey. Thus, the age range of adolescents who were interviewed was 10 to 19 years old for the 2006 survey and 11 (only one) to 19 years old for the 2008 survey.

4.1.3 Occupation

Table 4: Occupations of Respondents in the Surveys of 2006 and 2008

Occupation	2006 Survey	2008 Survey
Student	349 (or 77%, n=451)	424 (or 71%, n=596)
Employed	31 (or 07%, n=451)	106 (or 18%, n=596)
Hustling	16 (or 04%, n=451)	39 (or 07%, n=596)
Dependent	404 (or 90%, n=451)	578 (or 97%, n=596)

Most respondents were dependent on others, including parents, relatives and friends for financial support (90% and 97% of the 2006 survey and 2008 survey, respectively).

4.1.4 Social activities of respondents by age

Table 5: Social activities of respondents by age for both surveys

Activity	2006 Survey		2008 Survey	
	<15 years	15-19 years	<15 years	15-19 years
School	157 (68%)	117 (40%)	84 (60%)	173 (38%)
Church	121 (50%)	064 (30%)	47 (34%)	090 (20%)
Youth club	096 (40%)	072 (34%)	28 (20%)	066 (14%)
Sports	110 (46%)	067 (32%)	64 (46%)	155 (34%)
Gang	009 (04%)	011 (05%)	08 (06%)	048 (10%)

With the exception of gang activity, the younger adolescents (<15 years) were proportionally more involved than the 15-19 years age group in all social activities for both 2006 and 2008 surveys

The most popular activities for all age groups in both surveys were school-based (56% for 2006 survey and 43% for the 2008 survey). The least popular activity was hanging out with a gang (04% for the 2006 survey and 09% for the 2008).

4.1.5 People the respondents were living with at the time of the survey

Table 6: People the respondents were living with by age

Who they lived with	2006 Survey		2008 Survey	
	<15 years	15-19 years	<15 years	15-19 years
Mother	115 (75%)	100 (67%)	103 (75%)	303 (68%)
Father & mother	070 (81%)	050 (82%)	066 (47%)	163 (35%)
Father	016 (19%)	011 (18%)	087 (64%)	206 (46%)
Step parent	035 (15%)	024 (11%)	023 (32%)	042 (15%)
Friend	004 (02%)	004 (02%)	002 (01%)	029 (07%)
Alone	0	008 (04%)	0	029 (07%)

As it would be expected, the level of respondents living with parents was higher among the younger adolescents (<15 years) than the older adolescents (15-19 years). Those living with mother among the younger adolescents were 75% for both the 2006 and the 2008 surveys. For the older adolescents, those living with mothers were 67% for the 2006 survey and 68% for the 2008 survey.

4.1.6 Source of financial support

Table 7: Source of financial support to respondents by school-age groups

Sources of support	2006 Survey		2008 Survey	
	9-17 years	18 + years	11-17 years	18 + years
Employed	5 (01%)	26 (35%)	20 (05%)	86 (47%)
Hustling	8 (02%)	08 (10%)	23 (06%)	18 (10%)
Dependent	363 (97%)	41 (55%)	364 (89%)	78 (43%)
Total	376 (100%)	75 (100%)	407 (100%)	182 (100%)

In Jamaica, most adolescents exit the secondary school system after becoming 17 years old. As indicated in Table 7, the level of financial dependence decreases after the adolescent leaves school. Whereas the level of dependence among adolescents of 17 years and below was 97% and 89% in the surveys of 2006 and 2008, respectively, it decreased to 55% and 43%, respectively, in both surveys among the adolescents of 18 years and over. Moreover, as expected, adolescents who were both working and hustling were mostly from the age group 18 years and over.

4.2 Respondents' Knowledge of SRH and Use of Services

4.2.1 Knowledge about where to get advice, counseling or treatment

A list of situations was read to the respondents who were subsequently asked if they knew where in Jamaica they could go or call to get advice, counseling or treatment. Table 8 below shows the results for the two surveys.

Table 8: Would you know where to get help in the following situations?

Possible needs	Yes for 2006 Survey	Yes for 2008 Survey
Relationship with parent	43% (n=451)	44% (n=600)
Personal relationships	42%	38%
STI/AIDS infection	64%	51%
Forced sex encounter	55%	53%
Sexual molestation	65%	51%

As indicated in Table 8, adolescents who participated in both surveys were least aware of where they could seek help for personal relationships and their relationships with their parents. Overall, respondents in the 2006 survey demonstrated a higher level of awareness of where to seek help in case of need than respondents in the 2008 survey.

Differences in knowing where to go for help

In the 2008 survey, a higher proportion of female than male adolescents surveyed knew where to seek help on every possible need on the list. For the 2006 survey, this was so only in seeking help for sexual molestation.

In both surveys, age was a factor in levels of awareness. The older cohort (15-19 years) tended to know where to get help than the younger cohort (less than 15 years). The only exception was in relation to sexual molestation where, in the 2008 survey, 53% of the younger cohort in comparison with 50% of the older cohort knew where to seek help.

4.2.2 Perceived Needs for SRH Services

A list of situations was read to the respondents, who were then asked if they felt, within the previous 12 months leading to the time of the interview, the need to get help and from where or who. Table 9 shows the results for both surveys of 2006 and 2008.

Table 9: Perceived needs by help sources and by age groups

Needs	Help source	2006 Survey		2008 Survey	
		<15 years	15-19 years	<15 years	15-19 years
Relationship with parents	Did not get help	15 (37%)	13 (30%)	06 (18%)	12 (15%)
	Family	16 (39%)	8 (19%)	08 (24%)	11 (14%)
	Friends	02 (05%)	05 (12%)	06 (18%)	21 (26%)
	Counselors	05 (12%)	10 (23%)	12 (35%)	29 (36%)
	Police	03 (07%)	02 (05%)	0	0
	Church	0	05 (12%)	02 (05%)	8 (09%)
Total		41 (100%)	43 (100%)	34 (100%)	81 (100%)
Personal relationships	Did not get help	01 (08%)	07 (28%)	05 (23%)	16 (18%)
	Family	07 (58%)	10 (40%)	06 (27%)	30 (34%)
	Friends	01 (08%)	06 (24%)	06 (27%)	29 (32%)
	Counselors	01 (08%)	01 (04%)	05 (23%)	14 (16%)
	Police	01 (08%)	0	0	0
	Didn't specify	01 (08%)	01 (04%)	0	0
Total		12 (100%)	25 (100%)	22 (100%)	89 (100%)
STI/HIV treatment	Did not get help	07 (50%)	08 (29%)	01 (20%)	08 (19%)
	Family	02 (14%)	02 (07%)	0	08 (19%)
	Friend	0	0	01 (20%)	05 (11%)
	Counselors	0	0	0	04 (09%)
	Health professionals	05 (36%)	18 (64%)	03 (60%)	18 (42%)
Total		14 (100%)	28 (100%)	05 (100%)	43 (100%)
Family planning	Did not get help	12 (41%)	08 (24%)	01 (20%)	05 (09%)
	Family	04 (14%)	03 (09%)	01 (20%)	03 (05%)
	Friends	02 (07%)	04 (12%)	02 (40%)	02 (03%)
	Counselors	02 (07%)	0	0	04 (07%)
	Health Professionals	09 (31%)	18 (55%)	01 (20%)	44 (76%)
Total		29 (100%)	33 (100%)	05 (100%)	58 (100%)
Sex for money pressure	Did not get help	03 (43%)	04 (57%)	01 (17%)	05 (28%)
	Family	01 (14%)	01 (14)	0	03 (16%)
	Friends	02 (29%)	02 (29%)	02 (33%)	04 (22%)
	Police	0	0	03 (50%)	01 (06%)
	Counselors	0	0	0	04 (22%)
	Health professionals	01 (14%)	0	0	01 (06)
Total		07 (100%)	07 (100%)	06 (100%)	18 (100%)
Domestic violence/abuse	Did not get help	02 (18%)	0	03 (33%)	01 (05%)
	Family	03 (27%)	03 (60%)	0	06 (30%)
	Friends	0	01 (20%)	01 (11%)	06 (30%)
	Counselors	02 (18%)	0	04 (45%)	03 (15%)
	Police	04 (36%)	0	01 (11%)	03 (15%)
	Church	0	01 (20%)	0	01 (05%)
Total		11 (100%)	05 (100%)	09 (100%)	18 (100%)

As indicated in Table 9, adolescents interviewed in the 2008 survey generally demonstrated a higher ability than those interviewed in the 2006 survey to seek help from relevant professionals. For problems relating to parents, 35% of younger adolescents (<15 years) and 36% of the 15-19 year olds sought help from counselors in the 2008 survey, as compared to 12% and 23%, respectively for the same age groups in the 2006 survey (see Table 9).

Although most respondents from both surveys sought help from family members when dealing with problems relating to personal relationships, still 23% of the young adolescents and 16% of older adolescents in the 2008 survey sought help from counselors compared to 8% and 4%, respectively, in the 2006 survey (Table 9).

For problems relating to STI/HIV and to family planning, most adolescents of all ages from both surveys sought help relevantly from health professionals. This choice, however, was more pronounced in the 2008 survey than in the 2006 survey.

Neither gender nor location of communities studied showed statistical difference on how adolescents sought help for their perceived SRH needs.

Table 10: Adolescents that did not get help for felt needs in the past year

Needs for which help was sought	Did not get help	
	2006 survey	2008 survey
Had a problem with your parents	33% (n=84)	15% (n=124)
Had a problem with your girl/boy friend	22% (n=37)	20% (n=103)
Wanted to get counseling and testing for HIV	36% (n=42)	17% (n=53)
Wanted to get family planning (e.g. condoms or pill)	32% (n=62)	11% (n=55)
Had problems that forced you to have sex	50% (n=14)	27% (n=22)
Were experiencing violence or abuse in the home	13% (n=16)	12% (n=32)

As indicated in Table 10, getting help improved in all situations over a two year period.

4.3 The Bashy Bus Project

4.3.1 Respondents awareness of the Bashy Bus

Respondents were asked if they had ever heard or seen a clinic on a bus that gives information on how to prevent HIV and provides counseling and testing for HIV. Only 140 of the respondents of the 2008 survey (or 23%, n=600) had heard about or seen the mobile clinic. Table 10 shows the distribution of the 140 respondents that were aware of the mobile clinic across the communities surveyed.

Table 11: Distribution of Respondents Aware of the Mobile Clinic

Location	Distribution of respondents
March Pen (Spanish Town)	14 (or 10%, n=140)
Exchange (Ocho Rios)	34 (or 24%, n=140)
Bohemia (St. Ann rural)	15 (or 11%, n=140)
Flankers (Montego Bay)	29 (or 21%, n=140)
York Town (Clarendon)	17 (or 12%, n=140)
Lawrence Tavern (St Andrew)	19 (or 14%, n=140)
Springfield (St. Thomas)	12 (or 8%, n=140)
Total	140 (or 100%)

Although the highest two scores came from communities on the Bashy Bus route (24% for Exchange and 21% for Flankers), March Pen which is also on the same route had one of the lowest scores (10%). Moreover, Lawrence Tavern which is not on the Bashy Bus route had the third highest score of 14%, making the results somewhat inconsistent.

Asked if they remembered the name of the mobile clinic, only 82 of the 140 respondents (or 58%) mentioned Bashy Bus, mostly from the following surveyed communities: Exchange (28%), Flankers (18%), and 12% each from Lawrence Tavern, March Pen and Spring Field. The lowest score of 6% came from Bohemia, which is on the Bashy Bus route.

4.3.2 Use of the Bashy Bus

Only those who remembered the name were asked if they had ever used the Bashy Bus, and 29 of the 82 (or 35%) indicated that they had done so, mainly from Flankers (31%) and March Pen (21%). Most of those who had used the Bus (71%) had used it once, while 18% of them had used it twice.

4.3.3 Rating the Services of the Bashy Bus

Despite the low number of users among respondents, the quality of Bashy Bus services was rated highly. On the scale of 1-5, where 5 was the highest score, the services of the Bashy Bus were rated as follows: 41% of the 29 users scored it at 5, 45% of the users score it at 4, and 14% of the users score it at 3.

4.4 Gaps in SRH Knowledge

4.4.1 Safer sex ideas

In assessing the knowledge and perceptions of adolescents on safer sex, respondents in both surveys of 2006 and 2008 were asked whether taking the following actions would help prevent sexual transmitted infections (STIs):

1. having sex with one person (one sex partner)
2. having sex with a faithful partner (only has sex with me)
3. using condom every time (consistent condom use)

In the 2006 survey, 67% of adolescents studied (n=451) incorrectly assessed at least one of these three ideas. In the 2008 survey, this incorrect assessment was reduced to 52% (n=600), a reduction of 15 percentage points. Moreover, adolescents who incorrectly assessed all three safer sex ideas (high risk) in the 2006 survey were 32%. In the 2008 survey the corresponding figure was a mere 1%, a reduction of 31 percentage points.

4.4.2 Sexual health myths

Respondents' perceptions towards three common sexual health myths were also tested in both surveys. The myths related to steps to prevent STI/HIV transmission were:

1. make sure sexual partner looks healthy
2. avoid holding hands with someone who has HIV
3. avoid having sex with adults (over 19 years old)

While 32% of adolescents studied in the 2006 survey (n=451) rejected all the three myths, this level of rejection increased to 49% (n=600) in the 2008 survey; an increase of 17 percentage points. As well, while 8% of adolescents in the 2006 survey accepted two or more of the three myths, this level was reduced to 4% in the 2008 survey.

4.4.3 Recognizing signs of sexual infection

In the 2006 survey, 64% of the adolescents studied (n=451) could not recognize any signs of sexual infection. In the 2008, 82% (n=541) of the adolescents studied admitted that they could not recognize any signs of sexual infection, implying that if they contracted STI, they would not recognize the symptoms.

Table 12: Signs of STI that adolescents mentioned in both surveys

Sign of STI mentioned	The 2006 survey		The 2008 survey	
	Count	percent	Count	percent
Not aware of any signs	289	64%	444	82%
Sore or rash on the body	041	09%	026	05%
Discharge/bad odor	030	07%	025	04%
Rapid weight loss (“mawga”)	022	05%	021	04%
Bumps	020	04%	009	02%
Hair falling or getting pretty	017	04%	004	01%
Burning or problems urinating	015	03%	012	02%
Changes in body	008	02%	0	0
Itching	006	01%	0	0
Total	448	100%	541	100%

4.5 Risk in Sexual Attitude and Behaviour

4.5.1 Willingness to engage in sex

To measure sexual readiness, respondents were asked to indicate whether they agreed, disagreed or were not sure with respect to the following statement: “I think it is okay for me to have sex”.

Table 13: Respondents’ Readiness to have sex by Gender for 2008 survey

I think it is okay for me to have sex	Male	Female
I Agree	152 (60%, n=253)	126 (39%, n=319)
Not sure	43 (17%, n=253)	79 (25%, n=319)
I disagree	58 (23%, n=253)	114 (36%, n=319)

Results in Table 13 indicate that male respondents were more willing than females to have sex, which is consistent with results for the 2006 survey. In relation to age, of the 135 respondents of less than 15 years, 75 (56%) disagreed

with the statement. On the other hand, 103 of the 452 (or 23%) of the 15-19 year olds disagreed with the statement. These results are also consistent with those of the 2006 survey, which found that “older teenagers (15-19) were more ready than their younger peers” to engage in sexual activity.

4.5.2 Sexual experience

The adolescents studied in both surveys of 2006 and 2008 were asked if they had engaged in sex and, if so, when. Tables 14 and 15 show the results, stratified by gender and age, respectively.

Table 14: Sexual experience of adolescent by gender

Sexual experience	2006 Survey		2008 Survey	
	Male	Female	Male	Female
Had sex in last 12 months	100 (48%)	73 (31%)	138 (53%)	152 (47%)
Had sex before last 12 months	28 (14%)	12 (05%)	029 (11%)	53 (16%)
Never had sex before	78 (38%)	150 (64%)	92 (36%)	120 (37%)
All adolescents	206 (100%)	235 (100%)	259 (100%)	325 (100%)

In both surveys, male adolescents were more sexually active than females. In the 2008 survey, 64% of the males (n=259) and 63% of the females (n=325) were sexually active. In the 2006 survey, 62% of the males and 36% of females were sexually active, implying that sexual activity has increase over the last two years, especially among female adolescents.

Table 15: Sexual experience of adolescent by age for the two surveys

Sexual experience	2006 Survey		2008 Survey	
	< 15 yrs	15-19 yrs	<15 yrs	15-19 yrs
Had sex in last 12 months	38 (16%)	137 (65%)	26 (19%)	271 (59%)
Had sex before last 12 months	10 (04%)	31 (15%)	07 (05%)	77(17%)
Never had sex before	192 (80%)	43 (20%)	107 (76%)	111 (24)
All adolescents	240 (100%)	211 (100%)	140 (100%)	459 (100%)

As expected, younger adolescents (<15 years) were less sexually active than the older ones (15-19 years) in both surveys. Among the 15-19 year olds, there was a slight decrease in level of sexual activity from 80% in 2006 (65% who had sex in the previous 12 months plus 15% who had sex before) to 76% in 2008 (59% who had sex in the previous 12 months plus 17% who had had sex before).

4.5.3 Sexual experience and use of condom

Table 16 provides a comparison of findings between the two surveys using some indicators relating to sexual experience of the adolescents studied.

Table 16: Comparing Findings of Baseline Study and the 2008 Survey

Indicator	2006 Survey	2008 Survey
Sexual experience by age 19		
Females	36%	68%
Males	62%	81%
Mean age of sexual initiation		
Females	14.9 years	17.1 years
Males	11.8 years	13.9 years
Condom use at first sex by gender		
Females	80%	48%
Males	33.6%	44%
Condom use at first sex by age		
< 15 years	40%	31%
15-19 years	57%	47%
Condom use at last sex with partner by gender		
Females	61.6	67%
Males	80.4	69%
Condom use at last sex with partner by age		
< 15 years	52%	61%
15-19 years	72%	69%
Condom use at last sex with non main partner		
Females	54.1	74%
Males	77.3	88%
Fertility outcomes for females 15-19 years		
Ever pregnant before	10%	31%
Unplanned pregnancy by mothers 15-19	94%	84%

Although figures for the 2008 survey tended to be higher than those for the 2006 survey on most indicators, the findings of the two surveys are generally consistent, as indicated in Table 16. The only exception is condom use at first sex by female, which declined from 80% in 2006 to 48% in 2008. A possible explanation for this drastic decline is the small number of younger adolescent

(less than 15 years) in the 2008 survey (only 23%, n=600) compared to 53% (n=451) in the 2006 survey. Since younger adolescents are less likely to use condom at first sex than their elder peers (Bashy Bus Baseline Report, 2006: 22), their reduced number in the 2008 survey may be responsible for the above noted decline.

4.5.4 Vulnerability and sexual decision making

Vulnerability to some risky sexual behaviour such as transactional sex was associated with age differences between sexual partners and dependence on the partner for money. Manifestation of vulnerability was measured using the following indicators: females' attitude to condom negotiation, incidence of forced sex and susceptibility to sex for money pressures. Tables 17 through 20 show results.

Table 17: Dependence on sexual partner for money by condom negotiation

	Dependence on sexual partner for money 2006			Dependence on sexual partner for money 2008		
	Most times	Not often	No, I don't	Most times	Not often	No, I don't
Condom negotiation attitude by females						
Submit to partner most times	30%	13%	04%	28%	17%	04%
Submit to partner sometimes	30%	07%	06%	30%	39%	26%
No condom, NO SEX	40%	80%	90%	42%	44%	70%
N	20	15	51	43	48	89

The results from the two surveys are consistent with each other. In both surveys, female adolescents who did not depend on their respective sexual partners for money were the least to submit to their partners for sex; a percentage correlation between “I don't depend on partner for money” and “I submit to partner most times” was a mere 4% in both survey. On the other hand, those adolescents that

were dependent on their partners for money most of the time were the most likely to submit to their partners for sex (30% in the 2006 survey and 28% in the 2008 survey). Figures for male adolescents on this and other subsequent relationships were too small to make any meaningful analysis.

The three communities with the highest levels of dependence on sexual partners for money in the 2008 survey were: Spring Field (46%), Exchange (44%) and Flankers (42%). The lowest dependence level of 24% came from York Town.

Table 18: Money dependence on sexual partner by forced sex encounter

	Dependence on sexual partner for money 2006			Dependence on sexual partner for money 2008		
	Most times	Not often	No, I don't	Most times	Not often	No, I don't
Forced sex encounter for female adolescents						
Had forced sex	60%	20%	22%	38%	27%	32%
Never had forced sex	40%	80%	78%	62%	73%	68%
N	20	15	50	48	93	186

For those adolescents who were dependent on their sexual partners for money most of the time, the level of forced sex declined, over the two year period, from 60% in the 2006 survey to 38% in the 2008 survey.

The three communities with the highest levels of forced sexual encounters in the 2008 survey were: Exchange (32%), Bohemia (31%) and Flankers (26%). The lowest level of 15% came from March Pen.

Table 19: Mixed Age among respondents by female condom negotiation

Condom negotiation attitude	2006 Survey		2008 Survey	
	Not older partner	Older partner	Younger partner	Older partner
Submit to partner most times	07%	22%	12%	17%
Submit to partner sometimes	11%	15%	37%	40%
No condom, NO SEX	82%	63%	51%	43%
N	54	27	74	48

In both surveys, the greater the age differences between sexual partners the weaker the negotiation by female adolescents to use condoms when their partners did not want to. In the 2006 survey, only 63% of females with older partners insisted on “no condom, no sex”, compared to 82% of females with younger partners. In the 2008 survey, corresponding figures were 43% and 51%, respectively.

The three communities with the highest levels of condom negotiation (“no condom, no sex”) in the 2008 survey were: Spring Field (56%), Flankers (53%) and Lawrence Town (48%) The lowest level of 39% came from Bohemia.

Table 20: Mixed Age among respondents by female forced sex encounters

Forced sex encounter among female adolescents	2006 Survey		2008 Survey	
	Not older partner	Older partner	Not older partner	Older partner
Had forced sex	28%	41%	19%	36%
Never had forced sex	72%	59%	81%	64%
N	54	27	74	50

As indicated in Table 20, female adolescents with partners that were five or more years older had more forced sex encounters than those with younger partners. In the 2006 survey, 41% of female adolescent with older partners had forced sex encounters compared to 28% of female adolescents with younger partners. In the 2008 survey, the corresponding figures were 36% and 19%, respectively. Overall, figures in Table 20 indicate that levels of forced sex encounters have declined over the last two years.

5. The overall impact of the Bashy Bush

This section will discuss levels of achievement of the three Bashy Bus Project objectives within a two-year period of its establishment.

5.1: Safer sex ideas and sexual health myths: According to the performance framework of the Bashy Bus Project, there should be an increase in proportion of adolescents who correctly identify two methods of HIV prevention and who reject three sexual health myths, after two years of project establishment.

As indicated in section 4.4.1 of this study, the proportion of adolescents who incorrectly assessed one of the three safer sex ideas reduced from 67% in 2006 to 52% in 2008, implying that the proportion of adolescents who correctly identified two methods of HIV prevention increased by 15% between 2006 and 2008.

But does the Bashy Bus Project have a bearing on the above mentioned increase? This question can only be answered by looking at the distribution of scores among the seven communities studied, as indicated in Table 21 below. The communities, as they appear in Table 21, were rank-ordered by the author, starting with the community that scored highest on the combination of both assessments and ending with the community that scored lowest.

Table 21: Adolescents' scores on safer sex ideas by communities studied

Community	Correctly assessed all 3 safer sex ideas	Correctly assessed 2 of 3 safer sex ideas	Total percentage score on both
1. Bohemia	06%	91%	97% (n=79)
2. Exchange	15%	76%	91% (n=80)
3. York Town	41%	48%	89% (n=83)
4. Spring Field	34%	40%	74% (n=85)
5. Flankers	46%	27%	73% (n=82)
6. March Pen	25%	46%	71% (n=79)
7. Lawrence Tavern	34%	35%	69% (n=83)

The communities with the top two scores are both on the Bashy Bus route, which may have influenced the increased proportion of adolescents who correctly identified at least two methods of HIV prevention. The scores in the last four communities in Table 21 (communities numbered 4-7) were too close to each other, thus unable to make much difference individually to the increased proportion.

With reference to sexual health myths (section 4.4.2 of this study), the proportion of adolescents who rejected all three sexual myths increased from 32% in the 2006 to 49% in the 2008 survey. Table 22 shows how those adolescents were distributed among studied communities. The communities, as they appear in the table below, were rank-ordered, starting with the community that scored highest on objection to all three sexual health myths and ending with the community that scored lowest.

Table 22: Adolescents who rejected all 3 myths by communities studied

Community	Objection to all three sexual health myths
1. March Pen	53 (18.0%).
2. York Town	52 (17.7%)
3. Spring Field	46 (15.6%)
4. Bohemia	45 (15.3%)
5. Exchange	44 (15.0%)
6. Lawrence Town	30 (10.2%)
Flankers	24 (08.2%)
Total	294 (100%)

Of the top five communities, scoring between 15% and 18%, three of them (including the very top one with 18%) are on the Bashy Bus route, which may partly explain the 17% increase in the proportion of adolescents who objected to all three sexual health myths between 2006 and 2008.

5.2: Good risk assessment and sexual decision making skills: The second objective of the Bashy Bus Project, within two years of its establishment, was an increase in proportion of adolescents demonstrating good risk assessment, sexual decision making skills and sexual health practices. Below is a discussion of the performance on these indicators.

5.2.1 Good risk assessment: As indicated in Table 16, there were three indicators demonstrating an increase in proportion of adolescents with good risk assessment.

First, the mean age of sexual initiation increased from 14.9 years for female adolescents in the 2006 survey to 17.1 years in the 2008 survey. For male adolescents, the mean age of sexual initiation increased from 11.8 years in 2006 to 13.9 in 2008.

Second, condom use at the last sexual encounter with non-main partner increased, among female adolescents, from 52% in 2006 to 74% in 2008. Among male adolescents, it increased from 77% in 2006 to 88% in 2008.

Third, the proportion of unplanned pregnancy among adolescent mothers, aged 15-19 years, decreased from 94% in 2006 to 84% in 2008.

5.2.2 Sexual decision making skills: As indicated in Table 18 of this study, the proportion of forced sex encounters, among adolescents who depended on their sexual partners for money most of the time, declined from 60% in 2006 to 38% in 2008. Moreover, figures in Table 20 of this study demonstrate that the proportion of forced sexual encounters among adolescents involved in mixed age relationships has also generally declined between 2006 and 2008.

5.3: Awareness and use of SRH services available: The third objective of the Bashy Bus Project, within two years of its establishment, was an increase in proportion of adolescents who are aware of and use sexual reproductive health (SRH) services available.

As indicated in Tables 9 and 10 of this study, the proportion of adolescents who did not get help when they needed it in reference to eight SRH situations declined between 2006 and 2008 in all but one SRH situations. Moreover, as also indicated in Table 9 of this study, adolescents who were interviewed in the 2008 survey demonstrated a higher ability than those in the 2006 survey in seeking professional services in handling most of the SRH situations.

What all this implies is that, within the period from 2006 to 2008, adolescents not only became more aware of how to seek help when they needed it, but also where to seek professional services for different SRH situations.

6. Overall recommendations arising from the study

Given the success of the Bashy Bus project, thus far, the first recommendation is that the initiative should be expanded to cover more communities across Jamaica, in order to help adolescents to help themselves in the fight against HIV/AIDS and other sexual transmitted infections.

Second, as the services of the Bashy Bus are expanded across Jamaica, all Service Providers should develop easy to understand and short customer service survey instruments for collecting feedbacks, on a regular basis, from adolescents about services being provided, in order to provide clients both a voice and a realization that their opinions are vital in decision making relating to services they receive. Failure to consult with clients on a regular basis may have disastrous consequences, including an apathetic clientele that often leads to complacency on the part of service providers.

Third, for purposes of future impact assessment of the Bashy Bus project, the survey instrument to measure levels of change over time should remain the same, in order to enhance both reliability and validity of the assessment. In some instances, questions measuring same indicators in the surveys of 2006 and 2008 were put differently, thus, making the comparison of results quite difficult.

Fourth, as indicated in section 4.3.1 of this study, the level of awareness among adolescents about the Bashy Bush project during the 2008 survey was quite low (23%, n=600) even within communities that are on its route. It is, thus, recommended that awareness campaign about the Bashy Bus project be launched within communities on its route through newspapers, talk-back radio programmes and seminars in order to reach as wide an audience as possible, thereby making the project more effective.

Finally, the impact assessment of the Basy Bus Project should be conducted at regular intervals of, for example every two years, as a means of monitoring the progress of the Programme

Appendix: Survey Instrument of the 2008 Bashy Bus Project Evaluation

1) Indicate sex of respondent: Male
 Female

2) How old are you? _____ years old

SRH KNOWLEDGE & USE OF SERVICES

3) Where is the **nearest health clinic** to this community that you know of?

 Don't know any Can't recall where

4) I am now going to read from a list of situations. Do you know **where in Jamaica** you could go or call to get advice, counselling or treatment, for any of the following indicate where ↓

a) problems in your relationship with your parents Yes
_____ No

b) problems in your relationship with your boy/girl friend Yes
_____ No

c) you think you have sexual infection, HIV or AIDS Yes
_____ No

d) you were forced to have sex Yes
_____ No

e) an older person tried to feel up your private parts without you agreeing Yes
_____ No

5) a) Did you ever buy condom or any birth control pill at a pharmacy before?
 Yes (go to 5b) No (go to 5c)

5b.(i) Did the workers serve you without any problem? _____ Yes ___ No

(ii) Were the workers comfortable to sell you condoms/contraceptives _____ Yes ___ No

5c. If you were to buy condoms or some other contraceptives at the pharmacy, do you think that:

(i) The workers would serve you without any problem _____ Yes ___ No

(ii) The workers would feel comfortable to sell condoms/other contraceptives to young people ___ Yes ___ No

6) How would you describe the way workers at a health facility, clinic or hospital behave when young people go there to seek help/information:

a) Health workers respect young people and provide assistance/information in a friendly way

b) Health workers do not respect young people and provide assistance/information in unfriendly way

[do not read this option]

c) I don't know

7)

i) I am going to read from a list of situations: please tell me if in the **past 12 months**, you felt the need to get help because you:

- a) had a problem with your parents Y N
- b) had a problem with your girl/boy friend Y N
- c) wanted to get counselling and testing for HIV Y N
- d) wanted to be tested or treated for other STI Y N
- e) wanted to get family planning (e.g., condoms or Pill) Y N
- f) had money problems that forced you to have sex Y N
- g) were experiencing violence or abuse in the home Y N
- h) wanted information on how to prevent HIV & STI Y N

ii) **Where or who** did you go to for help?

iii) Did you act **get any help?**

- Yes No

8) Have you ever heard about or seen a clinic on a bus that gives information on how to prevent HIV and that does voluntary, confidential, counselling and testing for HIV? Yes No (go to 14)

9) Do you remember anything about what this clinic was called? _____ [if not Bashy Bus, go to 14)

10) [if q9) is Bashy Bus] In which community did you see the Bashy Bus ?

11) Did you ever use the Bashy bus or collect any information from them? Yes No (go to 14)

12) How many times have you used these services in the last 12 months? _____

13) How would you rate the quality of the services of the Bashy Bus using a scale of 1 - 5 where 1 is the lowest and 5 is the highest or best rating? _____

14) Can you tell me at least three ways persons protect themselves from getting sexual infections or HIV?

[DO NOT READ THIS LIST, JUST TICK THE ONES THAT APPLY, IF ANY]

- | | |
|--|--------------------------|
| | tick if yes |
| a) Have sex with only one uninfected person | <input type="checkbox"/> |
| b) The person someone has sex with only has sex with them | <input type="checkbox"/> |
| c) Use a condom every time | <input type="checkbox"/> |
| d) Make sure their partner looks healthy | <input type="checkbox"/> |
| e) Do not hold hands with someone who has HIV | <input type="checkbox"/> |
| f) Avoid having sex with adults (over 19 yrs old) | <input type="checkbox"/> |
| g) Abstain from sex or avoid having sex | <input type="checkbox"/> |
| h) Avoid sharing food with people living with HIV or AIDS | <input type="checkbox"/> |
| i) Avoid getting bitten by mosquitoes | <input type="checkbox"/> |
| j) Any other method? SPECIFY _____ | <input type="checkbox"/> |
| k) Nothing | <input type="checkbox"/> |

15) I am now going to read some statements about protecting yourself from HIV. For each statement, please tell me whether you agree or disagree:

People can protect themselves if they:	Agree	Disagree
a) Make sure their sex partner looks healthy	<input type="checkbox"/>	<input type="checkbox"/>
b) Avoid touching people who have HIV or AIDS	<input type="checkbox"/>	<input type="checkbox"/>
c) Have sex with only one faithful uninfected partner	<input type="checkbox"/>	<input type="checkbox"/>
d) Avoid having sex with adults (over 19 yrs old)	<input type="checkbox"/>	<input type="checkbox"/>
e) Avoid sharing food with people living with HIV or AIDS	<input type="checkbox"/>	<input type="checkbox"/>
f) Use a condom every time	<input type="checkbox"/>	<input type="checkbox"/>
g) Avoid getting bitten by mosquitoes	<input type="checkbox"/>	<input type="checkbox"/>

16) Can you tell me **one or more signs** you can use to tell that someone has a sexual infection? _____ No I can't

17) Have you ever had a Sexually Transmitted Infection? Yes No (go to 19)

18) Have you had a STI in the last 12 months? Yes No

19) Tell me whether or not you agree with the following statement:
I think it is OK for me to have sex I agree Not sure I disagree

SRH BEHAVIOUR & ATTITUDES

20) Have you ever had sex before? No (go to Q 36)
If yes, was it in the last 12 months before the last 12 months

21) The last time you had sex, was it the very first time? Yes No

22) The first time you had sex...

a) How old were you?	
b) How old was your partner at that time?	

23) Did you use a condom **that time**? Yes
 No...[if 'no'] Did you get pregnant/got girl pregnant? Y N

24) a) Have you ever **had sex** in any of these places before:
 private vehicle (car etc) public vehicle (e.g., bus or taxi) at school
 none of these places
b) IF YES, what led to your decision to have sex in these places?

25) Do you believe you were **forced** when you had sex the first time? Yes No

26) Were you ever **forced** against your will to have sex Yes No
 No response

27) Were you ever involved in **forcing someone to have sex with you** Yes No
 NR

- 28) Do you have a sex partner now? Yes No (go to q. 30)
- 29) How old is your sexual partner now? _____
- 30) In the past 12 months:
- a) How many sexual partners did you have? _____ (if 1 partner, go to 32)
- b) How many persons other than your main sex partner did you have sex with?

- c) Did you have more than one main sex partners at anytime in the past 12 months?
 Yes No
- 31) a) Did you use a condom the last time you had sex with a person other than your main partner? Yes No
- b) If no, what were your reasons for not using a condom?

- 32) a) Did you use a condom the last time you had sex with your **main** partner? Yes No
- b) If no, what were your reasons for not using a condom?

- 33) If your sexual partner does not want to use a condom but **you want to**, do you still have sex without one?
 Yes, most times Yes, sometimes No condom, then **no sex**
- 34) Do you **depend** on your girl/boy friend (sexual partner) for money?
 Yes, most times Yes, but not often No, I don't
- 35) Have you ever been pregnant (or gotten a girl pregnant)? Yes No (go to 36)
- a) [If yes] Was it planned or intended? Yes No
- b) Were you (or did you get a girl) pregnant in the last 12 months? Yes No
- c) Do you have any children? Yes No (go to 36)
- d) How many children do you have? _____

BACKGROUND INFORMATION

- 36) Are you enrolled in a school now? Yes No
- 37) Do you take part in any of these groups or activities?
 school activities church activities youth club sports Y N
 hang with gang None
- 38) Which of these persons live in the same house with you? [Ask all items]
 Mother Father [if yes, skip step father] Step parent Friend Live alone Other _____
- 39) I have a list of ways that you might be using now to get financial support. Please tell me if you depend on any of these ways to get support from time to time:
- a) I am working or in a job

- b) I do some hustling (specify) _____
- c) My friends (including boy/girlfriend)
- d) Both of my parents are working [if no, skip next item]
- e) One of my parent work
- f) Other ways specify _____

THANK YOU