

MBARARA CENTER FOR SPORTS AND HEALTH PROMOTION



END OF PROJECT KAP SURVEY REPORT- 2018



WORLD **DIABETES** FOUNDATION

Acknowledgements

Many individuals have assisted and provided input in carrying out diabetes prevention Knowledge, Attitudes and Practices (KAP) study and without their support the study would not have been possible. Special thanks are extended to the hundreds of students, teachers and parents who made the time to talk to the interview team and shared their beliefs and experiences on the diabetes prevention knowledge, attitudes and practices.

Grateful acknowledgment goes to the World Diabetes Foundation for their financial support in conducting this end line KAP survey, and the interviewers for their hard work in collecting data. We trust that the findings of this survey will be of much value, both in improving health outcomes through more informed decision-making and in designing future projects.

Special thanks go to the school management teams from different schools, students and parents who participated in this end line survey for the tremendous effort to spare their precious time and be part of this exercise.

Diabetes Prevention through Schools Programme

KAP End line survey carried out in 50 schools of Mbarara and Isingiro districts.

June, 2018

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ACRONYMS

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| MCSHEP | Mbarara Center for Sports and Health Promotion |
| WDF | World Diabetes Foundation |
| KAP | Knowledge Attitude and Practice |
| MoH | Ministry of Health |
| MoESST | Ministry of Education, Sports, Science and Technology |
| MRRH | Mbarara Regional Referral Hospital |
| NCDs | Non-communicable diseases |
| DLG | District Local Government |

EXECUTIVE SUMMARY

The Diabetes Prevention through Schools Programme was a three-year project funded by the World Diabetes Foundation (WDF) under a contract awarded in July 2015 to Mbarara Center for Sports and Health Promotion. (MCSHEP). The project was designed to promote adoption of healthy lifestyles behaviours among school children, teachers and their parents to prevent development of diabetes and other chronic diseases by providing information on healthy eating and physical activity. Main activities of the project included capacity building by training students, teachers and parents in diabetes primary prevention, establishing school food gardens, provision of sports equipment in schools, health education, procurement of medical equipment conducting healthy awareness and screening camps. The project utilized a behavioural change approach, which promoted primary prevention targeting children whose habits are not yet exposed to unhealthy behaviours and they were the primary targets of this project.

Objective:

The end line survey; was conducted towards the end of the project, in order to inform the achievement of progress of the indicators described at the logical framework that assessed the improvement in the knowledge, attitudes and practices of students, teachers and parents in the project target schools at the end of the project, as compared to the findings of the baseline KAP survey undertaken in 2015.

Specific objectives include:

- a) To assess the Knowledge, Attitude and Practices (KAP) towards diabetes prevention among students, teachers and parents.
- b) To identify gaps in knowledge, attitude and practices regarding unhealth lifestyles leading to negative impact on health
- c) To compare these data with the base line data to identify the effectiveness and impact of the project activities among students, teachers and parents.

Methodology of the survey:

The end line KAP survey was conducted by MCSHEP in the targeted schools of Mbarara and Isingiro districts from 21st May to 31st May 2018. Random sampling was applied for the data collection. The sample size which was 50 schools represents 50% of the total schools benefiting from the project. Total number of students, teachers and parents surveyed in 50 schools was 750 students, 150 teachers and 150 parents respectively. 14 primary schools and 36 secondary schools were selected to participate in the survey. Random sampling was applied for the selection of schools. The same methodology in the baseline survey was applied while conducting this end line survey. The survey was carried out by using semi-structured questionnaires (see Annex III) developed by MCSHEP in collaboration with Mbarara Regional Referral Hospital (MRRH). The questionnaires covered information on the background characteristics of respondents, including their literacy status, gender, and information relating to healthy behaviours for diabetes prevention. The questionnaires of students, teachers and parents varied slightly from one another to suit their relevancy.

Key Findings:

The key findings of the KAP end line survey are the following:

- Information on causes of diabetes, all the three groups had increased the knowledge about unhealthy diet and lack of physical exercise as causes of diabetes (students-90.6% and 93.3% respectively, parents-59% and 58% for unhealthy diet and lack of physical exercise respectively, teachers-93.3% and 90% for unhealthy diet and lack of physical exercise respectively,).
- Daily consumption of vegetables and fruits indicated that teachers consume more (71%) compared to other groups. Students who consumed daily vegetable and fruits were at 60% while parents were at 68%.
- Daily consumption of fruits was very low (students-0%, teacher-2%, and parents-2%)
- Information on the daily participation in physical activity showed that the majority were physically active. Parents were at 82%, students were at 80% and teachers were at 64%. This is attributed to the rural and semi-urban setting where parents engage in rudimentary methods of farming, teachers walk and students walk to and from schools.
- The end line survey results indicate a high level of knowledge among all respondents of all risk factors for diabetes. For instance, more than 90% of respondents were aware of more than 3 risk factors including unhealthy diet and physical inactivity.

Conclusion:

From KAP survey results, it was found out that good results have been achieved in the overall knowledge, attitude and practices about diabetes prevention among students, teachers and parents. Daily consumption of vegetables increased and also participation in physical activity rate increased. However, consumption of fruits daily is very low.

1.0: INTRODUCTION

This document describes the process and findings of a Knowledge, Attitudes, and Practices (KAP) study done by Mbarara Center for Sports and Health Promotion (MCSHEP) as part of the project “Diabetes Prevention through Schools Programme” (2015-2018). With funding from the World Diabetes Foundation, this project aimed at promoting the adoption of healthy lifestyles behaviours among school children, teachers and their parents to prevent development of diabetes and other chronic diseases by providing information on healthy eating and physical activity. The project focused in 100 schools (21 Secondary and 79 primary schools) in the districts of Mbarara and Isingiro. This report describes the results, analysis of findings and conclusions from the survey.

The project utilizes a behavioural change approach, which promotes primary prevention targeting children whose habits are not yet exposed to unhealthy behaviours and they are the primary targets of this project implementation. The assessment was to establish baseline levels of target groups’ diabetes-related knowledge, attitudes, and practices (KAP) in selected schools. It was also to enable the project to set realistic targets using indicators based on the baseline survey findings.

1.1: END LINE SURVEY OBJECTIVES.

- a) To assess the Knowledge, Attitude and Practices (KAP) towards diabetes prevention among students, teachers and parents.
- b) To identify gaps in knowledge, attitude and practices regarding unhealth lifestyles leading to negative impact on health.
- c) To compare these data with the baseline data to identify the effectiveness and impact of the project activities among students, teachers and parents.

1.2: PROJECT INDICATORS:

End line survey was done and below were findings of the agreed indicators:

(i) knowledge about diabetes prevention through physical activity and healthy eating by secondary students was increased from 4.8% at baseline to 98%, primary pupils from 6.7% to 96%, teachers from 37.4% to 96%, and parents from 47.3% to 87%.

(ii) dietary behaviour about vegetable and fruit consumption daily by secondary students increased from 23.3% at baseline and it was increased to 60%, primary pupils from 31% to 62%, teachers from 24% to 71% while parents was increased from 30.7 to 68%.

(iii) Daily participation in physical activity by secondary students increased from 67.6% at baseline to 80%, primary pupils from 63.5% to 87%, teachers from 60% to 64% while parents from 68.7% to 82%.

1.3. RESEARCH DESIGN

A case study design was used to understand and explore the existing knowledge, attitude and practice of the target group (teachers, parents, and students) on diabetes, healthy eating and physical activity. The quantitative technique was used for purposes of analysing the data collected and also establishing the correlation and

regression relationships between the variables. This approach was preferred because of its strength in identifying, capturing key issues and allowing more detailed and richer inclusions of the aspects of the study.

1.4 STUDY POPULATION

The study population was drawn from teachers, parents and students of 50 schools in Isingiro and Mbarara districts. The target population was 750 students, 150 parents and 150 teachers. This target population was chosen due to cost implications and it was assumed that the target population would give a general overview of the situation in the two districts where the project has been implemented.

1.5 SAMPLE SIZE AND SELECTION

The respondents in the survey were of the three categories, parents, teachers and students from 50 schools (14 secondary and 36 primary schools) where the baseline survey was carried out. From each of the 50 schools, interviews were conducted with 15 students, 3 teachers and 3 parents making it a total of 1050 respondents.

1.6 DATA COLLECTION TOOLS

Data were collected by using the same revised questionnaire employed for the baseline survey. Informal verbal consent from the respondents was obtained after explaining the purpose of the study. Data was collected from 21st May to 31st May 2018. Three sets of survey tools (for students, teachers and parents) were developed for data collection in the survey (Appendix III). All the questionnaires collected individual demographics and structured items to assess knowledge, attitudes, and practices of respondents on diabetes prevention as regards to health eating and physical activity. To facilitate coding, a set of pre-designed potential answers was provided for every question (i.e., close-ended). Nonetheless, an open-ended option (i.e., “others”) was included often as a valid choice to capture unexpected answers. There were single- and multiple-choice questions as well as categorical (e.g., sex), numerical (e.g., age), and rating questions. Response choices were listed from the low to high frequency such as from “Never” to “Always” or from “Strongly Disagree” to “Strongly Agree”.

All questionnaires were pre-tested separately to determine the acceptability of the survey, the usefulness of the data being collected, and to identify questions that should be deleted, added, or modified before finalizing the survey instruments. Additional amendments to the questionnaires were made during the training of survey interviewers, and as a result of field-testing combined with practice interviews.

2.0 DATA COLLECTION AND ANALYSIS

2.1 Survey Team Selection and Training

MCSHEP recruited interviewers who were able to communicate in English and the local language, had completed higher levels of education and represented a balanced number of men and women. Ten people were thus trained in data collection techniques by the M&E officer. During the day training session, they were briefed on the survey objectives, and how best to complete the questionnaires. Special attention was given to ethical research principles and behaviour (e.g., voluntary participation, informed consent, etc) and age-appropriate interviewing. The training included lecturing as well as practice, both in-class and in the field. One field-testing session was carried out in Kakoba Muslim Primary school and St. Bridget Girls' High school. This also served to further refine the instrument. Quizzes and observation were administered, and reviewed to assess participants' learning.

2.2 Quantitative Data Analysis

The collected data was checked for completeness, coded and entered in the computer using Statistical Package for Social Scientists (SPSS). Data was entered and analysed using SPSS software. MS Excel was then used to generate the required charts and graphs for the indices that had been identified.

2.3. Ethical Considerations

Permission from schools to conduct survey was obtained. Interviewers used the introductory letter from MCSHEP which explained the objectives of the study to approach the various respondents from where the survey was conducted. While conducting the survey, several measures were taken to protect confidentiality, observe informed consent, and to reduce any potential adverse consequence to the participants.

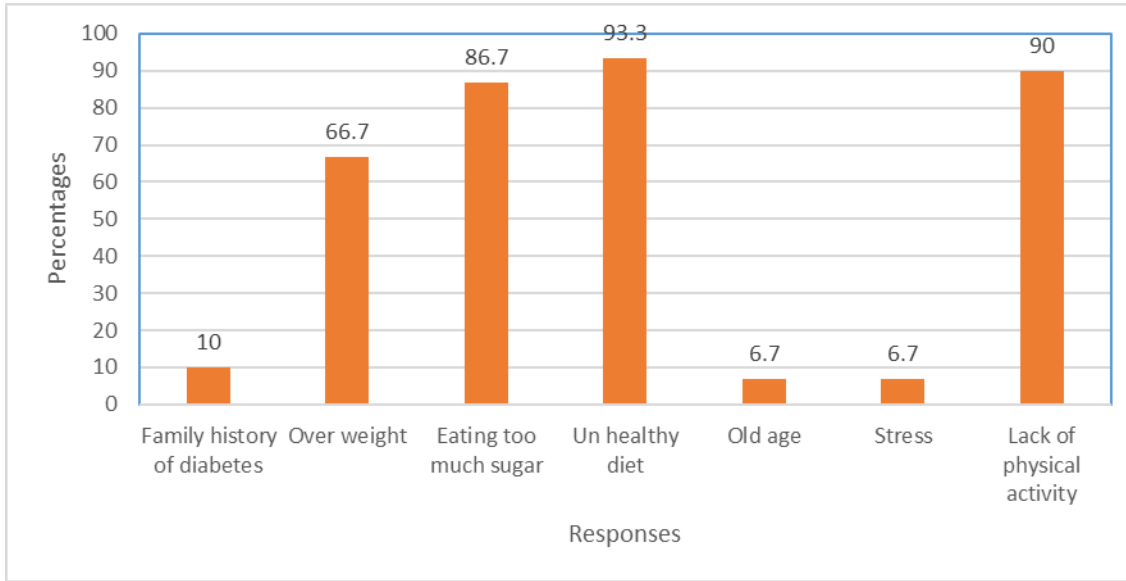
3.0 ENDLINE KAP RESULTS

The project endline survey report indicates that a total of 1050 people participated in the survey. Like in the baseline survey, findings of this endline survey were categorized into three as per the target population of the project. The categories included, 150 teachers, 150 parents and 750 students as shown below.

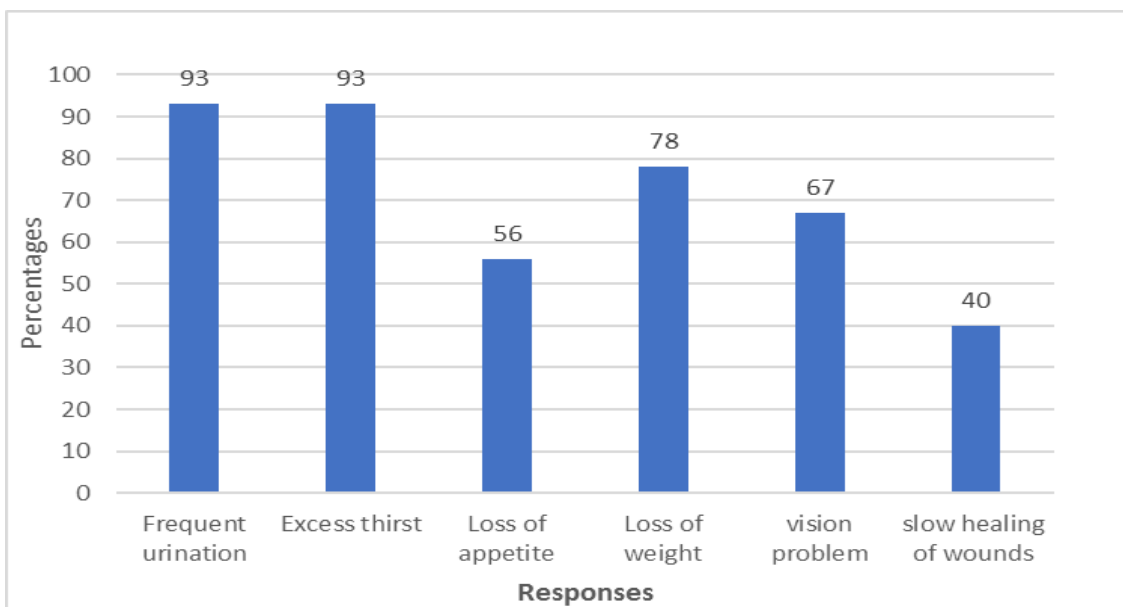
3.1. TEACHERS' KNOWLEDGE ON DIABETES

The sample of 150 teachers surveyed was taken from both Primary and Secondary schools

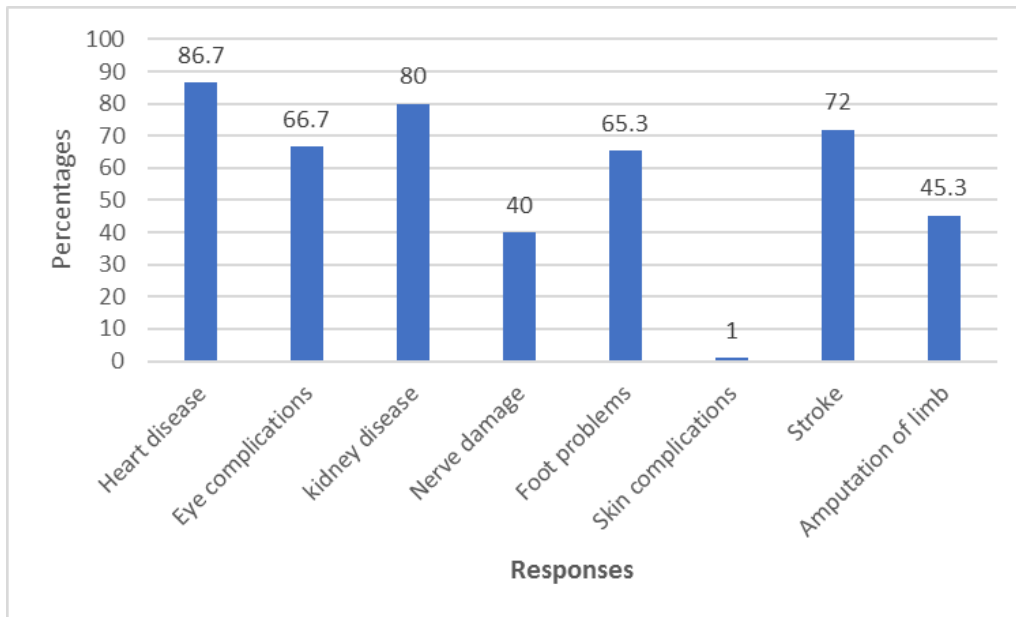
The endline survey showed an increases awareness on the risk factors for diabetes compared to the baseline data. For example, 93.3% and 90% indicated unhealthy diet and lack of physical activity as the causes of diabetes. All teachers surveyed at least knew some factors that may predispose them to diabetes as indicated below:



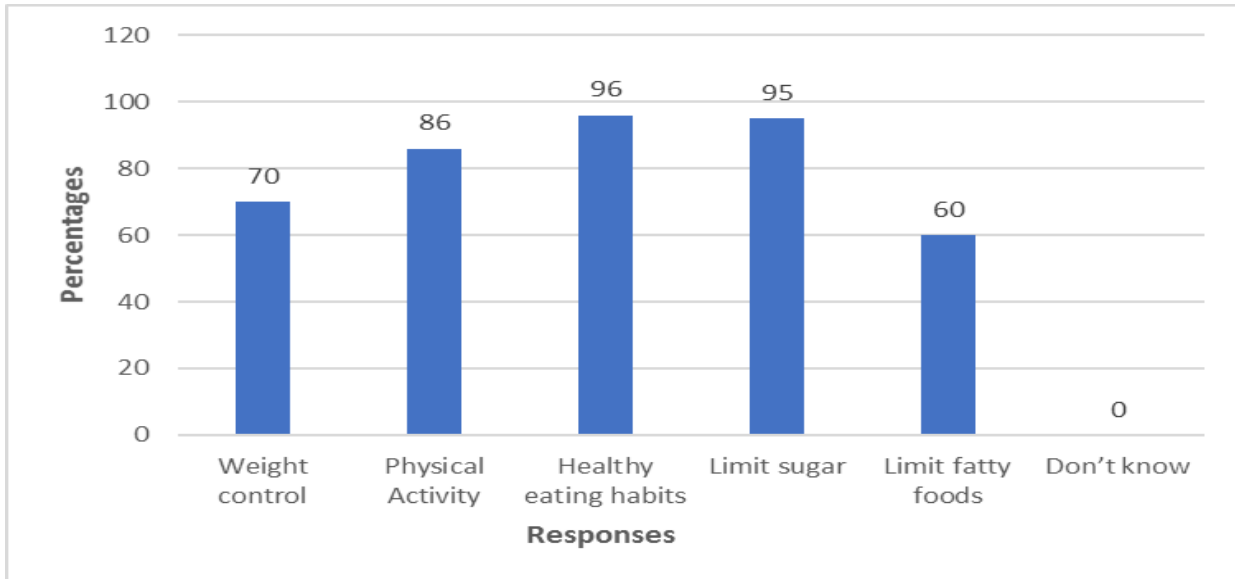
There was improved knowledge on the signs of diabetes among the teachers that were surveyed. The end line survey data shows that 93% of the respondents knew frequent urination and excessive thirst as signs of diabetes . In the baseline survey only 28.3 % and 2.7 knew of the respondents frequent urination and excessive thirst as signs of diabetes respectively.



When asked about complications of diabetes, 86.7% reported heart diseases compared to only 23% at baseline, 80% reported kidney disease while 66.7% reported eye complications. All the participants had improved knowledge on the complications of diabetes. This indicates improved awareness on the health problems of untreated or poorly managed diabetes may cause.

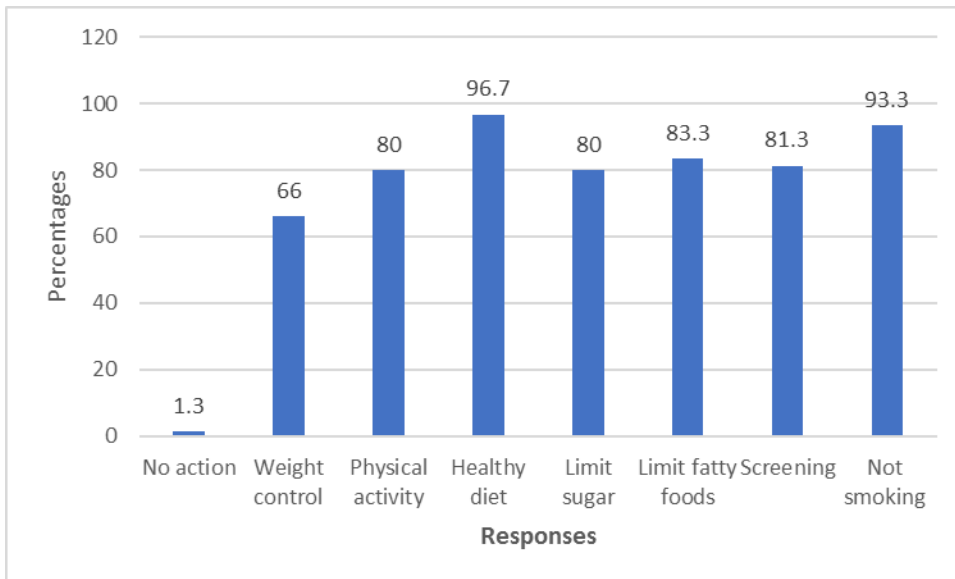


Teachers were asked about how diabetes can be prevented, and 96% mentioned adopting healthy eating habits, 86% mentioned physical activity. All respondents knew various ways of how diabetes can be prevented compared to 32.7% of teachers who didn't know anything about diabetes prevention at base line. This is attributed to health education in schools by peer educators, health educator in addition to the various IEC awareness materials that were distributed in schools.

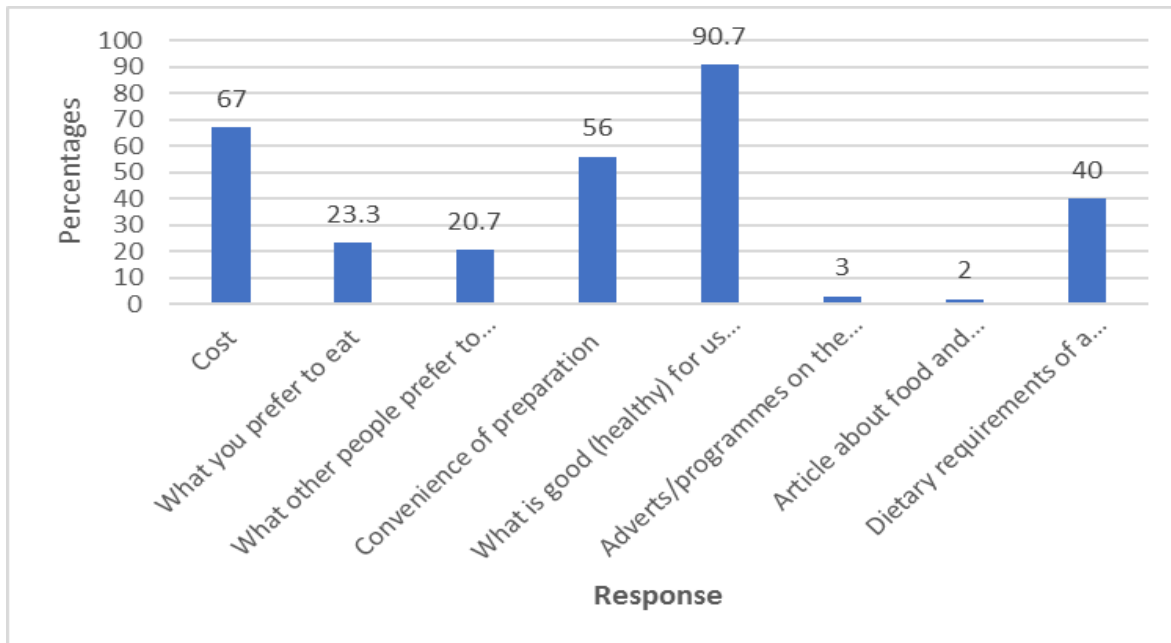


3.2. TEACHERS' ACTIONS TO PREVENT DIABETES

Like in the base line survey, 74% of the teachers surveyed were below 40 years of age and therefore when healthy lifestyles are adopted and sustained, they can prevent or delay diabetes. Teachers were asked the actions they were taking to make it less likely to develop diabetes in the future and 96.7% and 80% mentioned healthy diet and physical activity respectively. Only 1.3% of the teachers said no action they are taking to prevent the possibility of getting diabetes.



Concerning the dietary behaviours, teachers asked about what influences their choice of choosing food for meals. Interestingly 90.7% said they consider those which are healthy and only 3% mentioned that advertisements influence them.

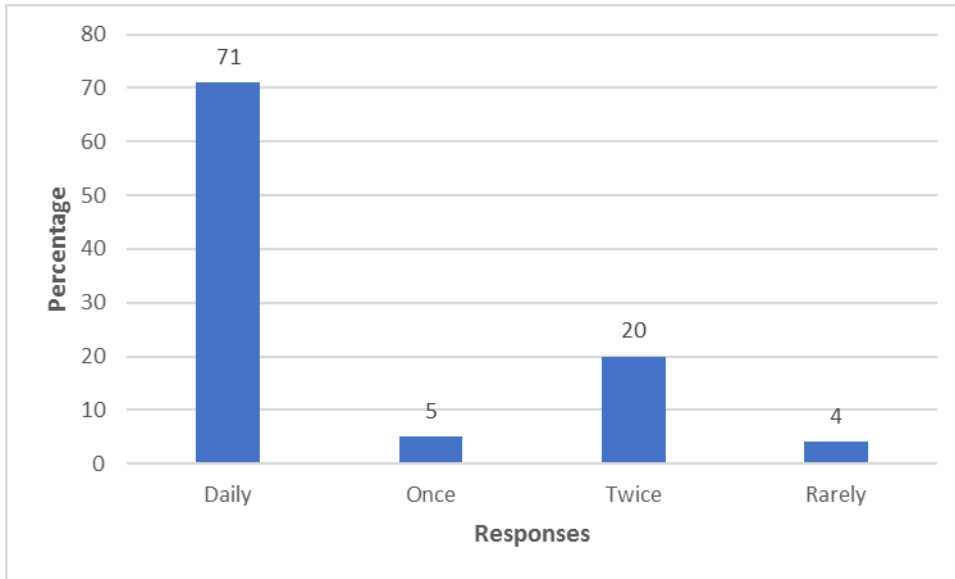


3.3. TEACHERS' ATTITUDE ON DIETARY BEHAVIOURS.

The interviewers further shared with the teachers about their attitude to healthy eating. They had attitude statements that needed the respondents to give their opinion by answering, strongly agree, agree, strongly disagree, disagree or don't know. About Fried food is healthier than boiled food, 86% strongly disagreed while only 4% agreed. This is an indicator that teachers were aware of the healthy dangers of fried food given that majority strongly disagreed. 73% strongly agreed that saturated fats lead to weight gain, 66.7% and 54% also strongly agreed that drinking alcohol and smoking tobacco is harmful to human health.

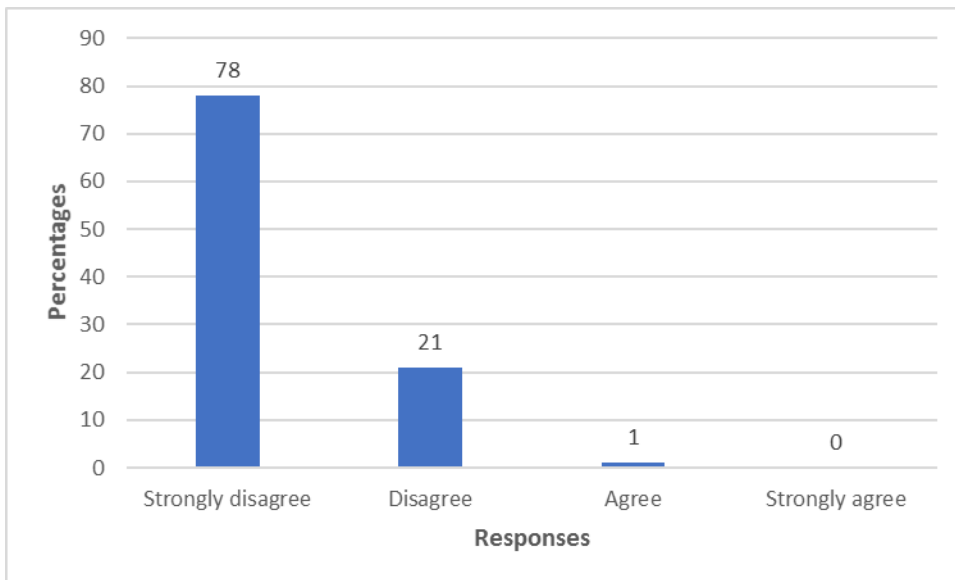
3.4. TEACHERS' PRACTICE ON HEALTHY EATING.

The teachers practice on healthy eating was mainly to establish how often they were eating vegetables and fruits in a week. It was interesting to find out to find out that 71% of teachers surveyed now consume vegetables daily compared to 24% at base line. This is mainly attributed to improved awareness and established school gardens where teachers can access fresh vegetables for their meals. However, it was found out that of the teachers interviewed, only 2% were the ones eating fruits daily while 68% rarely ate them. Fresh fruits are expensive to buy and its only during the harvesting season that fruits can be consumed daily. Other responses were as shared in the graph below.



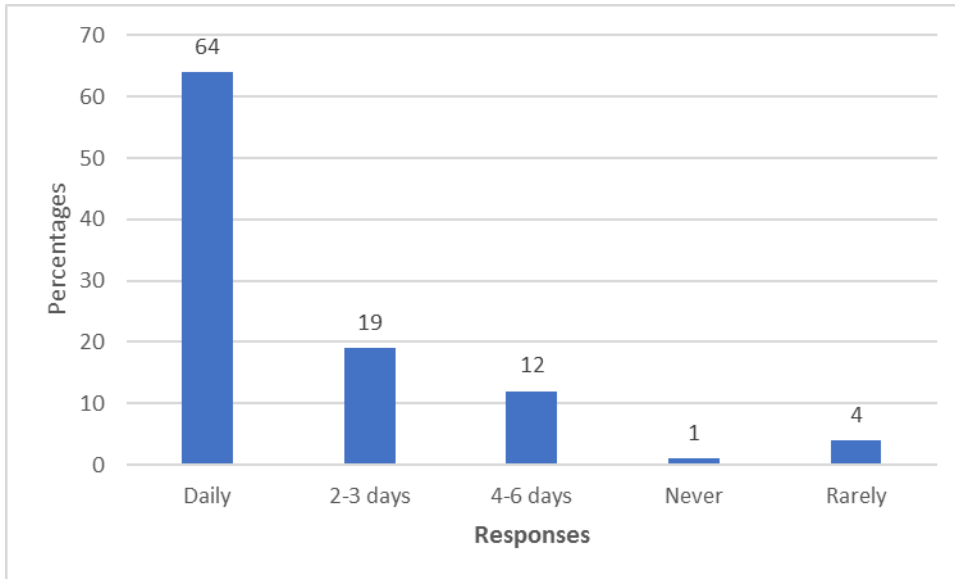
3.5. TEACHERS' ATTITUDE ON PHYSICAL ACTIVITY.

The teachers' opinion on physical activity was, 78% strongly disagreed compared to 40% at baseline that only overweight people should engage in physical activity, only 1% agreed with it while 21% disagreed with the statement. This shows that more information about physical activity was disseminated through peer educators, awareness materials and the health educator.



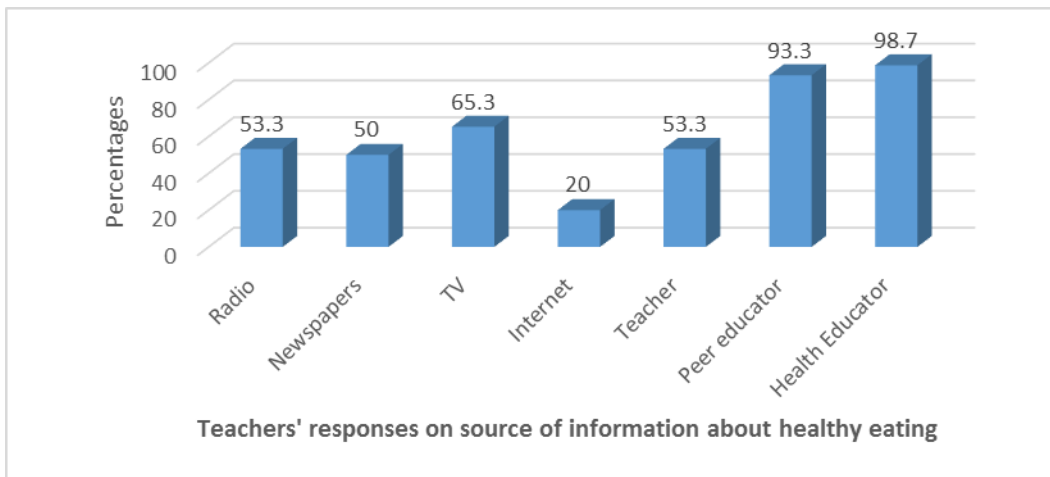
3.6. TEACHERS' PRACTICE ON PHYSICAL ACTIVITY.

The teachers also shared with the interviewers on how often they participated in physical activity to remain healthy and hence prevent diseases including diabetes, 64% of the teachers surveyed on indicated that they were participating in physical activity daily, while only 1% said don't participate in the physical activity. Below is the graph indicating further responses.



3.7. TEACHERS' AWARENESS SOURCE.

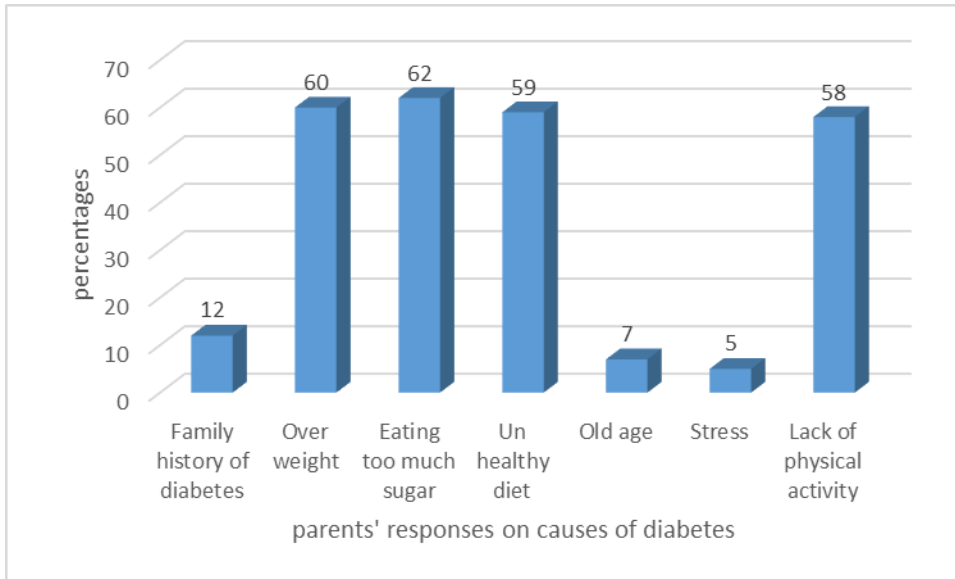
Most of the teachers know about diabetes through various sources. The most source of information was from health educator and peer educator at 98% and 93.3% respectively. Few teachers surveyed indicated that, their source of information was internet at 20%. Therefore, for any information dissemination about diabetes, various channels should be used to reach a bigger audience for information dissemination.



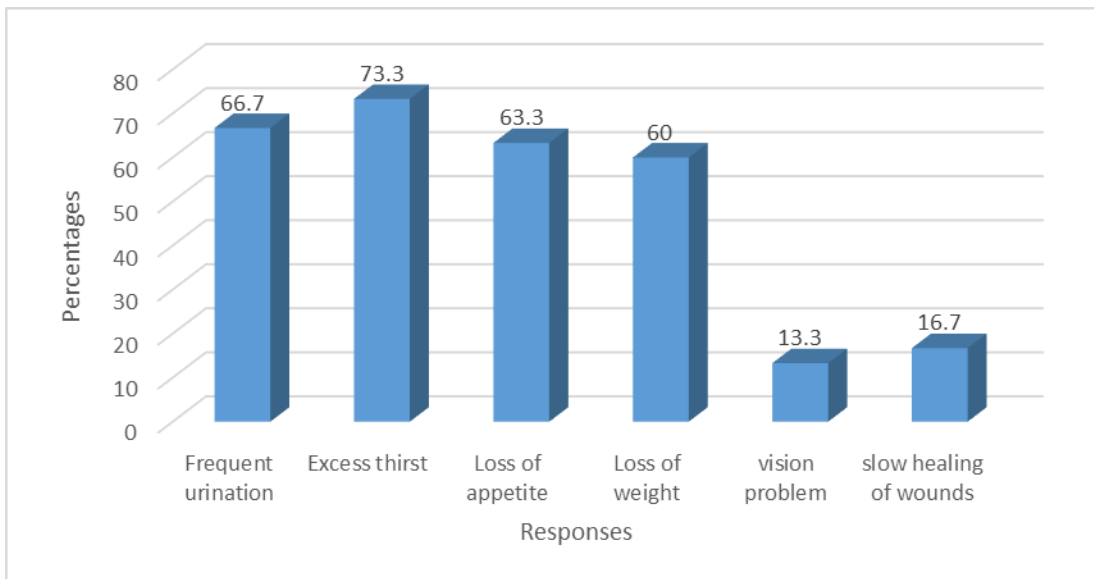
3.2.1. PARENTS' KNOWLEDGE ON DIABETES

The sample of 150 parents surveyed was taken from Parents of children from beneficiary schools.

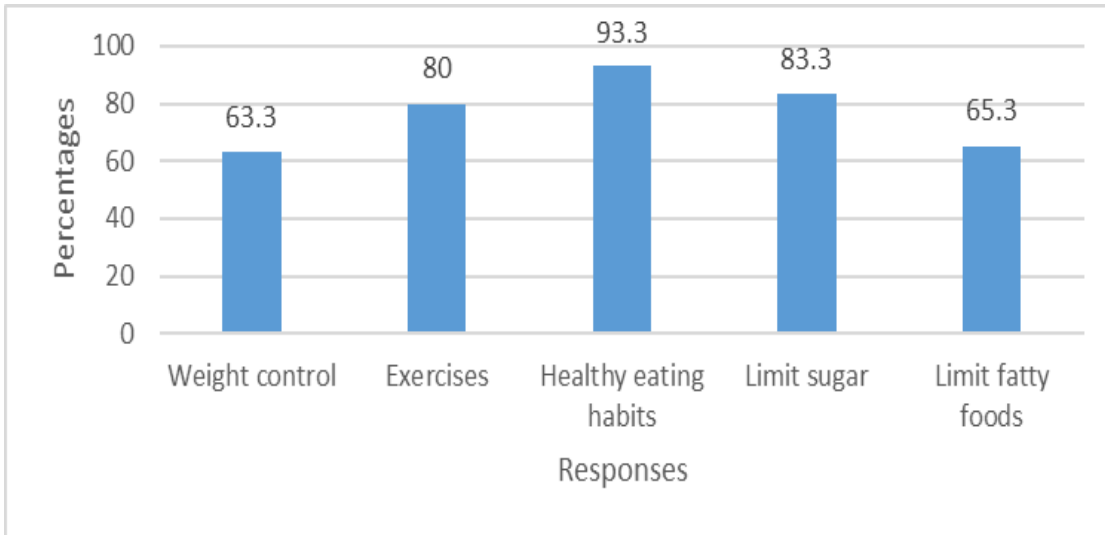
Under this category of the target population, there was an indicator for increased knowledge about the causes of diabetes compared to baseline. For example, 59% and 58% mentioned unhealthy diet and lack of physical activity as causes of diabetes respectively compared to 14% and 7% respectively at base line. Other responses equally showed increased knowledge on the risk factors as shown in the graph below.



The parents were also asked about their knowledge on the signs of diabetes, its complications and how it can be prevented. The responses received showed an increased knowledge on signs, complications and prevention strategies. On the signs, 66.7% mentioned frequent urination, 73.3 mentioned excess thirst, and none didn't know any sign for diabetes. About the complications of diabetes, 63.3% mentioned that diabetes may lead to heart disease, 64% mentioned eye complications and 64.7% said it leads to foot problems. The chart below shows responses from parents on the signs of diabetes:

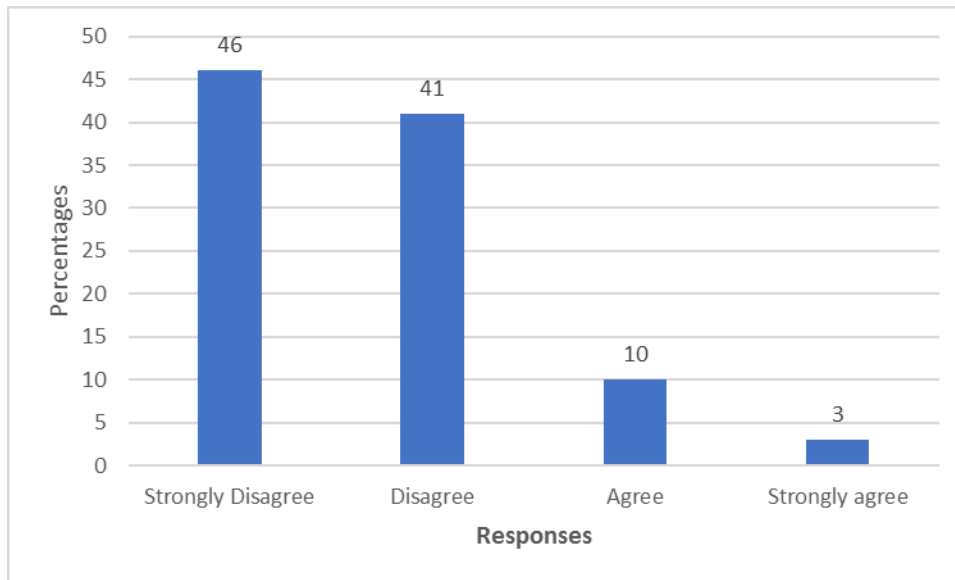


The parents were further asked about their knowledge on how diabetes can be prevented and 93.3% said it can be prevented through healthy eating, 80 percent mentioned doing physical exercise and the parents knew at least how they can prevent diabetes, compared to baseline where 66% of parents interviewed didn't know any prevention strategy.



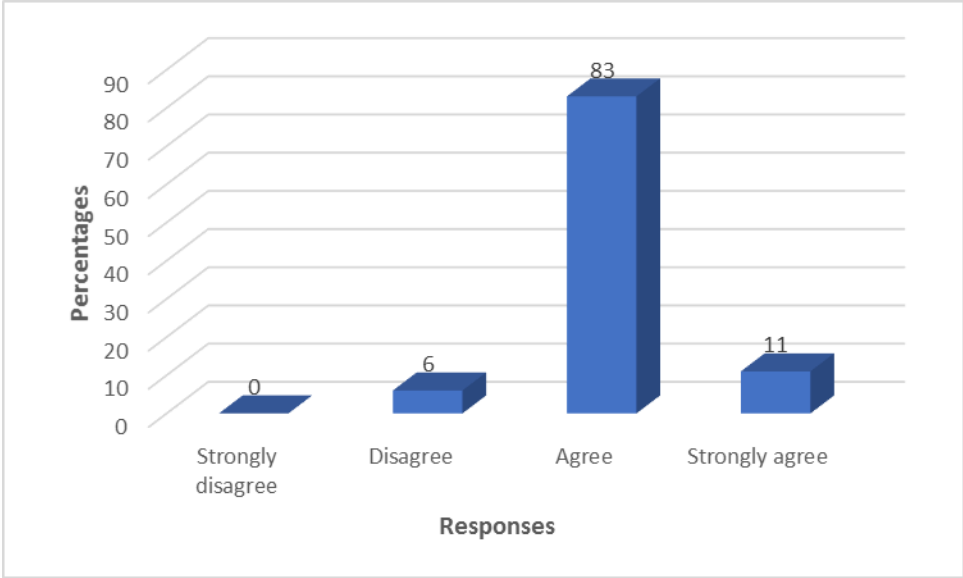
3.2.2. PARENTS’ ATTITUDE TO HEALTHY EATING.

Like the teachers, the interviewers also shared with parents healthy eating statements to find out their opinion. The statements required responses as strongly disagree, disagree, agree, and strongly agree. On the question whether fried food is healthier than boiled food, 41% of the parents disagreed, 46% strongly disagreed while 10% agreed. Given their opinion, the parents are also aware that fried food is not healthy and if this kind attitude remains then they would be at a lesser risk of having chronic diseases as a result of unhealthy diet and also providing their children with only health foods.



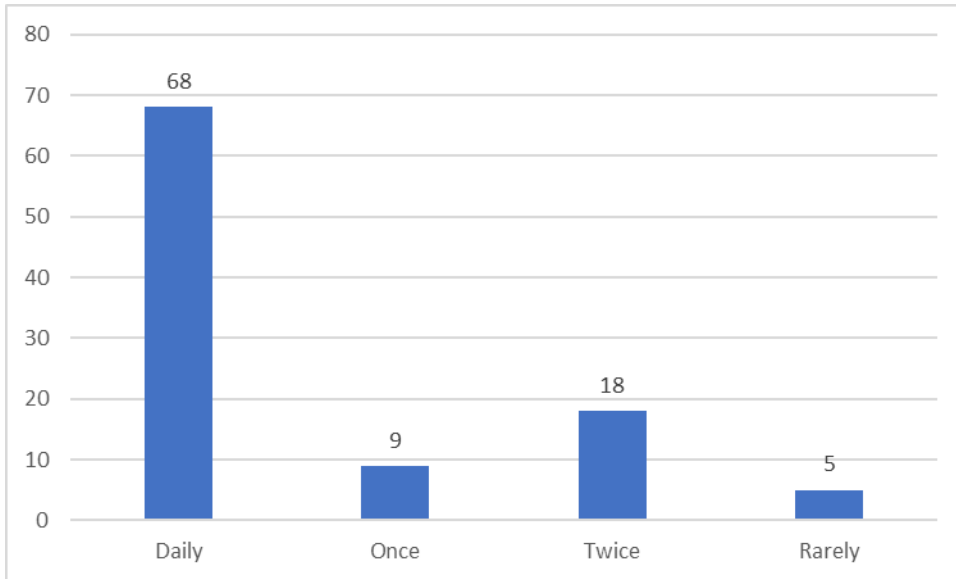
On the statement that smoking is harmful to our healthy, 67% of the parents strongly agreed, 29% agreed disagreed while 2% agreed. This means that the parents will be easy to sensitize about the dangers of smoking because they already know that it is harmful.

In addition to attitude statements, 83% of parents agreed that people should change their dietary behaviours to prevent diabetes and other chronic diseases, 11% strongly agreed and 6% percent disagreed with the statement. According to the response from parents, it indicates that parents know that eating unhealthy foods is a risk factor for chronic disease. The chart below shows responses from parents’ attitudes on unhealthy foods as a risk factor for chronic disease:

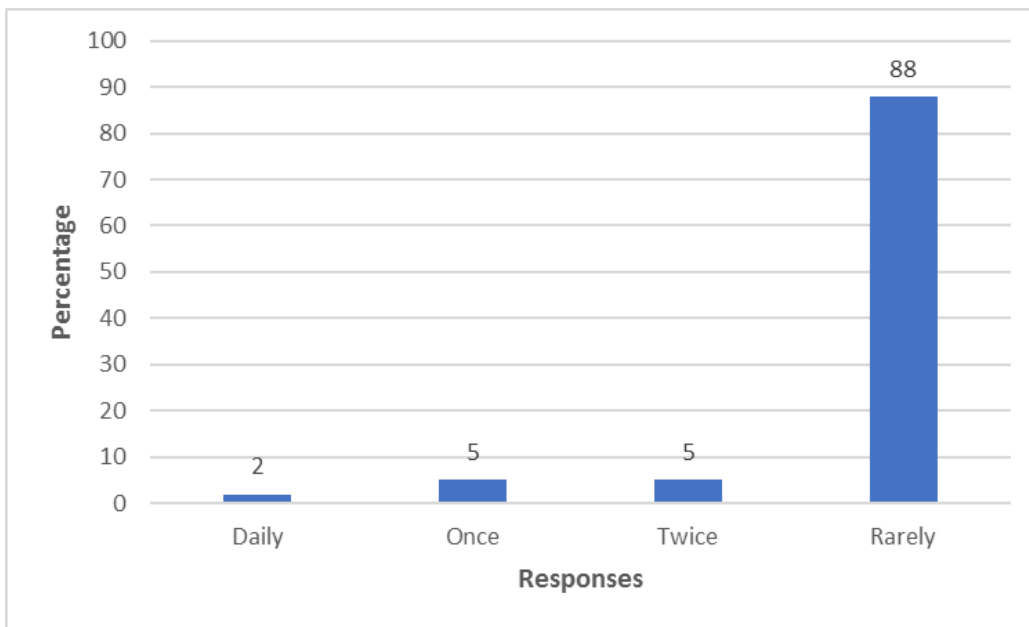


3.2.3. PARENTS’ PRACTICE ON HEALTHY EATING

The question focused on practices related to healthy eating and in particular how often they consumed vegetable in a week. Again, interviewers read a list of situations and asked respondents to assess whether parents consume them ‘daily’, ‘once’, ‘twice’ or ‘rarely’ in their homes. The end line survey shows an increase in the daily consumption of vegetables i.e. 68 % of the respondents stated that they consume vegetables daily, those who consumed twice a week were 18% and only 5% of the parents said that they rarely consumed vegetables. The increase for dairy consumption was attributed to increased awareness of the importance of consuming fresh vegetables in the prevention of diabetes and yet these vegetables are always available in their home gardens. Therefore, the access to vegetables was easy. In the base line survey, 30.7 percent were the ones found to eating vegetables daily and 7.3 percent rarely ate the same.

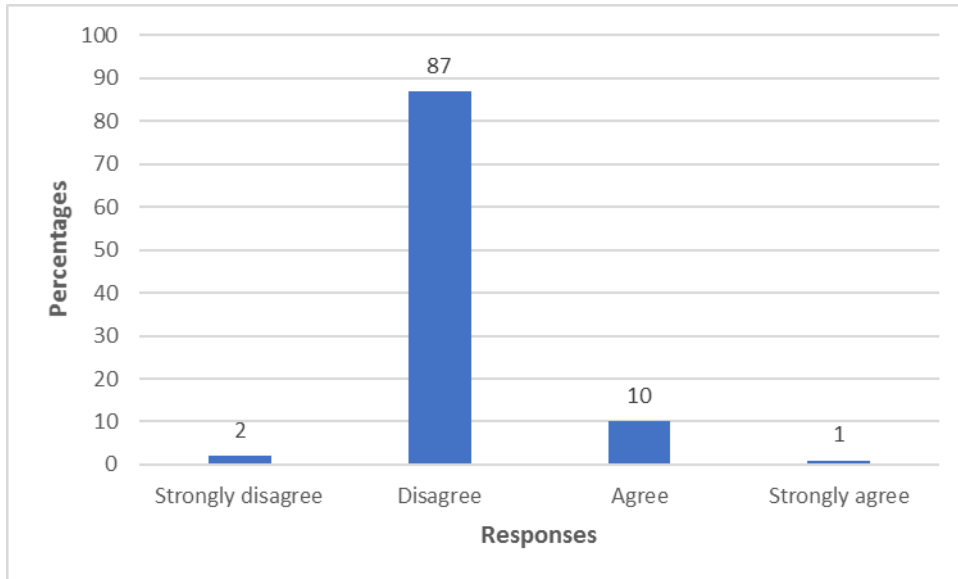


On the other hand, the survey showed consumption of fruits in a week is very rare. According to the survey, parents who consumed fruits on a daily basis were 2%, those who at least consumed twice a week were 5%, while 88% of the parents surveyed, they said that they rarely consume fruits. This was attributed to the high cost of fruits and the majority only wait for the harvest season of their fruit trees which occurs twice a year. That is when they consume fruits on a daily basis only. The chart below shows responses from parents on consumption of fruits:



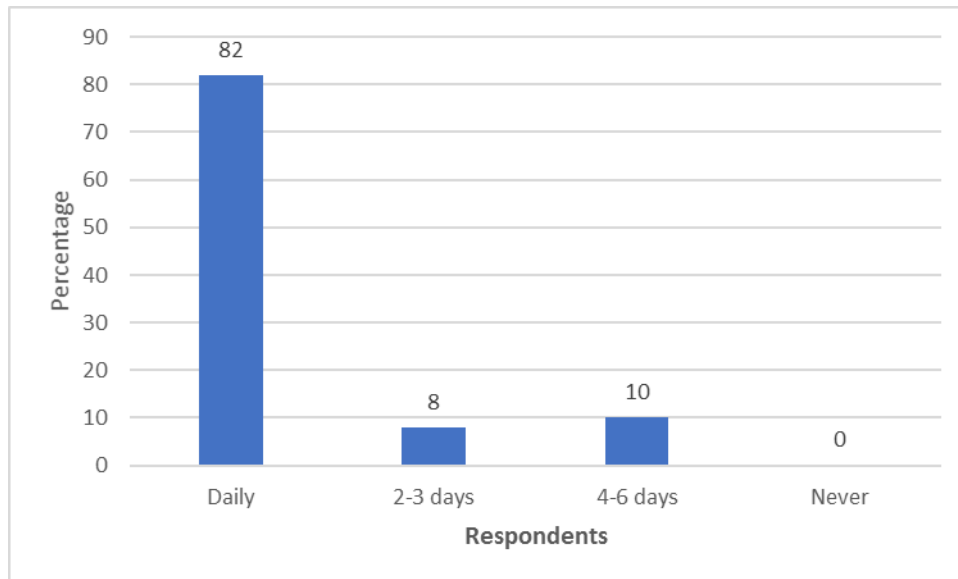
3.2.4. PARENTS' ATTITUDE ON PHYSICAL ACTIVITY

Parents' attitude on physical activity was also positive because they understood that physical activity is for every person stay healthy. On the statement that, only overweight people should engage in physical activity, 10% agreed with the statement, 87% disagreed while 2 strongly disagree. Therefore, this indicates that parents were sensitized about physical activity and the benefits that accrue to it.



3.2.5. PARENTS’ PRACTICE ON PHYSICAL ACTIVITY

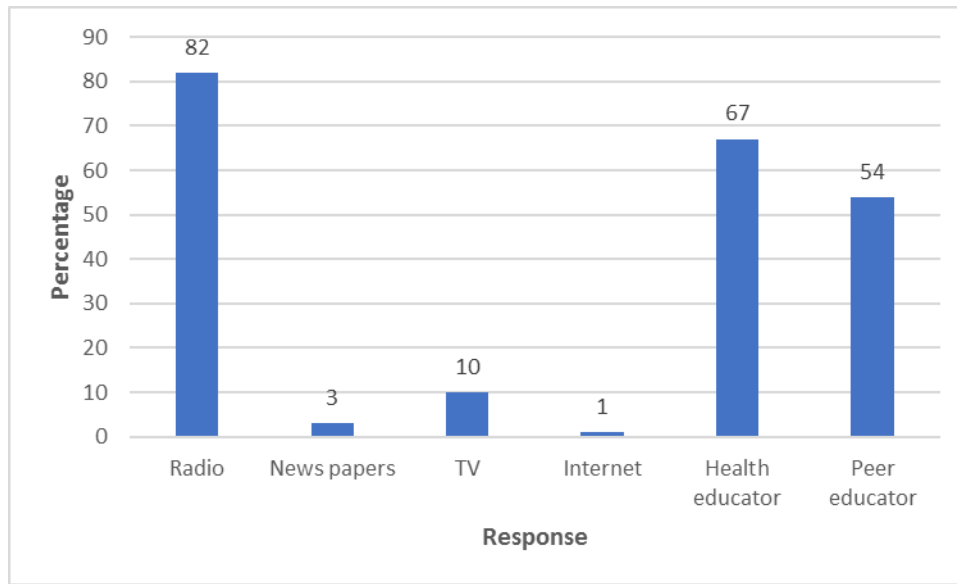
Regarding the practice of physical activity, respondents were asked about how often they participate in physical activity in a week. Parents’ response about physical activity daily participation had increased from 68.7% at baseline to 82%. This is attributed to the fact that most of the parents live in rural areas and are always involved in gardening, home chores, and walking almost on a daily basis. The higher percentage was again scored for those who participate between 4 to 6 days (10%) as was indicated in the end line.



3.2.6 PARENTS’ AWARENESS SOURCE

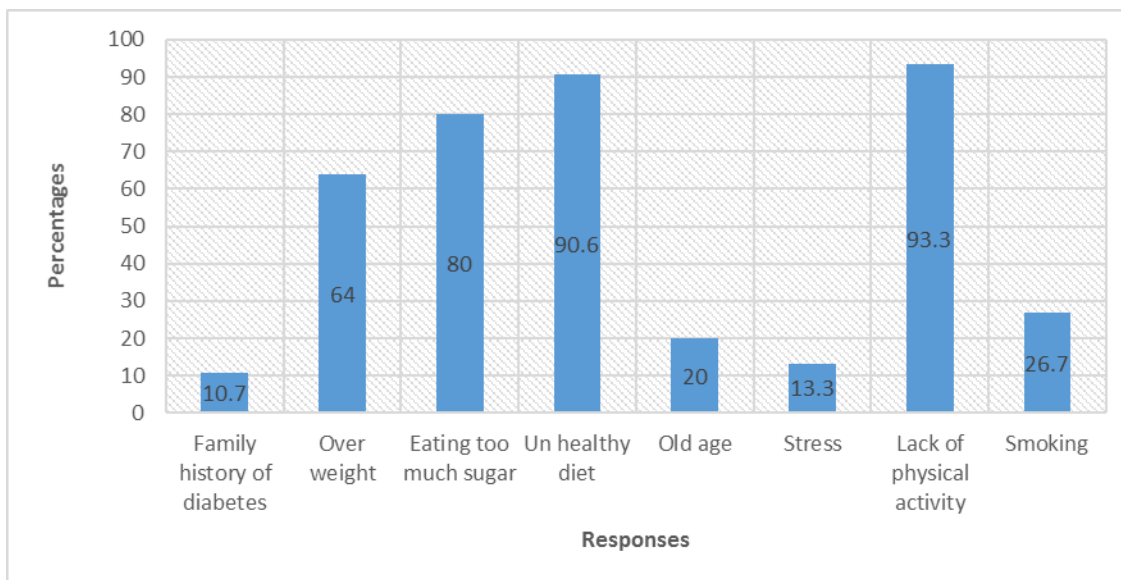
During the survey the parents were asked to share their source of information about diabetes, healthy eating and physical activities. 82% mentioned their main source as radio, 67% said health educator, 54% mentioned peer educator and only 1% mentioned internet as the major source of their information. This means any information

that is disseminated through outreaches, peer education and media especially radio can reach a big percentage of the population.



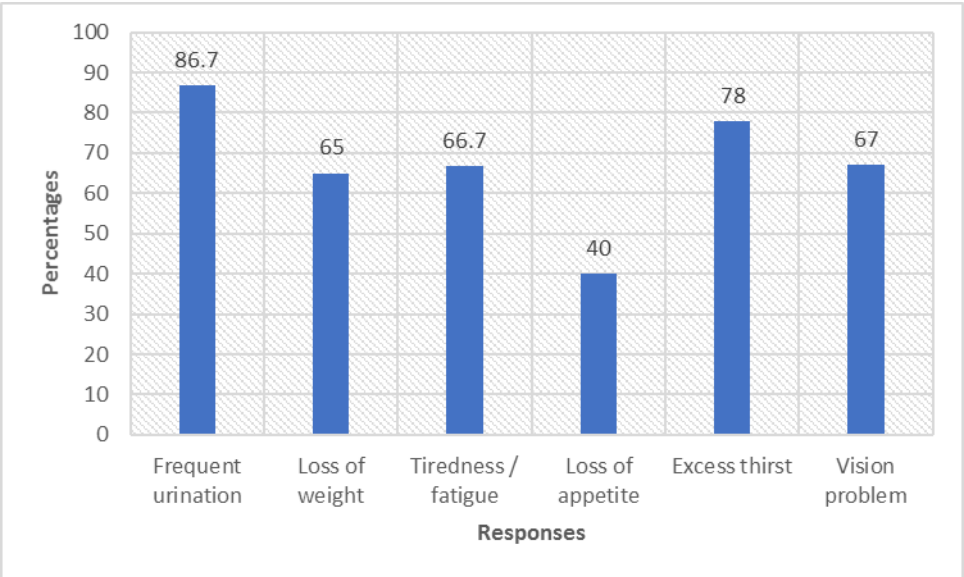
3.2.7 STUDENTS' KNOWLEDGE ON DIABETES

210 Secondary school students were interviewed. Regarding their knowledge levels about diabetes, 93.3% knew diabetes as a condition of high level of sugar in the blood. On the causes of diabetes 93.3% stated lack of physical activity, 90.6% mentioned unhealthy diet while only 10% indicated family history of diabetes. Unlike in the baseline survey where 44.3% could not mention a single cause of diabetes, in the end line survey all students could mention at least 3 causes. Other responses on causes are shown in the graph below: Multiple responses were allowed.

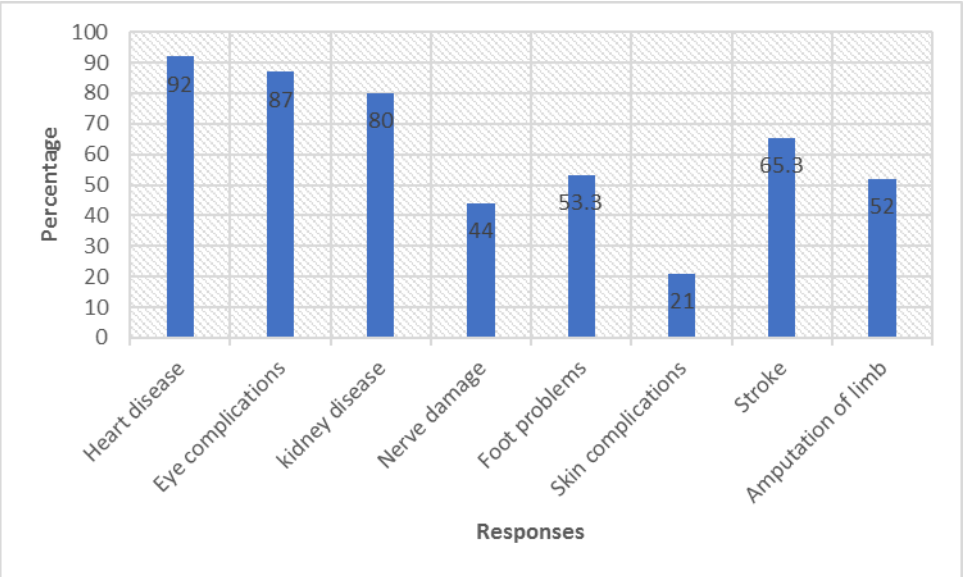


About their knowledge on the signs of diabetes, 86.7% mentioned frequent urination as the major sign of diabetes while 40% mentioned loss of appetite. This was due to much efforts directed to increase awareness by health

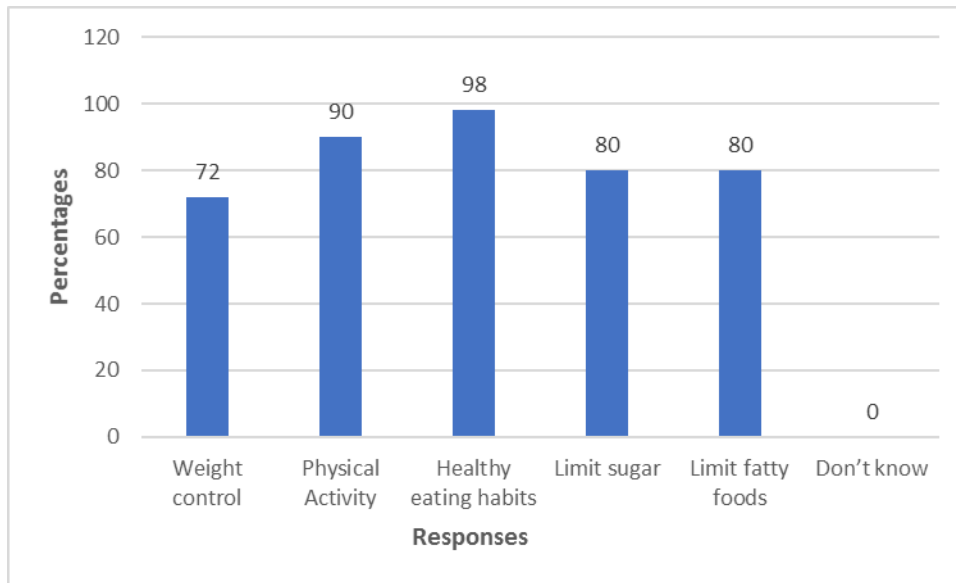
educator, peer educators and the awareness materials that were distributed in schools. At the baseline, only 12.4% mentioned frequent urination as the major sign of diabetes while 44.3% did not know the signs.



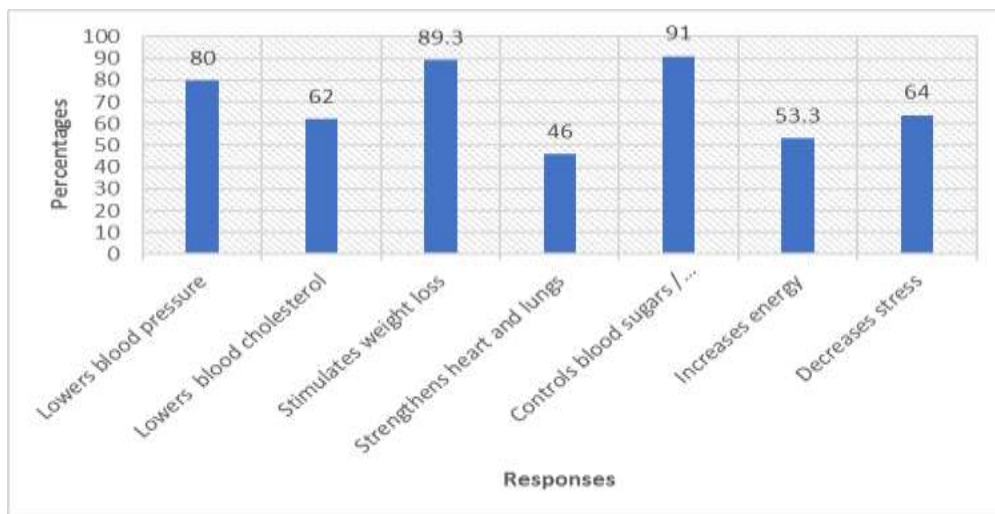
Students showed understanding of the complications brought by untreated diabetes. 92% mentioned heart disease, 87% mentioned eye complications and 80% indicated kidney disease. This unlike in the baseline survey where 72.8% could not mention any complication showed a great increase in the knowledge about diabetes.



The students were further asked whether they knew how diabetes could be prevented given its complications. All respondents knew at least one way of how diabetes can be prevented as opposed to the baseline survey when 43.8% didn't know how to prevent diabetes. In the end line survey, 98% indicated that healthy eating habits can be a powerful way through which diabetes can be prevented and 90% mentioned physical activity. Other responses are shown in the graph shown below:



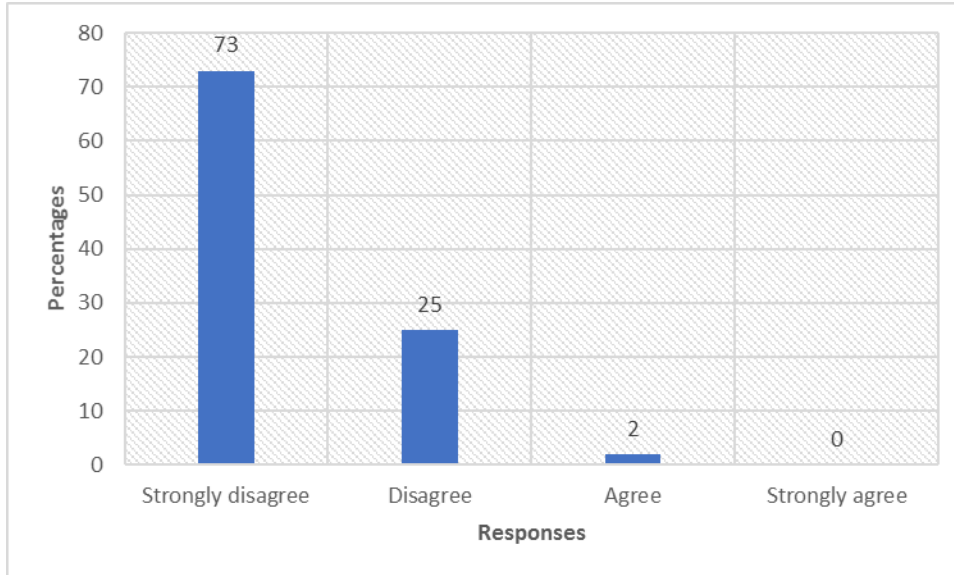
Furthermore, the students were asked to mention the benefits of physical activity that they knew and 91% mentioned that it controls blood sugar/diabetes, and 80% indicated that it lowers blood pressure. Unlike in the baseline survey where 18.6% did not know the benefits at all, in the end line survey all students knew at least one benefit of physical activity. This shows that in addition to the sports equipment and aerobic videos that were delivered to beneficiary schools, also awareness raising played a part in providing awareness on the importance of active living.



3.2.8 STUDENTS ATTITUDE ON DIETARY BEHAVIOURS

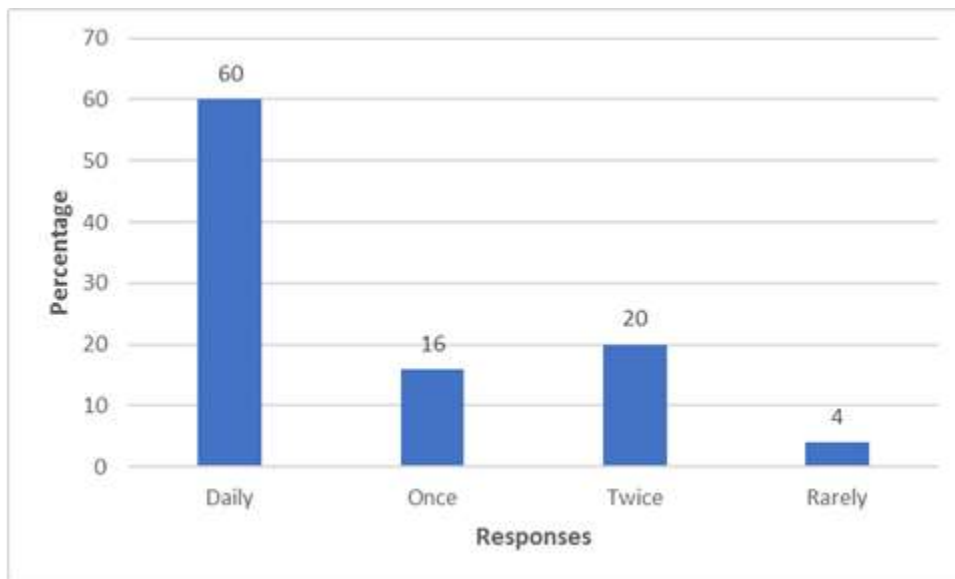
Like the teachers, the interviewers also shared with students on healthy eating statements to find out their opinion. The statements required responses as strongly disagree, disagree, agree, and strongly agree. On the question whether fried food is healthier than baked food, 73% of the students strongly disagreed, 25% disagreed while 2%

agreed. Given their opinion, the students are aware that fried food is not healthy and if this kind attitude remains then they would be at a lesser risk of having chronic diseases as a result of unhealthy diet.



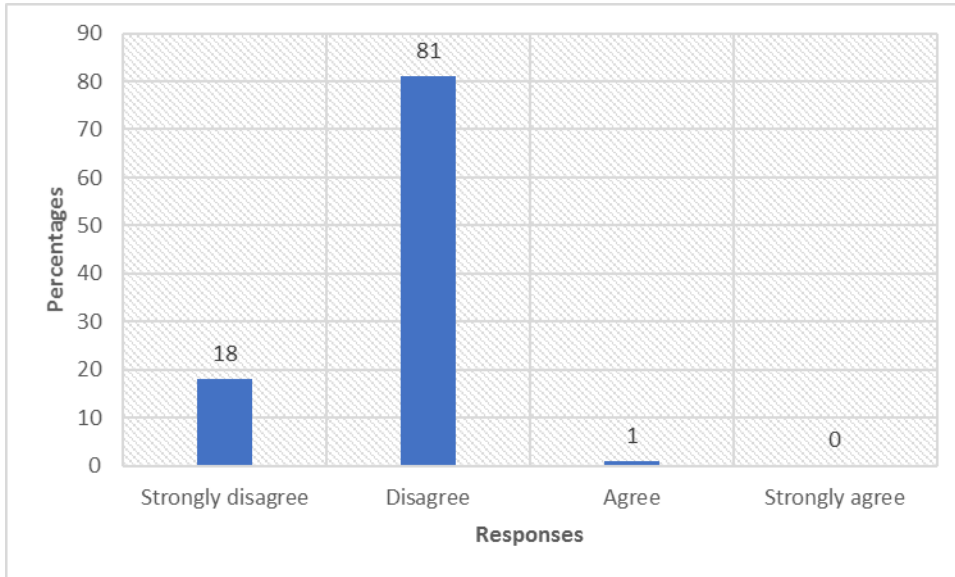
3.2.9 STUDENTS PRACTICE ON DIETARY BEHAVIOURS

Students were asked about how often they consumed vegetable and fruits in a week. The end line survey shows an increase in the daily consumption of vegetables i.e. 60 % of the respondents stated that they consume vegetables daily, those who consumed twice a week were 20% and only 4% of the students said that they rarely consumed vegetables. The increase for dairy consumption was attributed to established school gardens for those that take meals from school and also increased awareness of the importance of consuming fresh vegetables in the prevention of diabetes for both parents and students and yet these vegetables are always available in their home gardens. Therefore, the access to vegetables was easy.



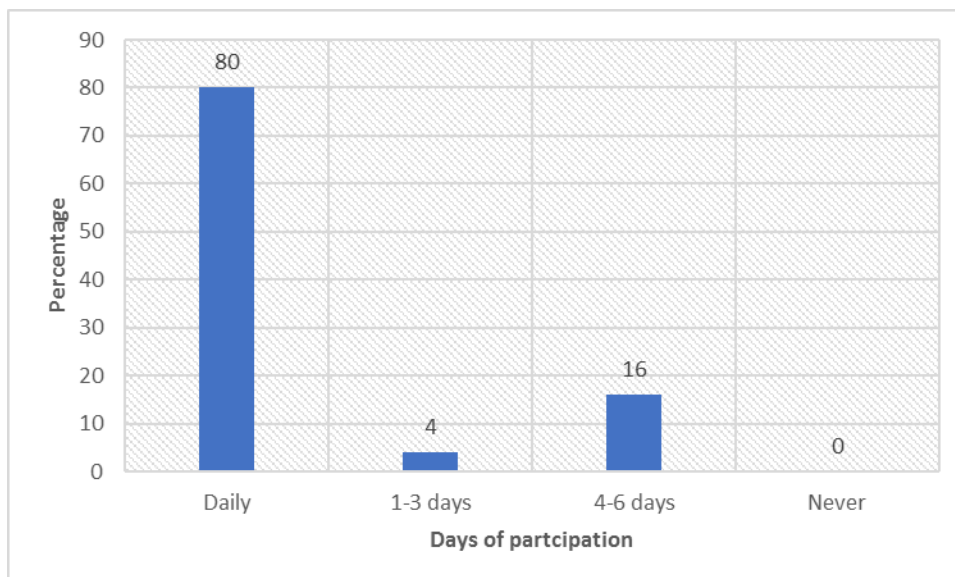
3.3.1 STUDENTS ATTITUDE ON PHYSICAL ACTIVITY

Like the teachers, the interviewers also shared with students on physical activity statements to find out their opinion. The statements required responses as strongly disagree, disagree, agree, and strongly agree. On the question only, overweight people should engage in physical activity, 18% of the students strongly disagreed, 81% disagreed while only 1% agreed. Given their opinion, the students are aware that physical activity is for all and if this kind attitude remains then they would be at a lesser risk of having chronic diseases as a result of physical inactivity.



3.3.2 STUDENTS PRACTICE ON PHYSICAL ACTIVITY

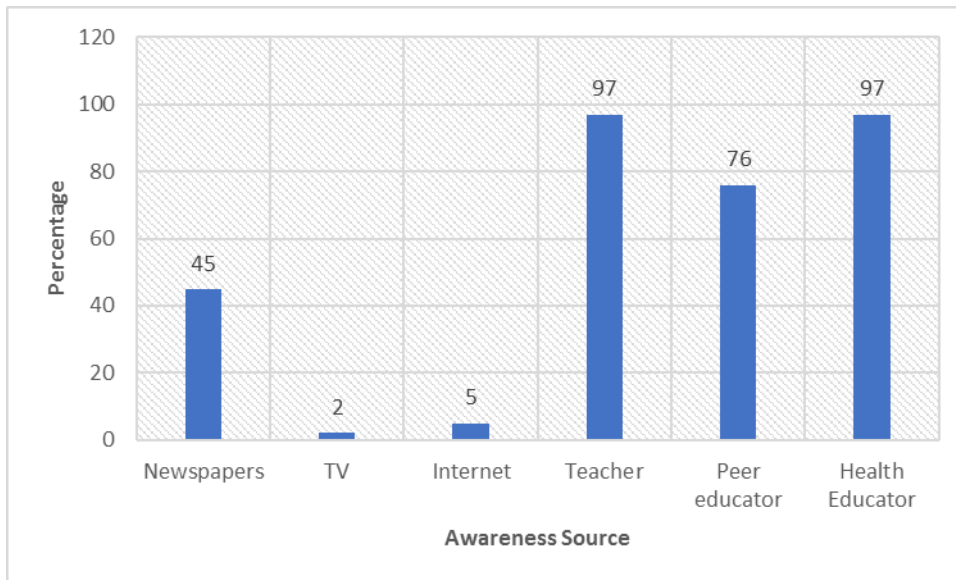
Students surveyed on responses about share their practice on physical activity was that, 80% of students participated in physical activity daily while 16% participated between 4 to 6 days in a week. This percentage is attributed to the fact that awareness raising on the daily benefits of physical activity was extended to schools, sports equipment and aerobic videos were distributed to school. This gives opportunity for students to engage in the physical activity they like.



3.3.3 STUDENTS' AWARENESS SOURCE.

The survey revealed that the major source of information about diabetes for students was from teachers and health educator who counted 97% while 76% mentioned peer educator as their source of information.

during project implementation, trained teachers and students as peer educators helped to disseminated information regarding diabetes prevention to students. Health educator also through school outreaches educated school children on matters regarding prevention as shown below:



4.0 CONCLUSIONS

This end line KAP survey was conducted in order to compare its results with the results of the baseline survey, to identify whether the diabetes prevention activities conducted in schools had been effective.

At the completion of the project implementation some good improvements in the overall efforts toward diabetes prevention could be observed in the targeted population (students, teachers and parents); the above observation is supported by the data collected in this survey. From KAP survey results (end line) it was found that good results have been achieved in the overall knowledge, attitude and practices about diabetes prevention. In the baseline survey, there was lack of knowledge i.e. about causes of diabetes, signs and complications etc. At the end of the project, improved knowledge about diabetes was realised. Though some good improvements were noticed after the implementation of project, it should not be forgotten that it takes time to consolidate behaviour changes for healthy lifestyle, so more follow up is necessary for further improvement.

4.1 RECOMMENDATIONS

The following interventions are recommended to translate the study findings into action:

- Peer education and outreaches are the most effective way of disseminating health promotion information.
- There is need to promote growing of fruit trees in order to increase fruit accessibility and affordability so that they can be consumed regularly.
- Radio is the most appropriate electronic medium of disseminating information to reach parents.
- There is need to enforce the teaching of physical education for all students in schools

5.0. ANNEXES

ANNEX I.

Mutually agreed indicators

(i) knowledge about diabetes prevention through physical activity and healthy eating by secondary students was increased from 4.8% at baseline to 98%, primary pupils from 6.7% to 96%, teachers from 37.4% to 96%, and parents from 47.3% to 87%.

(ii) dietary behaviour about vegetable and fruit consumption daily by secondary students increased from 23.3% at baseline and it was increased to 60%, primary pupils from 31% to 62%, teachers from 24% to 71% while parents was increased from 30.7 to 68%.

(iii) Daily participation in physical activity by secondary students increased from 67.6% at baseline to 80%, primary pupils from 63.5% to 87%, teachers from 60% 64% while parents from 68.7% to 82%.

ANNEX II

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SURVEY RESPONDENTS

This section covers the social demographic characteristics of students, teachers and parents. All the questionnaires collected basic demographic information (e.g., age, sex, and educational attainment) for respondents.

Teachers' Age

| | Frequency | Percent |
|-------|-----------|---------|
| 18-29 | 48 | 32.0 |
| 30-39 | 64 | 42.7 |
| 40-49 | 31 | 20.7 |
| >50 | 7 | 4.7 |
| Total | 150 | 100.0 |

Parents' Age

| | Frequency | Percent |
|--------------|------------|--------------|
| 18-29 | 20 | 13.3 |
| 30-39 | 52 | 34.7 |
| 40-49 | 62 | 41.3 |
| >50 | 16 | 10.7 |
| Total | 150 | 100.0 |

Students' Age

| | Frequency | Percent |
|--------------|------------|--------------|
| 8-9 | 18 | 2.4 |
| 10-12 | 327 | 43.6 |
| 13-18 | 405 | 54.0 |
| Total | 750 | 100.0 |

Gender

Teachers

| | Frequency | Percent |
|--------------|------------|--------------|
| Male | 83 | 55.3 |
| Female | 67 | 44.7 |
| Total | 150 | 100.0 |

Parents

| | Frequency | Percent |
|---------------|------------|--------------|
| Male | 77 | 51.3 |
| Female | 73 | 48.7 |
| Total | 150 | 100.0 |

Respondents' level of education.

| | Frequency | Percent |
|--------------|------------|--------------|
| Never | 7 | 4.7 |
| Primary | 59 | 39.3 |
| Secondary | 43 | 28.7 |
| Tertiary | 41 | 27.3 |
| Total | 150 | 100.0 |

Students

| | Frequency | Percent |
|--------------|------------|--------------|
| P5-7 | 658 | 87.7 |
| S1-4 | 89 | 11.9 |
| S5-S6 | 3 | .4 |
| Total | 750 | 100.0 |

Respondents' sex

| Category of respondents | Sex | | Total |
|-------------------------|------|--------|-------|
| | Male | Female | |
| Teachers | 83 | 67 | 150 |
| Parents | 85 | 65 | 150 |
| Students | 85 | 125 | 210 |
| Primary school pupils | 243 | 297 | 540 |
| Total | 496 | 554 | 1050 |

ANNEX III.

(A) Students' Information



Mbarara Center for Sports and Health Promotion

P.O.Box 958 Mbarara-Uganda (East Africa), E-mail: uganda4mcshep@gmail.com, Website: www.mbcshp.org, Tel:(+256)0703007374, (+256)0753428447,

Informed Consent

Dear respondent,

My name is.....and I am working with Mbarara Centre for Sports and Health Promotion. We are conducting an end line KAP survey to identify gaps in knowledge regarding diabetes prevention practices and existing practices leading to negative impact on health.

The following questions are to assess your Knowledge, Attitudes and Practice about diabetes, physical activity, dietary behaviours and other health-related issues. Your answers will help compare these data with the baseline data to identify the effectiveness and impact of the diabetes prevention activities. All the information you share will be treated in a strictly confidential manner. Thank you for your time and willingness to complete this questionnaire.

GENERAL INFORMATION (To be filled by the Assessor)

Identification

Name of the Assessor.....Organisation.....

Date of Assessment: (dd/mm/yy):/...../..... Contact:

Location of school

School name: Parish:

Sub-county: District:

Type of school: Urban Rural

Students' Information

Age group: 8-9 10-12 13-18

Class: P5-7 S1-4 S5-S6

Gender: Male Female

Knowledge about diabetes

4. What do you understand by the term diabetes?

- Diabetes is a condition of high level of sugar in the blood
- Diabetes is a condition of insufficient insulin production
- Diabetes is a condition of the body not responding to insulin
- Don't know **If don't know skip to question 9.**

5. What are the causes of diabetes?

- Family history of diabetes
- Over weight
- Eating too much sugar
- Un healthy diet
- Old age
- Stress
- Lack of physical activity
- Smoking
- Alcohol consumption
- Don't know

6. What are the symptoms of diabetes?

- Frequent urination
- Excess thirst
- Tiredness /fatigue
- Loss of appetite
- Loss of weight
- Vision problem
- Slow healing of wounds
- Don't know
- Others (Specify.....)

7. What complications can individuals with diabetes have?

- Heart disease
- Eye complications
- Kidney disease
- Nerve damage
- Foot problems
- Skin complications
- Stroke
- Amputation of limb
- Don't know

- Others (Specify.....)

8. How can diabetes be prevented?

- Weight control
- Physical activity
- Healthy eating habits
- Limit sugar
- Limit fatty foods
- Don't know
- Others (Specify.....)

9. Apart from diabetes, what are other chronic diseases/ NCDs do you know?

- Heart diseases
- Chronic respiratory diseases
- Cancer
- Don't know

10. Where did you get information about diabetes?

- Radio
- Newspapers
- TV
- Internet
- Teacher
- Peer educator
- Health Educator

Knowledge about dietary behaviours

11. What do you understand by the term healthy eating?

- A diet that maintains a healthy weight in adults
- A diet that enables healthy growth in children
- A diet that has a variety of foods
- A diet that provides enough energy and nutrients
- Eating lots of fruits and vegetables
- Eating Less fat/fatty foods
- Eating a balanced diet
- Using less fat in cooking
- Eating Less sugar/sugary foods
- Eating lots of whole grain foods
- limiting salt
- Don't know ***If don't know skip to question 13***

12. What are the benefits of healthy eating?

- Provides enough energy and nutrients
- Strengthens immune system which reduces risk for diseases
- Enables coping with stress
- Helps to maintain body weight

- Don't know
13. What are the health dangers of drinking alcohol?
- Cancer
 - Respiratory diseases
 - Heart diseases
 - Don't know
14. What are the health dangers of smoking?
- Cancer
 - Respiratory diseases
 - Heart diseases
 - Don't know
14. Where did you get the information about healthy eating?
- Radio
 - Newspapers
 - TV
 - Internet
 - Teacher
 - Peer educator
 - Health Educator

Knowledge about physical activity/exercises

15. What do you understand by the term physical activity?
- Movement of the body that requires energy expenditure
 - Any bodily movement by skeletal muscles that requires energy expenditure
 - Don't know ***If don't know skip to question 18.***
16. What are the examples of physical activity?
- Sports
 - Jogging
 - Gardening
 - Walking
 - Home cores
 - Others (specify.....)
17. What are the benefits of physical activity?
- Lowers blood pressure
 - Lowers blood cholesterol
 - Stimulates weight loss
 - Strengthens heart and lungs
 - Controls blood sugars/diabetes
 - Increases energy
 - Decreases stress
 - Don't know
 - Others (specify.....)

18. What are the categories of people who should participate in physical activity?

- Overweight / obese
- Under weight
- People with chronic diseases
- All persons
- Don't know

19. In your opinion how often a person should do exercise to stay healthy?

- Daily
- Twice in a week
- Once in a week
- Three days
- Don't know

20. Where did you get the information about physical activity?

- Radio
- Newspapers
- TV
- Internet
- Teacher
- Peer educator
- Health Educator

Attitude on diabetes

For each statement given, please indicate whether you Strongly disagree, Disagree, Agree or Strongly agree (21-37)

21. A person who feels normal may develop diabetes?

- Strongly disagree
- Disagree
- Agree
- Strongly agree

22. Family history increases the chance of getting diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

23. Over weight is related to having diabetes in future

- Strongly disagree
- Disagree
- Agree
- Strongly agree

24. Eating too much sugar causes diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

25. Un health diet is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

26. Old age puts one at risk of diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

27. Physical inactivity is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

28. Smoking is a risk factor for diabetes than non smoking

- Strongly disagree
- Disagree
- Agree
- Strongly agree

29. Alcohol consumption leads to diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Attitude on dietary behaviours

30. Fried food is healthier than baked food.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

31. Drinking alcohol is very harmful for human health

- Strongly disagree
- Disagree
- Agree
- Strongly agree

32. Smoking tobacco is very harmful for human health

- Strongly disagree
- Disagree
- Agree
- Strongly agree

33 It is important to eat fruits and vegetables every day

- Strongly disagree
- Disagree
- Agree
- Strongly agree

34. People should change their food dietary habits to prevent diabetes and other chronic diseases.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Attitude on physical activity

35. Only overweight people should engage in physical activity?

- Strongly disagree
- Disagree
- Agree
- Strongly agree

36. People should engage in regular physical activities to prevent diabetes and other chronic disease

- Strongly disagree
- Disagree
- Agree
- Strongly agree

37. People who exercise daily stand higher chances of not having diabetes than those who don't exercise.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Practices on diabetes

38. What actions are you taking to make it less likely that you will develop diabetes in the future?

- No action
- Weight control
- Physical activity
- Healthy diet
- Limit sugar
- Limit fatty foods
- Screening
- Not smoking
- Not drinking alcohol
- Don't know
- Others (specify.....)
-

Practice on dietary behaviours

39. When you are choosing food to eat, what influences your choice?

- Cost
- What you prefer to eat
- What other students prefer to eat
- What is good (healthy) for me to eat
- The special offers available when shopping
- Adverts/programmes on the television/radio
- Articles about food and recipes in newspapers/ magazines
- Dietary requirements of the food

40. Does your school have a vegetable and fruits garden?

- Yes
- No

41. If yes, who manages the garden?

- Garden committee
- Farm manager
- Teachers
- Students
- Parents
- Others (specify.....)

42. What benefits have you got from your school garden?

- Get vegetables to eat at school
- Get vegetables to eat at home
- Have learnt how to grow vegetables and fruits
- Have learnt the benefits of eating vegetables and fruits
- Others (specify.....)

43. How often do you eat fresh fruits in a week?

- Daily
- Once
- Twice
- Rarely

44. How often do you eat fresh vegetables in a week?

- Daily
- Once
- Twice
- Rarely

45. Does your school have a canteen?

- Yes
- No

46. If yes, which food items do you usually buy from your school canteen?

- Mandazi
- Chips , Chapati
- Fruits
- Yellow bananas
- Biscuits
- Fried eggs , Boiled eggs
- Fried cassava , Baked cassava
- Others specify.....

47. Which drink items do you usually buy from your school canteen?

- Milk tea
- Sodas
- Water
- Splash
- Fruits juice
- Black tea
- Others specify.....

48. How often do you eat/drink those items?

- Daily
- Once week
- Twice
- Rarely

49. Is there a health club in your school?

- Yes
- No

50. If yes, which health issues do you usually share in the club?

- Personal hygiene
- HIV/AIDS
- Diabetes
- Healthy eating
- Others specify.....

Practices on physical activity

51. In your school are there physical education classes?

- Yes
- No

52. If yes, how often do you attend those classes in a week?

- Daily
- 1-3 days
- 4-6 days
- Never

53. In your school, are you given opportunity to participate in physical activities?

- Yes
- No

54. If yes, for the last 7 days, what kind of physical activities have you engaged in?

- Sports
- Jogging
- Gardening
- Walking
- Home chores
- Others (specify.....)

55. If no physical activity, why?

- Lack of time
- Have no interest
- Health problems
- Lack of facilities
- Family responsibility
- Procrastination
- Others specify.....

56. If you do not engage in physical activity, would you be willing to if you had the adequate conditions to do so?

- Yes
- No

57. How often do you participate in physical activities in a week?

- Daily
- Once
- Twice
- Never

58. How long do you take doing physical activity?

- 30 minutes
- 40 minutes
- 50 minutes
- 50 + minutes
- Don't know

Thank you for completing the questionnaire

(B) Teachers' Information



Mbarara Center for Sports and Health Promotion

P.O.Box 958 Mbarara-Uganda (East Africa), E-mail: uganda4mcshep@gmail.com, Website: www.mcshep.org, Tel:(+256)0703007374, (+256)0753428447

Informed Consent

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The following questions are to assess your Knowledge, Attitudes and Practice about diabetes, physical activity, dietary behaviours and other health-related issues. Your answers will help compare these data with the baseline data to identify the effectiveness and impact of the diabetes prevention activities. All the information you share will be treated in a strictly confidential manner. Thank you for your time and willingness to complete this questionnaire.

GENERAL INFORMATION (To be filled by the Assessor)

Identification

Name of the Assessor.....Organisation.....
 Date of Assessment: (dd/mm/yy):/...../..... Contact:

Location of school

School name: Parish:
 Sub-county: District:

Type of school: Urban Rural

Teachers' Information

Age group: 18-29 30-39 40-49 >50

Gender: Male Female

Marital status: Single Married

Knowledge about diabetes

5. What do you understand by the term diabetes?

- Diabetes is a condition of high level of sugar in the blood
- Diabetes is a condition of insufficient insulin production
- Diabetes is a condition of the body not responding to insulin
- Don't know *If don't know skip to question 10.*

6. What are the causes of diabetes?

- Family history of diabetes
- Over weight
- Eating too much sugar
- Un healthy diet
- Old age
- Stress
- Lack of physical activity
- Smoking
- Alcohol consumption
- Don't know

7. State the signs of diabetes?

- Frequent urination
- Excess thirst
- Tiredness /fatigue
- Loss of appetite
- Loss of weight
- Vision problem
- Slow healing of wounds
- Don't know
- Others (Specify.....)

8. What complications can individuals with diabetes have?

- Heart disease
- Eye complications
- Kidney disease
- Nerve damage
- Foot problems
- Skin complications
- Stroke
- Amputation of limb
- Don't know

- Others (Specify.....)
9. How can diabetes be prevented?
- Weight control
 - Exercises
 - Healthy eating habits
 - Limit sugar
 - Limit fatty foods
 - Don't know
 - Others (Specify.....)
10. Apart from diabetes, what are other chronic diseases / NCDs do you know?
- Heart diseases
 - Chronic respiratory diseases
 - Cancer
 - Don't know
11. Where did you get the information about diabetes?
- Radio
 - Newspapers
 - TV
 - Internet
 - Teacher
 - Peer educator
 - Health Educator

Knowledge about dietary behaviours

12. What do you understand by the term healthy eating?
- A diet that maintains a healthy weight
 - A diet that enables healthy growth in children
 - A diet that provides enough energy and nutrients
 - Eating lots of fruits and vegetables
 - Eating Less fat/fatty foods
 - Eating a balanced diet/ variety of foods
 - Eating Less sugar/sugary foods
 - Eating lots of whole grain foods
 - limiting salt
 - Don't know ***If don't know, skip to question 14***
13. What are the benefits of healthy eating?
- Provides enough energy and nutrients
 - Strengthens immune system which reduces risk for diseases
 - Enables coping with stress
 - Helps to maintain body weight
 - Don't know
14. What are the good sources of fibre foods?
- Cereals
 - Beans
 - Vegetables

- Fruit
- Whole grain
- Don't know
- Others (specify.....)

15. State the sources of fats?

- Meat
- Dairy products
- Chips
- Vegetables
- Fruits
- Crisps
- Others (specify.....)

16. What are the health dangers of drinking alcohol?

- Cancer
- Respiratory diseases
- Heart diseases
- Don't know
- Others (specify.....)

17. What are the health dangers of smoking?

- Cancer
- Respiratory diseases
- Heart diseases
- Don't know
- Others (specify.....)

18. Where did you get the information about healthy eating?

- Radio
- Newspapers
- TV
- Internet
- Teacher
- Peer educator
- Health Educator

Knowledge about physical activity/exercises

19. What do you understand by the term physical activity?

- Movement of the body that requires energy expenditure
- Any bodily movement by skeletal muscles that requires energy expenditure
- Don't know ***If don't know, skip to question 22***

20. What are the examples of physical activity?

- Sports
- Jogging
- Gardening
- Walking
- Home chores
- Others (specify.....)

21. What are the benefits of physical activity?
- Low blood pressure
 - Low blood cholesterol
 - Stimulates weight loss
 - Strengthens heart and lungs
 - Control blood sugars/diabetes
 - Increases energy
 - Decrease stress
 - Others (specify.....)
22. What are the categories of people who should participate in physical activity?
- Overweight / obese
 - Under weight
 - People with chronic diseases
 - All persons
 - Don't know
23. In your opinion how often a person should do exercise to stay healthy?
- Daily
 - Twice in a week
 - Once in a week
 - Others specify.....
24. Where did you get the information about physical activity/exercise?
- Radio
 - Newspapers
 - TV
 - Internet
 - Teacher
 - Peer educator
 - Health Educator

What is your attitude towards the following statements as related to diabetes, dietary behaviours and physical activity?

For each statement given, please indicate whether you Strongly disagree, Disagree, Agree or Strongly agree (25-51)

Attitude on diabetes

25. A person who feels normal may develop diabetes
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
26. Family history increases the chance of getting diabetes
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree

27. Over weight is related to having diabetes in future

- Strongly disagree
- Disagree
- Agree
- Strongly agree

28. Eating too much sugar causes diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

29. Unhealthy diet is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

30. Old age puts one at risk of diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

31. Physical inactivity is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

32. Smoking is a risk factor for diabetes than non smoking

- Strongly disagree
- Disagree
- Agree
- Strongly agree

33. Alcohol consumption leads to diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

34. Diabetes and other NCDs can be prevented or delayed by healthy dietary behaviours and physical activity

- Strongly disagree
- Disagree
- Agree
- Strongly agree

35. Consuming fast foods can lead to diabetes

- Strongly disagree
- Disagree

- Agree
- Strongly agree

36. Diabetes and other NCDs can be transmitted

- Strongly disagree
- Disagree
- Agree
- Strongly agree

37. Non-communicable diseases are less dangerous than infectious diseases.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Attitude on dietary behaviours

38. Fried food is healthier than baked food.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

39. Saturated fats lead to weight gain.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

40. Drinking alcohol is very harmful for human health

- Strongly disagree
- Disagree
- Agree
- Strongly agree

41. Smoking tobacco is very harmful for human health

- Strongly disagree
- Disagree
- Agree
- Strongly agree

42. It is important for people to eat fruits and vegetables every day?

- Strongly disagree
- Disagree
- Agree
- Strongly agree

43. High salt containing foods affect the blood pressure.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

44. People should change their food dietary habits to prevent diabetes and other chronic disease
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree

Here are some things which might discourage people from eating more healthy foods. Rank the following that might prevent you from eating more healthy foods?

45. Family discouraging
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
46. Not knowing what changes to make
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
47. Lack of choice for healthy foods in places where you shop /canteen
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
48. Healthy foods are too expensive
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree

Attitude on physical activity/ exercises

49. Only overweight people should engage in physical activity?
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
50. People should engage in regular physical activities to prevent diabetes and other chronic disease
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
51. People who exercise daily stand higher chances of not having diabetes than those who don't exercise.
- Strongly disagree
 - Disagree
 - Agree

- Strongly agree

Practice on diabetes

52. What actions are you taking to make it less likely that you will develop diabetes in the future?

- No action
- Weight control
- Physical activity
- Healthy diet
- Limit sugar
- Limit fatty acids
- Screening
- Not smoking
- Not drinking alcohol
- Others (specify.....)

53. How often do you check for diabetes and other NCDs?

- Every after six months
- Once a year
- Every two years
- Never
- Others specify.....

Practice on dietary behaviours

54. When you are choosing food for meals for your family, what influences your choice?

- Cost
- What your children prefer to eat
- What you prefer to eat
- What other people prefer to eat (e.g. partner)
- Convenience of preparation
- What is good (healthy) for us to eat
- The special offers available when shopping
- Adverts/programmes on the television/radio
- Articles about food and recipes in newspapers/ magazines
- Dietary requirements of a member of the family

55. Do you have a school garden?

- Yes
- No

56. How often do you serve students vegetables?

- Daily
- Once a week
- Twice a week
- Rarely

57. How often do you serve students fruits?

- Daily
- Once a week
- Twice a week
- Rarely

58. How often do you eat vegetables?

- Daily
- Once a week
- Twice a week
- Rarely

59. How often do you eat fruits?

- Daily
- Once a week
- Twice a week
- Rarely

Practice on physical activity

60. How do you spend your leisure time?

- Watching TV
- Reading novels
- Reading newspapers
- Doing physical activities
- Others specify.....

61. a. For the last 7 days, what kind of exercise /physical activities have you engaged in?

- Sports
- Jogging
- Gardening
- Walking
- Home chores
- Others (specify.....)

b. If no physical activity why?

- Lack of time
- Have no interest
- Health problems
- Lack of facilities
- Family responsibility
- Procrastination
- Others specify.....

c. If you do not exercise, would you be willing to if you had the adequate conditions to do so?

- Yes
- No

62. How often do you participate in these physical activities in a week?

- Daily
- 2-3 days
- 4-6 days

- Never
63. How long do you take doing physical activity?
- 30 minutes
 - 40 minutes
 - 50 minutes
 - 50 + minutes
 - Don't know

Thank you for completing the questionnaire

(C) Parents' Information



Mbarara Center for Sports and Health Promotion

P.O.Box 958 Mbarara-Uganda (East Africa), E-mail: uganda4mcshep@gmail.com, Website: www.mbcshp.org, Tel:(+256)0703007374, (+256)0753428447

Informed Consent

Dear respondent,

My name is.....and I am working with Mbarara Centre for Sports and Health Promotion. We are conducting an end line KAP survey to identify gaps in knowledge regarding diabetes prevention practices and existing practices leading to negative impact on health.

The following questions are to assess your Knowledge, Attitudes and Practice about diabetes, physical activity, dietary behaviours and other health-related issues. Your answers will help compare these data with the baseline data to identify the effectiveness and impact of the diabetes prevention activities. All the information you share will be treated in a strictly confidential manner. Thank you for your time and willingness to complete this questionnaire.

GENERAL INFORMATION (To be filled by the Assessor)

Identification

Name of the Assessor.....Organisation.....
 Date of Assessment: (dd/mm/yy):/...../..... Contact:

Location of school

School name: Parish:
 Sub-county: District:
 Type of school: Urban Rural

Parents' Information

Age group: 18-29 30-39 40-49 >50
 Gender: Male Female
 Marital status: Single Married

Level of education: Never Primary Secondary Tertiary

Knowledge about diabetes

5. What do you understand by the term diabetes?

- Diabetes is a condition of high level of sugar in the blood
- Diabetes is a condition of insufficient insulin production
- Diabetes is a condition of the body not responding to insulin
- Don't know *If don't know skip to question 10.*

6. What are the causes of diabetes?

- Family history of diabetes
- Over weight
- Eating too much sugar
- Un healthy diet
- Old age
- Stress
- Lack of physical activity
- Smoking
- Alcohol consumption
- Don't know

7. State the signs of diabetes?

- Frequent urination
- Excess thirst
- Tiredness /fatigue
- Loss of appetite
- Loss of weight
- Vision problem
- Slow healing of wounds
- Don't know
- Others (Specify.....)

8. What complications can individuals with diabetes have?

- Heart disease
- Eye complications
- Kidney disease
- Nerve damage
- Foot problems
- Skin complications
- Stroke
- Amputation of limbs
- Don't know
- Others (Specify.....)

9. How can diabetes be prevented?

- Weight control
- Physical activities
- Healthy eating habits

- Limit sugar
- Limit fatty foods
- Don't know
- Others (Specify.....)

10. Apart from diabetes, what are other chronic diseases/ NCDs do you know?

- Heart diseases
- Chronic respiratory diseases
- Cancer
- Don't know

11. Where did you get the information about diabetes?

- Radio
- Newspapers
- TV
- Internet
- Others (Specify.....)

Knowledge about dietary behaviours

12. What do you understand by the term healthy eating?

- A diet that maintains a healthy weight
- A diet that enables healthy growth in children
- A diet that provides enough energy and nutrients
- Eating lots of fruits and vegetables
- Eating Less fat/fatty foods
- Eating a variety of foods/balanced diet
- Eating Less sugar/sugary foods
- Eating lots of whole grain foods
- limiting salt
- Don't know ***If don't know skip to question 14***

13. What are the benefits of healthy eating?

- Provides enough energy and nutrients
- Strengthens immune system which reduces risk for diseases.
- Enables coping with stress
- Helps to maintain body weight
- Don't know

14. What are the good sources of fibre foods?

- Cereals
- Beans
- Vegetables
- Fruits
- Whole grain
- Don't know
- Others (specify.....)

15. State the sources of fats

- Meat
- Dairy products
- Chips
- Crisps
- Vegetables
- Fruits
- Others (specify.....)

16. What are the health dangers of drinking alcohol?

- Cancer
- Respiratory diseases
- Heart diseases
- Don't know
- Others (specify.....)

17. What are the health dangers of smoking?

- Cancer
- Respiratory diseases
- Heart diseases
- Don't know
- Others (specify.....)

18. Where did you get the information about healthy eating?

- Radio
- Newspapers
- TV
- Internet
- Others (Specify.....)

Knowledge about physical activity/exercises

19. What do you understand by the term physical activity?

- Movement of the body that requires energy expenditure
- Any bodily movement by skeletal muscles that requires energy expenditure
- Don't know ***If don't know skip to question 22.***

20. What are the examples of physical activity?

- Sports
- Jogging
- Gardening
- Walking
- Home chores
- Others (specify.....)

21. What are the benefits of physical activity?

- Low blood pressure
- Low blood cholesterol
- Stimulates weight loss
- Strengthens heart and lungs
- Control blood sugars/diabetes

- Increases energy
- Decrease stress
- Don't know
- Others (specify.....)

22. What are the categories of people who should participate in physical activity?

- Overweight / obese
- Under weight
- People with chronic diseases
- All persons
- Don't know

23. In your opinion how often a person should do exercise to stay healthy?

- Daily
- Twice in a week
- Once in a week
- Others specify.....

24. Where did you get the information about physical activity/exercise?

- Radio
- Newspapers
- TV
- Internet
- Others (Specify.....)

What is your attitude towards the following statements as related to diabetes, dietary behaviours and physical activity?

For each statement given, please indicate whether you Strongly disagree, Disagree, Agree or Strongly agree (25-50)

Attitude on diabetes

25. A person who feels normal may develop diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

26. Family history increases the chance of getting diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

27. Over weight is related to having diabetes in future

- Strongly disagree
- Disagree
- Agree
- Strongly agree

28. Eating too much sugar causes diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

29. Unhealthy diet is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

30. Old age puts one at risk of diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

31. Physical inactivity is a risk factor for diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

32. Smoking is a risk factor for chronic diseases than non smoking

- Strongly disagree
- Disagree
- Agree
- Strongly agree

33. Alcohol consumption leads to diabetes

- Strongly disagree
- Disagree
- Agree
- Strongly agree

33. Diabetes and other NCDs can be prevented or delayed by healthy dietary behaviours and physical activity

- Strongly disagree
- Disagree
- Agree
- Strongly agree

34. Consuming fast foods can lead to diabetes

- Strongly disagree
- Disagree
- Agree

- Strongly agree
35. Diabetes and other NCDs can be transmitted
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
36. Non-communicable diseases are less dangerous than infectious diseases.
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree

Attitude on dietary behaviours

37. Fried food is healthier than baked food.
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
38. Saturated fats lead to weight gain.
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
39. Drinking alcohol is very harmful for human health
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
40. Smoking tobacco is very harmful for human health
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
41. It is important for people to eat fruits and vegetables every day?
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree
42. High salt containing foods affect the blood pressure.
- Strongly disagree
 - Disagree
 - Agree
 - Strongly agree

43. People should change their food dietary habits to prevent diabetes and other chronic disease

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Here are some things which might discourage people from eating more healthy foods. Rank the following that might prevent you from eating more healthy foods?

44. Family discouraging

- Strongly disagree
- Disagree
- Agree
- Strongly agree

45. Not knowing what changes to make

- Strongly disagree
- Disagree
- Agree
- Strongly agree

46. Lack of choice for healthy foods in places where you shop

- Strongly disagree
- Disagree
- Agree
- Strongly agree

47. Healthy foods are too expensive

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Attitude on physical activity

48. Only overweight people should engage in physical activity?

- Strongly disagree
- Disagree
- Agree
- Strongly agree

49. People should engage in regular physical activities to prevent diabetes and other chronic disease

- Strongly disagree
- Disagree
- Agree
- Strongly agree

50. People who exercise daily stand higher chances of not having diabetes than those who don't exercise.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Practices on diabetes

51. What actions are you taking to make it less likely that you will develop diabetes in the future?

- No action
- Weight control
- Physical activity
- Healthy diet
- Limit sugar
- Limit fatty foods
- Screening
- Not smoking
- Not drinking alcohol
- Others (specify).....

52. How often do you check for diabetes and other NCDs?

- Every after six month
- Once a year
- Every two years
- Never
- Others specify.....

Practice on dietary behaviours

53. When you are choosing food for meals for your family, what influences your choice?

- Cost
- What your children prefer to eat
- What you prefer to eat
- What other people prefer to eat (e.g. partner)
- Convenience of preparation
- What is good (healthy) for us to eat
- The special offers available when shopping
- Adverts/programmes on the television/radio
- Articles about food and recipes in newspapers/ magazines
- Dietary requirements of a member of the family

54. Do you have vegetable/ fruits gardens in your home?

- Yes
- No

55. How often do you eat vegetables in your family?

- Daily
- Once a week
- Twice a week
- Rarely

56. How often do you eat fruits in your family?

- Daily
- Once a week
- Twice a week

- Never

Practices on physical activity

57. How do you spend your leisure time?

- Watching TV
- Reading novels
- Reading newspapers
- Doing physical activities
- Others specify.....

58. a. For the last 7 days, what kind of physical activities have you engaged in?

- Sports
- Jogging
- Gardening
- Walking
- Home chores
- Others (specify.....)

b. If no physical activity why?

- Lack of time
- Have no interest
- Health problems
- Lack of facilities
- Family responsibility
- Procrastination
- Others specify.....

c. If you do not engage in physical activity, would you be willing to if you had the adequate conditions to do so?

- Yes
- No

59. How often do you participate in these physical activities?

- Daily
- 2-3 days
- 4-6 days
- Never

60. How long do you take doing physical activity?

- 30 minutes
- 40 minutes
- 50 minutes
- 50 + minutes
- Don't know

Thank you for completing the questionnaire