Availability of School-based Psychosocial Support Programs on Fire Disaster Preparedness in Secondary Schools in Uasin Gishu County, Kenya

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Abstract:- Fire is a common disaster affecting Education in Secondary Schools in Kenya. This research was motivated by the frequent reports of occurrence of fire disasters in secondary schools. The purpose of the study was to investigate the level of fire disaster preparedness in Secondary Schools in Uasin Gishu County, Kenya. The study was done in in Uasin Gishu County, Kenya. One of the objectives of the study was to investigate the availability of school-based psychosocial support in secondary schools as one of the interventions to reduce fire disasters in secondary schools. Descriptive research design was employed to collect data on what, when, where, and how. The research adopted stratified random sampling to acquire a sample. The target population of this study included 166 public secondary schools, 1792 teachers, 166 principals, and 2,732 students. The data was collected from a sample of 117 secondary schools, 117 school principals, 327 teachers and 349 students. Quantitative and qualitative data was collected through questionnaires and observation checklist respectively. The data collected was analysed using descriptive statistics for quantitative data and thematic analysis for qualitative data. The study established that schools lacked proper implementation of both students' and teachers' psychosocial interventions to reduce fire disasters in secondary schools in Uasin Gishu County. Therefore, psychosocial fire disaster preparedness had not been met. It recommended that schools should incorporate psychosocial interventions, some of which include: guidance and counselling as a mitigating strategy for mass indiscipline, strongly discourage corporal punishment and use of abusive and inhumane language by teachers to reduce occurrence of fire disasters in schools.

Keywords:- School-based Psychosocial Support, Fire Disaster Preparedness, Arson, Guidance and Counselling

I. INTRODUCTION

Fire disaster preparedness can be achieved by having fire safety disaster programs. This programs enhance preparedness for fire outbreaks, help to prevent accidents and thus minimize the resulting loss and damage to persons and property during fire outbreaks (Armstrong, 2006). Some of the recent fire disasters occurred in Masara Mixed Secondary School dormitories in December 2020 (The Standard, 2020), Vihiga Boys Secondary School in which the fire burnt the dormitories destroying properties of

unknown value (K24TV, 2021) and Kisumu Boys High School (The Standard, 2022).

In Kenya despite the existence of a Safety Standards Manual in secondary schools, fires in secondary schools are still rampant. In 2017 the National Crime Research Centre in Kenya indicated that 37.5% of the schools were burnt, 32.5% were schools where attempts to burn took place while 30 % of the schools had no incidence (NCRC, 2017). This statistics are alarming.

International efforts have been made on promoting school safety, manuals have been written, curriculum adjustments, guides and training materials have been distributed as well as national, regional and international meetings have been organized by bodies such as the World Conference on Disaster Reduction (Shaw, 2002). Despite all this effort fire is the commonest disaster that results to loss of life and properties in learning institutions in Kenya (Makhanu, 2009). This means that there is a very high chance that the next disaster to occur in a secondary school in Kenya could be a fire disaster.

The Kenyan government has attempted to address the problem of fire disaster in schools through the guidelines in the Safety Standards Manual, which has been issued to all schools. The question that arises is "How far have the guidelines in the Safety Standard Manual been implemented to curb fire disasters in secondary schools?" This study aimed to investigate the level of fire disaster preparedness in secondary schools in Uasin Gishu County, Kenya in regard to implementation of these guidelines.

One of the objectives of this study was to investigate the availability of school-based psychosocial support in secondary schools as one of the interventions to reduce fire disasters in secondary schools Uasin Gishu County.

Despite the fact that there has been efforts to mitigate fire disasters management in secondary schools in Kenya as indicated by previous studies, fire disasters are still happening hence there was a need to go back and assess the status of fire disaster preparedness in secondary schools as was.

This research adopted Psychosocial Development theory postulated by Erikson and his wife Joan. The theory states that; personality develops in a predetermined order through eight stages of psychosocial development, from infancy to adulthood. During each of these stages, the person experiences a psychosocial crisis which could have a positive or negative outcome for personality development. This study focused on two stages; Industry vs. Inferiority and Identity vs. Role confusion. Lack of identity can result to psychological crisis to the learners. The crisis can lead to depression or rebellion.

Student's actions, as human beings, are greatly influenced by their lived experiences. Experiences such as humiliation, oppression, alienation, disempowerment, denial of rights and freedom, anxiety, hopelessness and disillusionment (absurdity) gender dehumanization (Malenya, 2016).

Students in schools identify themselves in groups. This was evident when a group of students burned Uriri High School after they were denied to watch a football match. This was a repetition of the same event that took place in Itiero Boys High School in Kisii in 2016 (The Standard, 2019). Peer pressure coupled by drugs abuse was identified by Akoko (2017) to be factors that influencing arson attacks in secondary schools in Trans Nzoia County, Kenya.

Social Media such as Facebook, WhatsApp, Twitter and others were identified as major social factors that contributed to the school burning wave of 2016. The discussions were conducted through posts, tweets, hashtags and trending topics at a global scale (Oburu H, Coetzee B, Swartz L., 2020). Discussions, photos and videos posted online had vicarious impact to other learners. The discussion on school fires resulted to digital vigilantism and resulted to secondary trauma (Oburu H, Coetzee B, Swartz L., 2020).

This work therefore endeavoured to investigate availability of School-Based Psychosocial Support Programs on Fire Disaster Preparedness in Secondary Schools in Uasin Gishu County, Kenya.

The reviewed literature reveals that fire disaster preparedness is essential in all secondary schools in Kenya. It showed that property damage, injuries or even fire related deaths can be averted if schools put in place measures to contain fire incidents. The review has shown that fire disaster preparedness in secondary schools in Kenya is

unsatisfactory. This implies that there is still a knowledge gap as far as fire disaster preparedness of schools is concerned. This study assessed the current situation regarding fire disaster preparedness in secondary schools in Uasin Gishu County.

The literature review also acknowledged the efforts of the Government of Kenya through the Ministry on Education to put in place guidelines and policy on fire safety in secondary schools. But the goal of these policies has not been reached. This research therefore aimed to establish the level of compliance to Fire Safety Policies and therefore assess fire disaster preparedness in schools in Uasin Gishu County, Kenya.

From the literature review fire disaster in schools are on the rise. This is an indication that more has to be done to address the issue of fire disasters in secondary schools. This research therefore aimed to assess the current state fire disaster preparedness situation in Uasin Gishu County, Kenya.

II. METHODOLOGY

The pragmatic research paradigm was employed in this study since it gave the researcher an opportunity to determine relationships in research by what the researcher deems appropriate to that particular study (Brierley, 2017). This research adopted descriptive design to gather relevant data. Descriptive design is defined as a method of research that gathers data at a particular point in time with the intention of describing the nature of existing conditions of, or determining specific information (Kombo & Tromp, 2006). This study took place in Uasin Gishu County, Kenya. The county had experiences fires in several school.

This research targeted all 166 public secondary schools, 1792 teachers, 166 principals, and 2732 form 3 and 4 students in Uasin Gishu County. Sample size was determined using the Yamane Taro (1973) formula for finite population. The formula for the sample was given in equation at the confidence interval of 95% with significance level of 5%. Where a sample of 117 secondary schools, 117 school principals, 327 teachers and 349 students was obtained. The sample is summarised in Figure 1.

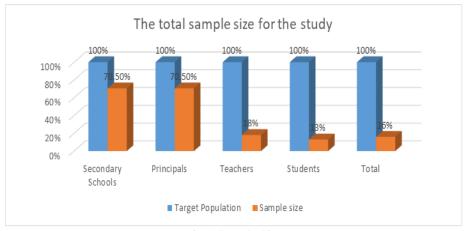


Fig 1 Sample Size

In this study data was collected using questionnaires to collect quantitative data. Orodho (2008) identifies validity of a test as a measure of how well a test measures what it is supposed to measure while Reliability of an instrument is the degree of consistency with which it measures a variable (Mugenda & Mugenda, 2003). A pilot study was conducted to establish reliability of the instruments. This was determined by use of test-retest method. Sampled responses from the test and the retest were analysed using means, frequencies and percentages that produced scores which helped check whether the two processes gave similar results. The scores were then be correlated using Pearson's Product Moment Correlation Coefficient as an estimate of reliability.

The coefficient value of 'r' lies between -1 to +1, the closer the value is to +1, the stronger the congruence. From the pilot study a coefficient value of 0.84 was obtained. According to Gay (2002), coefficient values between 0.6 and 0.9 determine the instrument reliability. Therefore the instruments reliability was good.

The researcher inspected the filled questionnaires. After correcting any identified errors that could potentially influence data analysis, the data was then coded and analysed using SPSS. The principles of self-determination, voluntary participation, consent and anonymity were followed.

III. RESULTS AND DISCUSSION

Demographic Information on the Gender of Teachers and Principals

The gender of the principals teachers, students are indicated in Figure 2.

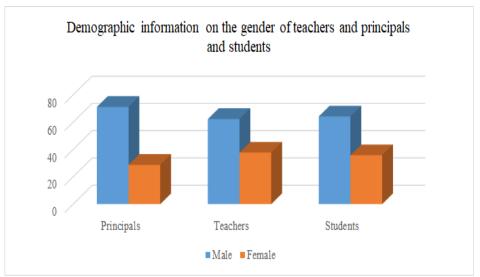


Fig 2 Gender of Teachers and Principals and Students

The sampled population of principals was 71.2% male and 28.8% female. The sampled population of teachers was 62.3% male and 37.7% female. The sampled population of students was 64.2% male and 35.8% female.

> Demographic Information on the Length of Time Served as A Teacher
The length of service for the principals and the teachers is shown in Figure 3.

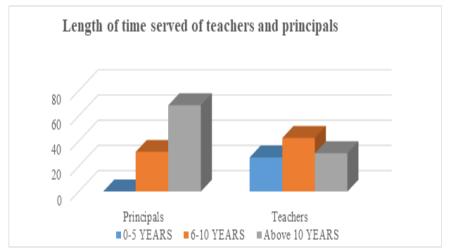


Fig 3 Length of Service for the Principals and the Teachers

68.5% of the principals had experience in their jobs for more than 10 years. The experience level was an indicator of how informed the principals were on school activities.

Demographic Information on Class of Students

The students were asked to indicate the current class they were in and their responses were as indicated in Figure 4.

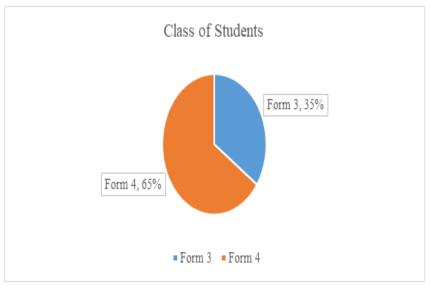


Fig 4 Class of the Students

The sampled population of students was made of 65.3% form threes and 34.7% form fours. The form threes and form fours are well informed about school safety and school programs.

IV. AVAILABILITY OF SCHOOL-BASED PSYCHOSOCIAL INTERVENTION PROGRAMS

One of the objectives of this study was to determine whether secondary schools in Uasin Gishu County had school-based psychosocial support programs. For this purpose respondents were questioned on several issues that helped to indicate the availability or absence of School-Based Psychosocial Programs against fire disasters in schools. Some of these issues are presented below:

Existence Cases of Groupings or Gangs and Mass Indiscipline in Secondary Schools

The principals, teachers and students were asked to comment on existence of cases of groupings or gangs and mass indiscipline in schools. This is shown in Figure 5.

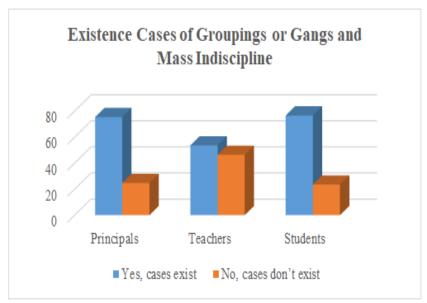


Fig 5 Existence Cases of Groupings or Gangs and Mass Indiscipline

75.3% of the principals, 53.6% of the teachers and 76.5% of students agreed that students formed some groups of gangs in schools. However 24.7% of principals 46.4% of teachers and 23.5% of students disagreed on this matter.

How Mass Grouping and Mass Indiscipline are Handled

The principals, teachers and students were further asked to comment on how the cases of groupings or gangs and mass indiscipline in schools were handled. The responses were grouped into two themes, analysed and tabulated as indicated in Figure 6

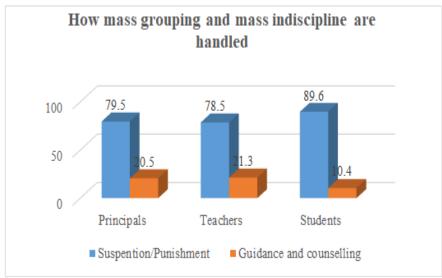


Fig 6 How Mass Grouping and Mass Indiscipline are Handled

The responses from 79.5% of principals, 78.7% of teachers and 89.6% of students responded that any student gang is normally taken through a disciplinary process which end up with the students being suspended. 20.5% of the principals, 21.3% of teacher and 10.4% of the students indicated that these students were taken through a guidance and counselling process. When students are punished they are likely to retaliate as a method of expressing themselves as pursue their own empowerment so that they can use the power to humble authorities as observed by Malenya, 2016.

Students Involvement in Institution Management and Formation of School Rules The responses were as summarise in Figure 7.

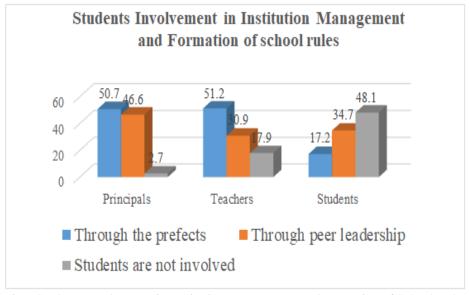


Fig 7 Students Involvement in Institution Management and Formation of School Rules

48.1% indicated that students were never involved in school rules formation and school management, this was supported by 2.7% of principals and 17.9% of teachers.

Method of Selecting Student Leaders is School

The principals, teachers and students were further asked to comment on the method of selecting student leaders in schools. The respondents indicated in Figure 8 that student leaders were selected by teachers through the students' performance.

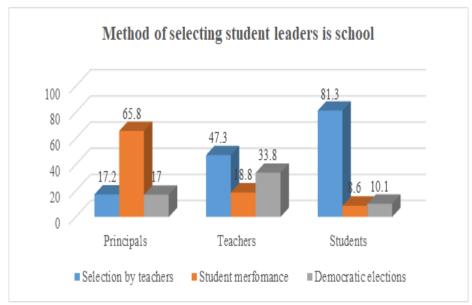


Fig 8 Method of Selecting Student Leaders is School

The method of selecting student leaders was identified to have effect on the psychosocial behaviour of students. 81.3% of students indicted that the student's leaders were in most cases appointed by the teachers. Therefore they were likely to treat them the same manner they treat the teachers. Therefore likely to label or punish the students leaders for wrath directed to teachers.

➤ Availability of School based Guidance and Counselling Sessions

The researcher sought to establish whether guidance and counselling sessions were available at schools. The responses were; 79.5% of the principals, 78.3% of the teachers and 39.9% of the students indicated that the guidance and counselling sessions were available. This was contradicted by 20.5% of the principals, 21.3% of the teachers and 60.1% of the students.

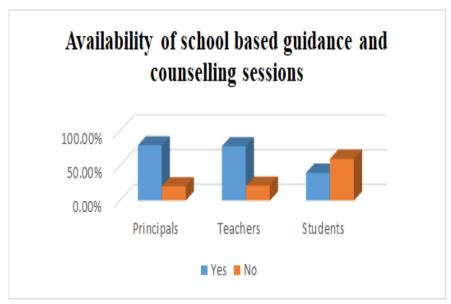


Fig 9 Availability of School based Guidance and Counselling Sessions

Surveillance Methods to Monitor Student's Behaviour

The principals, teachers and students were asked to comment on surveillance methods employed by their school management to monitor the behaviour of students. This is captured in Figure 10.

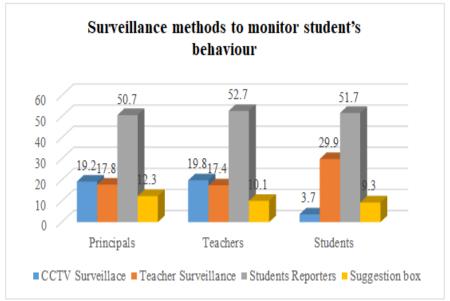


Fig 10 Surveillance Methods to Monitor Student's Behaviour

Students' behaviour changes while they know that they are under surveillance but the method used can also be counterproductive. While under surveillance students are less likely to cause school fires.

It is of particular interest that use of students' reporters to monitor behaviour of students was very popular in schools in Uasin Gishu County. This method has frequently created personal differences among students.

Students in your School Aware that Arson is a Crime Punishable by Law

The principals, teachers and students were asked to comment on whether the students in their schools were aware that arson is a crime punishable by the law of Kenya. This is shown in Figure 11.

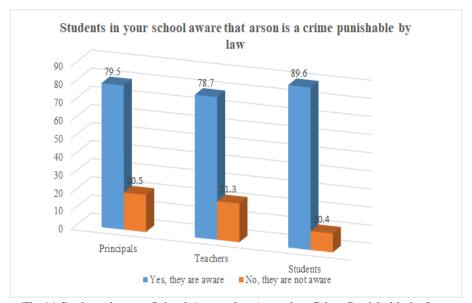


Fig 11 Students in your School Aware that Arson is a Crime Punishable by Law

The leaners who have acquired the sense of industry and have satisfied the demand of the society are more likely support school initiatives and less unlikely to be involved in arson attacks. On the other hand, learners who feel inferior are less likely to support school initiatives and cannot satisfy the society demand hence more likely to be involved in arson attacks.

The feeling of inferiority coupled with inability to develop specific skill and they feel society is demanding can lead to frustration resulting to drug abuse and subsequent arson attacks. Akoko (2017) identified drug abuse as a leading factor to arson in schools in Kenya. These demotivated learners may be ignorant of the fact that arson is a crime. From the data it was clear that there was a level of ignorance that arson is a crime.

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Students in your School have Access to Mainstream Media and Social Media

The principals, teachers and students were asked to respond on whether students had access to mainstream media and social media during schools sessions (Figure 12). This was followed by an inquiry on the possible impact and results of news of fires in other schools to the students.

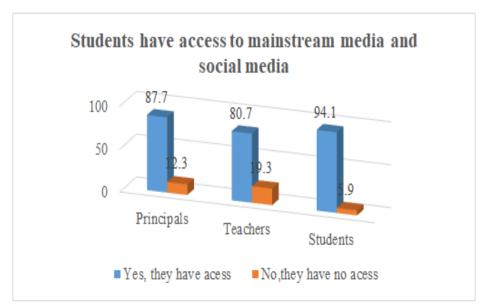


Fig 12 Students access to mainstream media and social media

Social Media such as Facebook, WhatsApp, Twitter and others were identified as major social factors that contributed to the school burning wave of 2016. The discussions were conducted through posts, tweets, hashtags and trending topics at a global scale (Oburu H, Coetzee B, Swartz L., 2020). This information reaches students in school in one way or another and becomes a motivation to copy. Glenn (2016) had made a similar observation regarding the 2015 #FeesMustFall movement in South Africa.

The researcher further confirmed the impact of access to the media on students. The information obtained was analysed and captured in Figure 13.

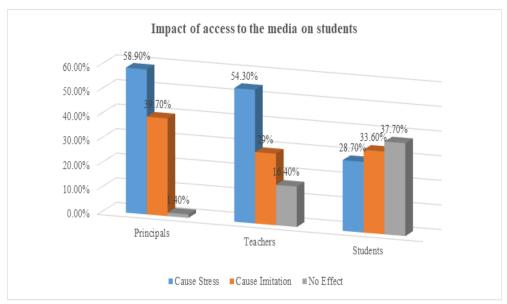


Fig 13 Impact of Access to the Media on Students

58.9% of the principals and 54.3% of the teachers showed that access to social media had impact to the students, causing stress and in most cases students would imitate the other schools.

> Existence and use of Abusive and Dehumanizing Language/Treatment by Teachers Towards Students

When respondents were asked about existence and use of abusive and dehumanizing language by teachers in the schools, their responses are captured in Figure 14 and Figure 15.

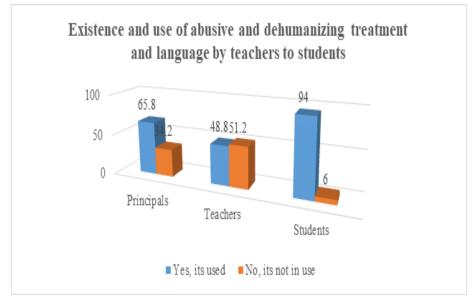


Fig 14 Existence and use of Abusive and Dehumanizing Language/Treatment by Teachers Towards Students

➤ What Countermeasure have been Put in Place for use of Abusive and Dehumanizing Language by Teachers.

The responses for the countermeasures for use of abusive and dehumanizing language by teachers were as indicated in Figure 15.

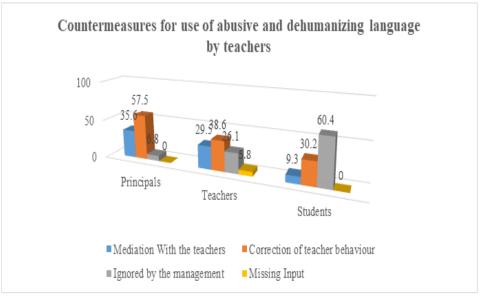


Fig 15 Countermeasures for use of abusive and dehumanizing language by teachers

Some experiences in schools may be dehumanizing to students. Experiences such as ethnic differences, competition for personal attention, political differences, gender discrimination, competition for leadership roles and competition for school resources .When dehumanized, students will act, react, or engage, sometimes with protest and intense violence. Kenyan students have learned that arson is effective as a tactic in protest politics and consider it as an instrument of power to negotiate survival needs (Wasonga, 2021).

Experiences such as humiliation, oppression, alienation, disempowerment, denial of rights and freedom, anxiety, hopelessness and disillusionment (absurdity) gender dehumanization (Malenya, 2016). This experiences coupled with continued use of dehumanizing language indicated lack of proper preparation for arson in schools.

➤ Specific Psychosocial Programs Available in Schools

Majority of the principals indicated that teachers in general use proper language to address students as indicated by 35.6% and 43.8% of the principals (Table 1). This is a positive indicator. However, 20.5% of the principals disagreed. The principals also unanimously agreed that students were treated fairly in general.

	Strongly						Strongly		Total %
	agree		Agree		Disagree		disagree		
Response	N	%	N	%	N	%	N	%	
Teachers use proper language	26	35.6	32	43.8	12	16.4	3	4.1	100
All students are treated fairly	32	43.8	37	50.7	4	5.5	0	0	100
Action is taken for student rights abuse	26	35.6	44	60.6	3	4.1	0	0	100
Any noted use of drugs by students	13	18.3	22	31.0	19	26.8	17	23.9	100
Whistle blowing/tip-offs avenues exist	26	35.6	42	57.5	5	6.8	0	0	100
There are cases of mass indiscipline	12	16.4	25	34.2	36	49.3	0	0	100
Teachers get guidance and counselling trainings	21	28.8	39	53.4	13	17.8	0	0	100
I have read government reports on causes of arson	8	11.0	30	41.1	17	23.3	18	24.7	100
in schools									

Table 1 Principals' Responses on Status of Specific Psychosocial Programs in Schools

The principals also indicated that they had provided whistleblowing avenues for the students to communicate with the management anonymously. This was agreed by 93.1% of the principals. 49.3% of principals indicated that drug use is a concern in their schools. 82.2% of principals also agreed that teachers had received some in-service and refresher trainings on guidance and counselling. The same question was posed to the teachers where 48.3% agreed and 50.7% disagreed to having trained on guidance and counselling. The teachers clearly showed that the in-service and refresher trainings on guidance and counselling were rarely done. This indicated that there were good measure to provide psychosocial programs but still there was a lot of work to be done.

The principals were finally asked to indicate whether they had read the government reports on causes of school fires. 52.1% agreed and 48% disagreed. This indicated that a good number of principals approximately 48% had not read government reports on causes of school fires and therefore may not have been aware of the causes of fire disasters in secondary schools. This indicates lack of psychosocial fire disaster preparedness.

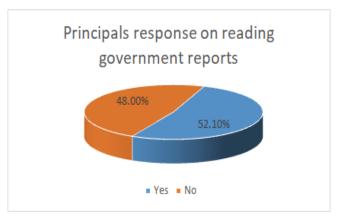


Fig 16 Principal Response on Reading Government Reports

Failure of a 48.0% of the principals to read government reports of fire disaster in schools indicated that the principals were not psychologically prepared for fire disasters and may not be aware of the recommendations therein. School based psychosocials programs were therefore found to be existent but there was room for improvements regarding specific psychosocial programs.

Suggested ways to Improve Fire Disaster Preparedness in Schools

The respondents were asked to suggest ways to reduce the occurrence of fire disasters in schools. The responses were analysed thematically as presented in Figure 16. From this 41.5% of the respondents indicated that providing an avenue to solve student-teacher problems would help reduce the occurrence of fire disasters in schools. 20.66% of the respondents indicated that improvement on handling of students' affairs would also help to reduce the occurrence of fire disasters in schools. Since student-teacher problems and students' affairs are psychosocial issues majority of the respondents (41.5%+20.66%=62.16%) indicated that providing an avenue to solve students' and teachers' psychosocial problems/issues would reduce the occurrence of fire disasters in schools.

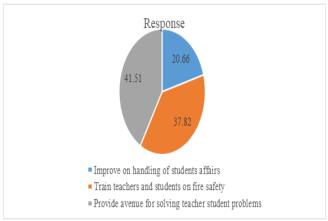


Fig 17 Suggested ways to Improve Fire Disaster Preparedness in Schools

V. CONCLUSION

Most schools lacked proper implementation of both students and teachers psychosocial needs. Most of the schools lacked properly established psychosocial interventions. There were cases of grouping. Only a small percentage of the schools incorporated guidance and counselling to control mass indiscipline. Majority of teachers disagreed on having received in-service training on guidance and counselling. With this in mind the teachers therefore were found to be incapable of offering well informed psychosocial support to students. Use of abusive and inhumane language by some teachers existed in schools.

The most preferred countermeasure by the management was to ignore the students who had been offended. This indicated lack of proper social reconciliation between the two parties.

Most principals did not read government reports on schools fires and school safety in general. This indicated that most principals were not aware of the causes of fire disasters from the government reports. They also would not be aware of the recent developments and recommendations on fire disaster management in schools.

RECOMMENDATIONS

- In view of the foregoing the following recommendations were made based on the findings and conclusions as guided from the objective of this study:
- That schools should embrace psychosocial support for both students and teachers to encourage good relationship between teachers and students
- That schools should incorporate guidance and counselling as a mitigating strategy for mass indiscipline.
- That the school management should involve more students in schools management activities to encourage ownership of the school and discourage the use of student reporters as a surveillance method for students' behaviour.
- To the provide for students appointed by the teachers to be teacher assistants and the democratically elected students to be the prefects, the two groups to work together to bridge the students gap in the two social groups, provide avenues for streamlining teacher student relationship.
- That school management to strongly discourage use of abusive and inhumane language by teachers.

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