

# Opinions of primary school principals in Bunia City (DRC) on the establishment of infirmaries within their schools

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## ABSTRACT

### Introduction

This study presents the different opinions of the Heads of Primary Schools in the City of Bunia regarding the establishment of an infirmary within their schools.

### Purpose

The objectives of this study are to: identify their opinions on the long- and short-term benefits of establishing a school infirmary in primary schools; identify the challenges or obstacles identified by the heads of primary schools for the establishment of an infirmary; identify the proposals or suggestions of the heads of establishments for the establishment of an infirmary in schools; and describe the opinions of the heads of establishments regarding the management of an infirmary in primary schools.

### Methods

The ethnographic method was used for this study. Data were collected through individual semi-structured interviews and were subjected to inductive analysis of the thematic content.

### Results

This study revealed that the lack of financial resources is the major challenge in setting up an infirmary. Most heads of establishments favour the establishment of an infirmary in primary schools with the involvement of public authorities. The preferred model for managing an infirmary is collaboration between the permanent nurse, the head of the establishment, and the State, according to most heads of establishments. Integrating medical care is essential for saving students' lives. Most respondents confirm the ineffectiveness of medical care in schools due to the lack of required resources.

### Conclusion

Raising awareness among the leaders of primary schools in the City of Bunia about the establishment of infirmaries within primary schools is necessary in order to effectively manage health emergencies.

## INTRODUCTION

It is essential for every school to have an infirmary or to recruit a teacher who has undergone training in first aid (FLALLA, 2021). Therefore, preventive action and health education are crucial to ensure the health of students (World Health Organization [WHO], 2011).

In Africa, the health situation is particularly concerning,

with a multitude of diseases that hinder the socio-economic development of societies. This issue is even more alarming in schools. Consequently, addressing health in schools remains a priority for public authorities, as well as private and international organizations (Niang, 2008).

Injuries are among the most significant global health

problems for young people during their school years. Muscle strains and sprains are the most common, while other types of physical injuries include cuts, tears, bruises, head injuries, and burns (WHO, 2011).

During our visit to 15 primary schools in the city of Bunia, conducted during our 2024 complementary master's internship, we observed that none of the schools had established a school infirmary, despite the need for health assistance in emergencies such as injuries, sudden loss of consciousness, convulsions, epilepsy, and other conditions.

An opinion is a judgment that one forms about an individual, a phenomenon, an action, an object, or a situation. It can be considered either good or bad. Opinions can influence others and provide valuable or misleading information about a subject within a group, a person, or an object.

The aim of this study was to explore the opinions of school heads on the establishment of an infirmary in primary schools in the city of Bunia, through the following objectives: (i) to identify their opinions on the long- and short-term benefits of establishing a school infirmary in primary schools; (ii) to identify the challenges or obstacles that the heads of primary schools perceive regarding the establishment of an infirmary; (iii) to identify the proposals or suggestions of the heads of schools for the establishment of an infirmary; (iv) to describe the opinions of the heads of schools regarding the management of an infirmary in primary schools; (v) to determine the opinions of the heads of schools on the integration of medical care within the school environment; and (vi) to discover their opinions on the effectiveness of medical care in the school environment.

## METHODS

### *Presentation of the Study Environment*

This study was conducted in primary schools in the Bunia City Sub-Division. Bunia is the capital of Ituri Province, located in the northeast of the Democratic Republic of the Congo. It is bordered by:

- The Chiefdom of Baboa Bokeo to the north
- The Banywagi Chiefdom and the W/Tatsi Sector to the east

- The Chiefdom of Babira Basili to the south
- The Chiefdom of Bahema d'Irumu and the Chiefdom of Babebe to the west

### *Sampling Method and Data Collection Techniques*

This study was descriptive in nature. Descriptive research aims to discover new knowledge, describe existing phenomena, determine the frequency of occurrence of a phenomenon within a given population, or categorize information (Anonymous, n.d.). The study was conducted in 2024, covering the period from July to September. The ethnographic method was employed in this study.

The population of this study consisted of all the heads of primary schools in the urban subdivision of Bunia. Multi-stage sampling was used to select the participants for the study.

- **First stage:** Simple random sampling was used to select two-thirds of the communes in the city of Bunia using the URNE technique. The communes of Mbunya and Nyakasanza were selected. A box containing 136 pieces of paper was used, each representing a school. A child was asked to randomly draw one piece of paper at a time. This process was repeated with replacement until 35 schools were selected.
- **Second stage:** From the selected communes, 50% of the schools (i.e., 68 schools) were chosen using the same sampling technique.
- **Third stage:** Non-probability sampling by convenience was used to select the heads of the schools for the study, who were included in the sample.

In qualitative research, the number of participants is not predetermined and depends on the data. The principle of saturation was applied to determine the number of participants. Saturation occurs when no new information is gained from additional data collection. This principle was used to create a sample of 35 school heads. The individual semi-structured interview technique was employed to gather the opinions of the heads of schools.

**Table 1:**  
Socio-Demographic Characteristics of Respondents

N	Age	Level of study	Seniority
E1	36	D6	8 years
E2	32	D6	9 years
E3	40	D6	9 years
E4	39	D6	10 years
E5	36	G3	3 years
E6	36	D6	8 years
E7	63	D6	26 years
E8	24	D6	1 year
E9	57	D6	25 years
E10	33	D6	6 years
E11	39	D6	7 years
E12	40	D6	13 years
E13	36	D6	1 year
E14	26	G3	2 years
E15	68	D6	3 years
E16	38	D6	2 years
E17	28	D6	1 year
E18	49	D6	2 years
E19	66	D6	12 years
E20	42	D6	6 years
E21	36	D6	7 years
E22	43	D6	5 years
E23	78	D6	32 years
E24	43	D6	14 years
E25	73	D6	18 years
E26	31	D6	4 years
E27	50	D6	20 years
E28	27	D6	9 years
E29	56	D6	4 years

*Selection Criteria*

*Inclusion Criteria*

To participate in the study, the following criteria were considered: (i) all Heads of the selected primary schools in the city of Bunia.

*Exclusion Criteria*

The following were excluded from the study: (i) All heads of primary schools in the city of Bunia who were not selected or who refused the interview.

*Data Processing and Analysis Technique*

The data from the individual semi-structured interviews were transcribed in full. After thoroughly reviewing the interview reports, content analysis was conducted on the extracts from the heads of establishments' interviews. The

responses were classified according to themes and sub-themes, with a focus on the intensity or frequency of specific words, sentences, or expressions.

*Ethical Considerations*

This study was conducted in compliance with ethical standards. To conduct fieldwork, a research certificate was obtained from the ISTM/Kinshasa Doctoral School to facilitate data collection, and the study was approved by the Head of the Provincial Health Division, the Head of the EPST Sub-Division, and the Heads of the establishments.

In this study, informed consent was obtained from the participants. They were informed of the study's framework and were asked to participate by answering several questions. We assured them of the confidentiality of the information they provided and the anonymity of their responses. All responses were treated anonymously and confidentially, with the focus solely on the implementation of the school infirmary.

**RESULTS**

*Advantages of the School Infirmary*

**Table 2:**  
Advantages of Establishing an Infirmary in Primary Schools

No	Opinions	f	%
1	Facilitate primary care	5	14.3
2	Provide first aid	11	31.4
3	Rescue children	8	22.9
4	Prevent chronic diseases	5	14.3
5	Maintain health education	6	17.1
<b>Total</b>		<b>35</b>	<b>100</b>

Analysis of the respondents' answers shows that the majority believe that establishing an infirmary in primary schools would provide emergency medical care to schoolchildren.

**Table 3:**  
Challenges of Implementing an Infirmary

No	Opinions	f	%
1	Insufficient financial resources	23	65.7
2	Multitude of taxes	2	5.7
3	Lack of qualified personnel	6	17.1
4	Lack of space for construction	4	11.4
<b>Total</b>		<b>35</b>	<b>100.0</b>

According to the respondents, the lack of sufficient financial resources is the major challenge for establishing an infirmary in primary schools.

**Table 4:**  
Strategies for Setting Up an Infirmary

No	Opinions	f	%
1	Integration of the infirmary into the school budget	9	25.7
2	State authorization of the establishment	4	11.4
3	Government grant	11	31.4
4	Having a large plot (space)	5	14.3
5	The state must impose the implementation	15	42.9
<b>Total</b>		<b>35</b>	<b>100</b>

The content analysis reveals that most heads of establishments feel the implementation of public power is necessary for setting up an infirmary in primary schools.

**Table 5:**  
Management of an Infirmary

No	Opinions	f	%
1	Establish collaboration between the Head of Establishment and the permanent nurse	19	54.3
2	Participation of the Congolese State	6	17.1
3	Hiring of field staff	10	28.6
<b>Total</b>		<b>35</b>	<b>100</b>

The content analysis of the respondents' opinions on managing a primary school infirmary indicates that most believe there could be collaboration between the permanent nurse, the school director, and the Congolese state.

**Table 6:**  
Integration of Medical Care in Schools

No	Opinions	f	%
1	Save students' lives	11	31.4
2	Address health concerns	8	22.9
3	Restore health	5	14.3
4	Prevent contagious diseases	8	22.9
5	Facilitate well-being	3	8.6
<b>Total</b>		<b>35</b>	<b>100</b>

Most respondents stated that integrating medical care in schools could save students' lives.

**Table 7:**  
Effectiveness of Medical Care

No	Opinions	f	%
1	Priority consideration by the manager	6	17.1
2	Lack of funding	15	42.9
3	Government drug allocation	10	28.6
4	Regular monitoring of students	4	11.4
<b>Total</b>		<b>35</b>	<b>100</b>

The results indicate that medical care in schools is generally ineffective due to a lack of appropriate resources.

#### *Advantages of Establishing an Infirmary in Primary Schools*

Analysis of respondents' responses regarding the benefits of establishing an infirmary in primary schools revealed

that emergency medical care was identified as an advantage in most cases. Some respondents stated:

- **E1:** "The establishment of an infirmary within the school has the advantage of facilitating primary care in the event of accidents (injuries) or sudden illnesses."
- **E4:** "It is to provide first aid."
- **E5:** "Emergency assistance and observation of a few cases."
- **E6:** "Helping children who fall ill."
- **E7:** "Students will be quickly taken care of in the event of illness or injury."

Other respondents emphasized that the advantages of having an infirmary in primary schools also included prevention, treatment, and health education:

- **E1:** "Prevention, treatment of diseases, and health education."
- **E16:** "Managing children with chronic illnesses."
- **E19:** "Health education for children."

#### *Challenges for the Implementation of an Infirmary*

The respondents' responses revealed various challenges in setting up an infirmary in primary schools. In most cases, insufficient financial resources were identified as the major challenge:

- **E1:** "Setting up an infirmary has the difficulty of lacking financial means for its implementation."
- **E3:** "Insufficient financial means and numerous taxes to be paid."

Another group of respondents highlighted the lack of personnel in the field in schools and the lack of space for constructing an infirmary:

- **E1:** "The lack of staff in the field in schools."
- **E10:** "Lack of space for the infirmary."

#### *Opinions of School Heads on the Establishment of an Infirmary in a Primary School*

Regarding the opinions of heads of establishments on the establishment of an infirmary in primary schools, most expressed the need for support from public authorities and school authorities:

- **E1:** "School authorities must budget for the establishment of an infirmary, and schools must set aside a budget line for its establishment."

- **E3:** "The State should grant authorization for the establishment of schools."
- **E6:** "Government grants to schools for the establishment of the infirmary."
- **E7:** "The state must impose the heads of establishments."

Others emphasized the importance of having suitable premises and qualified caregivers:

- **E4 and E18:** "You must have premises and qualified personnel."
- **E5:** "The school needs to have a large plot of land."

#### *Opinions of Heads of Establishments Regarding the Management of an Infirmary*

The content analysis of the speeches from the heads of establishments revealed that collaboration between the permanent nurse, the school director, and the state is necessary for the management of an infirmary in primary schools:

- **E3:** "The nurse works in collaboration with the Director."
- **E10:** "The participation of the Congolese state."

Some respondents suggested hiring staff from the estate to manage the infirmary:

- **E1, E2, and E23:** "It requires the commitment of personnel from the field and financial resources."

#### *Opinions of Heads of Establishments Regarding the Integration of Medical Care in the School Environment*

Analysis of the respondents' responses regarding the integration of medical care into the school environment shows that the majority of heads of establishments see it as crucial for saving students' lives:

- **E1:** "It is important to save the students' lives."
- **E2:** "It helps address a lot of students' health concerns."
- **E3:** "To restore health because health is a priority."
- **E6:** "Preventing contagious diseases."
- **E8:** "Facilitating student well-being."

#### *Opinions of Heads of Establishments Regarding the Effectiveness of Medical Care in Schools*

Regarding the effectiveness of medical care in schools, most respondents reported ineffectiveness due to the lack of required resources:

- **E1:** "Medical care would be effective if the person in charge took it as a priority."
- **E5:** "The support will be ineffective due to the country's economic situation and lack of funding."
- **E6:** "Care can be effective if the government provides the drugs."

Some respondents suggested that schoolchildren should be promptly taken care of and regularly monitored:

- **E7:** "Care will be effective because of direct care."
- **Surveyed 9:** "Regular monitoring of sick students."

Others stated that the effectiveness of medical care depends on the head of the establishment:

- **E1:** "Medical care would be most effective if the person in charge takes it as a priority."

## DISCUSSION

#### *Advantages of establishing an infirmary in primary schools*

The analysis of respondents' speeches revealed that for the majority of those surveyed, the establishment of an infirmary in primary schools provides the advantage of offering emergency medical care to schoolchildren. Indeed, recent studies highlight a shortage of school nurses, and the health crisis has only exacerbated this issue (Indeed, 2023). This result can be attributed to the fact that health emergencies, such as accidents or sudden illnesses, occur in schools and require immediate care.

#### *Challenges for the implementation of an infirmary*

Respondents' speeches emphasized that insufficient financial resources are the primary challenge for establishing an infirmary in primary schools. This finding aligns with the work of Nyane (2008), who noted that due to financial constraints and challenges within the Cameroonian education system, NGOs and development partners have stepped in to address health and education issues in schools. The establishment of an infirmary in primary schools is further complicated by the required

resources for meeting operational standards, which are often unavailable.

#### *Opinion of school heads on the establishment of an infirmary in a primary school*

The content analysis of school heads' speeches revealed that most believe the involvement of public authorities is essential for establishing an infirmary in a primary school. This finding is consistent with the INSPQ (2008b) study, which noted that in Quebec, the healthy school approach has been adopted by government bodies to create environments conducive to educational success, health, and well-being. The study advocates for an integrated health promotion model that fosters collaboration between the health, social services, and education sectors. Additionally, IUHPE (2009) emphasized that international organizations recognize the potential of schools to contribute to the health and well-being of young people, particularly when health promotion programs take an integrated, collaborative approach. These findings suggest that primary schools should receive holistic support from the state to ensure the health and well-being of schoolchildren.

#### *Opinions of primary school heads regarding the management of an infirmary*

The analysis of the heads of establishments' speeches on the management of an infirmary revealed that collaboration between the nurse, the school director, and the state is vital. This finding mirrors the concerns of LSSSS et al. (2003), who suggested that health and social services institutions must develop individualized service plans for young people who need extended care. Such plans involve collaboration among school, health, social, and community sectors. The integration of resources and services in a coordinated manner is crucial for meeting the needs of young people. The heads of establishments believe that collaboration would enhance the efficiency of the infirmary, ensuring it meets medical care needs in terms of both equipment and human resources.

#### *Opinions of primary school principals regarding the integration of medical care*

Most respondents indicated that integrating medical care in schools could save students' lives. This result aligns with Lucarelli (2010), who stated that in nursing therapy within schools, the therapeutic program is determined by

the nurse, who evaluates the clinical needs of the students and adjusts care as necessary. Roy et al. (2013) also noted that nurses in private educational establishments assess chronic or complex health issues and identify appropriate nursing activities that can be carried out by school staff. The integration of medical care in primary schools allows the monitoring of students' health and ensures timely interventions, which are beneficial to their well-being.

#### *Opinions of heads of establishments regarding the effectiveness of support in the school environment*

The results of the study generally show the ineffectiveness of medical care in schools due to the lack of appropriate resources. This finding contrasts with the work of Ficca and Welk (2006), who noted that school nurses maintain quality clinical practice by staying updated with relevant studies and research. They incorporate these findings into their interventions with students. Engelke et al. (2008) further emphasized the importance of nurses contributing to the advancement of youth health practice by sharing research findings and participating in professional events. Despite these examples, the current study suggests that the operating conditions for infirmaries in primary schools are not yet sufficient to ensure effective medical care.

## CONCLUSION

This study, titled "Opinions of primary school principals in Bunia City (DRC) on the establishment of infirmaries within their schools" has come to a close. The major challenge identified for the establishment of an infirmary is the insufficiency of financial resources. Most heads of establishments support the idea of setting up an infirmary in primary schools with the assistance of public authorities. Regarding the management of the infirmary, most respondents suggest collaboration between the permanent nurse, the school director, and the state. The integration of medical care is seen as essential for saving the lives of students. However, most respondents also confirm the ineffectiveness of medical care in schools due to the lack of the necessary resources for establishing the infirmary.

#### *Recommendations*

It is recommended to:

1. **Legalize the establishment of school infirmaries** throughout the Democratic Republic of the Congo. Policymakers should be sensitized to the benefits

of this measure for children's health and its potential to improve the quality of education.

2. **Assign nurses to primary schools.** Initial and continuing training programs for school nurses should be established, and nursing students should be encouraged to specialize in school health.
3. **Budget for medical care.** A specific budget should be allocated for the operation of school infirmaries within the state budget. Additional funding should be sought from development partners, non-governmental organizations, and the private sector.
4. **Investigate the impact of establishing infirmaries in primary schools.** A monitoring and evaluation system should be set up to assess the impact of school infirmaries on student health, attendance, and academic performance. The results of the evaluation should be disseminated to inform policymakers and civil society actors.

**Ethics Approval:** Ethical clearance was obtained from the Doctoral School, Higher Institute of Medical Techniques of Kinshasa, Kinshasa, Democratic Republic of the Congo.

**Conflicts of Interest:** None declared.

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