COMMON DISEASES AND MEDICINE USE AT A PRIMARY BOARDING SCHOOL IN UGANDA

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Acronyms and abbreviations

FGD: Focus Group Discussion(s)
AIDS: Acquired Immune Deficiency Syndrome
HIV: Human Immune Virus
IDP(s): Internally Displaced Person(s)
MFEP: Ministry of Finance and Economic Planning
MOE: Ministry of Education
MOGLCD: Ministry of Gender, Labour and Community Development
MOH: Ministry of Health
MUK: Makerere University Kampala
NDA: National Drug Authority
NUFFIC: Netherlands University Fellowship Programme
ORS: Oral Rehydration Salts
RH: Reproductive Health
SAPS: Structural Adjustment Policies
SPSS: Statistical Products and Service Solutions
TB: Tuberculosis
UDHS: Uganda Demographic and Health Survey
UNICEF: United Nations Children’s Fund
UWESO: Uganda Women’s Effort to Save Orphans
WB: World Bank
WFP: World Food Programme
WHO: World Health Organization
Definition of terms

**Gender:** Social construction of femininity and masculinity.

**Agency/Autonomy:** Ability for children to make decisions as social actors in the arena or healthcare.

**Social networks:** Existing bonds among children involving sharing of ideas, resources, and scholastic items. This level of interacting included care for the sick either as a sibling, classmate or friends.

**Disease/illness:** The adopted definition of these two terms for this study is at phenomenology level. The two terms have been used interchangeably to mean a condition of 'abnormality' or 'not normal' due to attack of the body by pathogens or due to accidents. The distinction of the two terms can however be made at theoretical level. For instance Kleinman (1980: 74-74), Kleinman (1986) and Unschuld (1986) recognize that the difference between these terms is a social construction from sickness and they define illness as a subjective state experienced by the sufferer and possibly recognized by others in consequence of her/his demeanor and disease is a pathological condition recognized by biomedicine.

**Medical pluralism:** Practices, both biomedical and indigenous geared towards restoring normality. It involves use of pharmaceuticals and herbal remedies and other procedures for curative purposes.

**Pharmaceutical pluralism:** Presence and use of therapies both pharmaceutical and herbal remedies in case of illnesses or diseases.

**Children:** Individuals below the age of eighteen years. For purposes of this study children are a category above five years, though the main respondents were aged 9-14 years.
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Abstract

The main focus of this study was to assess common diseases and medicine use by children in a primary boarding school. The research design was exploratory, multilevel, and focused ethnography. Mapping out ideas at micro, meso and macro levels helped to put into perspective pertinent healthcare issues for children above five years. At micro level, children aged 9-14 years were viewed as social actors in their own right, able to define common diseases and select medicines in the context medical pluralism. The school administration, staff, parents’ views represent meso aspects of this study’s problematics. Meanwhile, at macro level, are policy issues, political processes that dictate the marking of healthcare, ideas and input by professional and non-professional healthcare givers. The research methods employed included depth interviews, observation, listing, photography, diagrammatic representation, focus group discussions and self-administered structured questionnaires.

This study has demonstrated that unlike the existing public healthcare discourse for children above five years which emphasizes deworming and oral hygiene, this age group largely experience infectious diseases including malaria, diarrhoea, cough and flu, typhoid and skin fungal infections. The children know when they were ill. Common signs detected by them included high body temperature, appetite loss, vomiting, headache, weakness and diarrhoea. There were gender differences in areas of emphasis with boys largely putting emphasis on weakness and headache while girls emphasized vomiting and appetite loss. This study found out that effectiveness of the medicine, type of disease and what the nurse, parent or doctor says, the amount of money they had, and whether they were known at the healthcare centre, were main criteria for medicine selection.

Children exhibited both agency and vulnerability in defining diseases and therapy choice. Unlike girls who sought gate passes to go home for 'good care' or immediately reported to the matrons and school nurse, boys made agreements with their close kin not to disclose an illness episode until one was very weak or one was too weak to play or leave bed. Subsequently this gender difference in managing illness significantly influenced the type of healthcare received. For example, boys mentioned that they largely got medicines from hospitals and home/market, while girls mentioned drug-shops, pharmacies, and clinics.
This study further demonstrated that there were obstacles children met in the process of healthcare seeking including; limited focus in public healthcare planning and implementation of programmes for children above five years, an adult-centered and market oriented healthcare system, presence of market drugs which are readily available but only provide symptomatic relief. These market drugs are not recommended or supervised by the MOH. Whereas a wide range of herbal remedies were named, it is not yet known how effective they are in treatment of such diseases like malaria, cough, aches and pains and boys mentioned ice and lugave for treatment of mumps and wounds respectively.

This study concludes that children have agency in the arena of healthcare but they are also vulnerable. Regarding children’s agency, this study established that it is the differential socialization of boys and girls in a patrilineal society which largely influences how children exhibit their autonomy. For example, whereas girls employed their agency in context of feminine values, boys’ agency manifested within the framework of masculine attributes. What is clear in the gender differentiated values in disease management are feminine attributes of vulnerability, weakness, ‘in need of care’, while masculine values include power, control, perseverance and strength.

Concerning vulnerability, children above five years met obstacles in the process of healthcare seeking already mentioned above.

This study recommends that structural factors in the arena of healthcare, which impact on children’s agency, could be addressed to facilitate their role as actors in their own right. For instance, there is need to refocus public healthcare policy from deworming and oral hygiene for this age group to infectious diseases. With an increasing number of children under minimal or no adult healthcare givers, sensitization of professional and non-professional healthcare givers about this issue and allocating a separate clinic in hospitals for this age group is recommended. Moreover, environmental conditions which are ‘child related’ such as poor hygienic practices and negligence mentioned in the text, and ‘school related’ factors including lack of drainage system, few sanitation facilities, limited water supply congested dormitories and lack of sickbay come to the fore in influencing children’s health and healthcare.
Structure and organization of this thesis

The thesis comprises five chapters. The first chapter gives an overview of the study's problematics including the study's background information, main focus, objectives, research questions, problem analysis diagram, theoretical framework and literature on medical pluralism.

The second chapter describes the methodology of this study. Subtopics in this chapter include area of study, study population, data collection instruments such as writing compositions, diagrammatic representations, conversations, semi structured questionnaires, observation, photography, listing of common diseases and medicines at school, quality control and management and data analysis. Ethical considerations are also found in this chapter.

Chapter three presents the research findings. Findings are based on the research questions and both qualitative and quantitative findings are presented in this chapter.

Chapter four presents analysis, discussions and conclusions of findings. Particular thematic areas in this study's problematics have been analysed and conclusions drawn basing on data collected. Reference has been made to the theoretical framework, literature review and problem analysis diagram during the discussion and analysis.

Chapter five presents the summary of findings, recommendations to the children at Molly and Paul boarding primary school, school administration, parents and healthcare givers.
CHAPTER ONE
1.0 Background and Literature review

1.0 Background

Uganda, like other developing countries has put in place a Ministry of Health (MOH) to design and implement programmes geared towards providing for the healthcare needs of its citizens and improving existing services. Programmes range from malaria control, Reproductive health (RH), AIDS awareness and prevention, vertical programmes for sleeping sickness, TB, primary healthcare programmes and expanded programmes of immunisation (MOH 1999; MOH, 2001; Whyte & Birungi 2000; UNICEF 2003; UNICEF 1998). The general trend in planning and implementation of these programmes is to target adults, especially mothers who are defined by their traditional role of healthcare giving. Conventionally, adults have been viewed as being in charge of and having responsibility for children. This emphasis tended to obscure children's own role and contribution. These views as argued by Christensen (1996), not only dominate popular perceptions of childhood illness, but have also been projected to influence most research about children.

However, in contemporary Uganda as in other developing countries as discussed by Webb (1988:1), young children spend much of their lives on their own or under the care of older siblings. Such circumstances include children in boarding schools, street children, and children under the care of child minders. In situations of insurgency and displacement of people due to war, children are often on their own and may settle in camps as child headed-households. Another increasing number of child-headed households can be found among the orphaned children due to HIV/ AIDS epidemic in Uganda (UDHS 1995; MOH 1999; UWESO 2003; UNICEF 2003).

The children mentioned are not only outside the normal traditional households where the presumed role of the adult or mother as healthcare giver is absent, they are also faced with various illnesses which place them in situations whereby they are social actors; can speak of; and about illnesses and even use medicines when required. These medicines in context of medical pluralism may be obtained from the popular, biomedical or folk sectors as will be discussed later.
The Ugandan constitution (1995) defines children as individuals below eighteen years. Hartzema (1996:355) study established that from age 8 children’s thinking becomes logical and systematic, and they are able to interpret changes in their bodily experiences and act upon it. However, no documentation is available regarding the illness experiences and medicine use by children in boarding schools. Like in the rest of Uganda, the healthcare system in these boarding schools is characterised by medical pluralism. Medicines, both biomedical and indigenous, are readily accessible in the market without prior consultancy with health professionals (Whyte & Birungi 2000:128; Adome et al. 1996).

Essentially this study’s population category was children between 9-14 years. The age limit is consistent with the ages of children in upper boarding primary school. It is at this ages that children’s agency in medicine use is rational and also based on previous illness experiences in boarding school context. The children interviewed had been in boarding school for a minimum of three years by this age and therefore established meaningful peer ties for their popular sector.

My interest in the residential primary schools is against the background that prior to the introduction of structural adjustment policies (SAPS) in Uganda, there were very few such schools. The existing ones were put in place by the colonialists so that the sons and daughters of kings and the ruling class would be isolated from their bigger homesteads. The major emphasis then was for both academic/career and well-being of such children. In general terms, their physical structure, design and location suited the place of habitation for the children of the ruling class.

However, with implementation of SAPS such as privatisation since the late 1980s, even schools are simply one of the lucrative businesses. Schools, especially the residential ones, are constructed with the main motive of maximising profits. I find this significant because some of these schools are located in overpopulated city suburbs, or former private dwellings of larger homesteads. Given this background, it is likely that the children in these schools are left to fend for themselves for most illnesses they experience. This study examined specific healthcare facilities in place to ensure well-being and prompt management of common illnesses experienced by the children.

1.2 Statement of the problem
The ministry of health policy regarding health and healthcare of children below five years is clear (see above and in public health approaches). However, as mentioned earlier, for children above five years, there is a limited focus, and there are varied underlying assumptions regarding their healthcare. Although in contemporary Uganda, this age group constitutes a higher proportion of the population, it is a neglected group in terms of healthcare planning.
and implementation. This study therefore set out to examine how children above five years are actors in the existing adult-centred healthcare system with no inclusive healthcare programme for them.

Central to this study, therefore are questions regarding the common diseases children above five years experience and factors influencing access and use of medicines in a boarding school and medical pluralistic context. Issues documented include how children determined illness conditions, how they detected severity signs and how their therapy choice was influenced by their agency on the one hand and macro factors such as the public health discourse and the availability of therapies outside the MOH’s domain on the other. Regarding the public health discourse, special attention was paid to its implicit assumptions such as the limited definition of health needs of children above five years by focusing on de-worming and oral hygiene, and its adult centred approach. Concerning the availability of therapies, the focus was on the commoditization of healthcare through the activities of profit-oriented healthcare providers and pharmaceutical companies. In context of medical pluralism, therapies both herbal and pharmaceutical in nature are used for illnesses basing on varied reasons which this study documented.

Meanwhile gender concerns for this study were based on questions concerning differential socialisation of children in patrilineal societies. Of particular interest was the idea that girls are socialised as healthcare givers while boys are not; so how does this difference in gender values manifest in contexts where children are not under a direct adult healthcare giver?

1.3 Main focus

Medicine use for common illnesses by boarding school children.

1.4 Objectives

- To examine how children identify and determine severity of diseases.
- To study children's medicine use in the context of medical pluralism.
- To document gender differentials in illness experiences and medicine use by boarding school children.
- To discuss the influence of macro factors on children’s access and use of medicines.

1.5 Research questions

- How do children in boarding schools know that they are ill?
- How do they determine the severity of illnesses?
• What are the common illnesses that children experience?
• What medicines do they use for the illnesses they experience?
• Where do these children get the medicines?
• What factors influence access to and use of medicines?
• Do boys and girls experience and treat illnesses differently?
• If so, why are there any differences?

1.6 Theoretical Framework
This study’s theoretical framework draws upon a wide range of theories including those focusing on child agency and vulnerability, political economy of healthcare, and constructs of masculinity and femininity stemming from the socialisation process in patrilineal communities.

In theories of children’s agency, children are viewed as social actors in their own right as discussed by (Prout 1990; Prout & Christensen 1996; Christensen & James 2001; Van der Geest 1996; Van der Geest & Geissler 2003). Proponents of these theories argue that childhood is a social and cultural construction and that children can be understood as social actors with their own perspectives of the social world. Children have cognitive abilities Kanaaneh & Netlend (1992), with viewpoints and cultures as areas of study in their own right O’Kane (2000). Closely related to the theories on child’s agency are child-development psychology theories (Hartzema 1996; Yule 1999; Garmezy & Rutter 1985; APA 1994). Child development theories categorise children by age, and there is a general consensus that from age 8 they are able to define changes in their physiology and act upon them.

In theories which take children’s vulnerability as a starting point emphasis is not only that children are vulnerable but also that children are always under the adult healthcare giver. Adults are viewed as being in charge of, and having responsibility for the child, and the child is positioned as the dependent and passive object Christensen (1994). Significantly, by placing children within the family, these perceptions imply the positioning of adults as responsible providers and carers of the child and the child ‘as not yet contributing to society’; receiving care, protection and training (Prout 1992; Christensen 1994; Prout & Christensen 1996:33).

It is also important to note that proponents of child vulnerability theories largely focus on children below five years and programmes are put in place geared towards protecting the vulnerable child. Such programmes include

Children below five years also feature prominently in the World Health Organisation (WHO), United Nations Children's Fund (UNICEF) and World Bank (WB) literature as particularly vulnerable to communicable diseases such as malaria, diarrhoeal diseases and respiratory tract infections and to deaths due to preventable cases (WHO 2000b; Jamison 1999; UNICEF 1998; UNICEF 2003). The Ugandan Ministry of Health (MOH) and UNICEF country programme discourse is very similar to that of the international organisations. In essence, children below five years are portrayed as a ‘risk group’ and with low immunity and therefore more focus is paid to them through varied health programmes (see above) (WHO 2000a; WHO 2000b; MOH 2000; Najera et. al 2002; Langi et.al, 1994; UNICEF 2003).

By focussing on children below five years, desirable interventions are left out. It is assumed that children above five years have ‘now developed significant immunity’ (WHO 2000a; WHO 2000b). Incidentally, the children above five years essentially feature in the tetanus vaccination programme for women of child-bearing age, oral hygiene and anthelmintic medication (Jamison 1999:13; MOH 1999; MOH 2001; UNICEF 2003). Subsequently, planning and programmes geared towards healthcare service provision of children above five years are limited in promoting their well-being.

For instance the Minister of State for Health recently responding to the deteriorating health situation in the camps in Gulu district said “the ministry is planning to deworm children in the IDPs camp in northern Uganda”. Meanwhile the camp health report indicated that IDPs most of them children have died of malaria and diarrhoea. The local district administrator blamed parents for the spread of the disease saying they did not take the children for treatment after they discovered that they were suffering from malaria (WWW.Newvision.co.ug/local north: Feb, 17 2003).

The questions which remain unanswered are: whether the children above five years are less vulnerable to communicable diseases; whether such children are more prone to non-communicable diseases and; whether these children manage well without the care of adults.
The progress of the health problems through demographic and epidemiological changes is blurred about the health situation of older children. For instance, common assertions are that children below five years are more prone to communicable diseases while the elderly to non-communicable diseases (MOH 2001; Jamison 1999; World Bank 2001; WHO 2000a; WHO 2000b; MOH 1999; UNICEF 2003). Such a discourse makes this study even more interesting because not much literature is available to spell out illness experiences of children above five years which this study documented. Moreover this study documented children’s medicine use as social actors in context of medical pluralism. Having looked at the health organisations and public health approach towards children and illness, I now turn to the post-modern anthropological and sociological discourses.

Meanwhile scholars (Hardon et.al. 2002; Farmer 1998; Doyal 1981) who subscribe to the political economy of healthcare argue that health or lack of it – and the quality of healthcare are largely determined by social competition between groups of people (classes) and the unequal distribution of scarce resources. Problems in the field of health and healthcare in the developing countries are often linked to social and economic inequality and poverty which are often seen as consequences of the penetration of the capitalist economy. It is the profit motive and not promotion of well-being per se which drive healthcare givers in developing countries (Hardon et.al. 2002; Farmer 1998; Doyal 1981).

Although theories on child’s agency and vulnerability and political economy of healthcare were core to this study, they are quite inadequate regarding children as social actors in their own right in the area of healthcare and health seeking behaviour. This study added to the three theories by studying children in their own right in a developing country and in context of medical pluralism.

In order to conceptualise gender differences in medicine use for common diseases, theories of culturally constructed masculinity and femininity values acquired during the socialisation process will be employed. Underlying these theories is the recognition of shared oppression premised on the notion that women as a social group are dominated by men as a social group (Ortner 1974; Moore 1988). Analysis of women’s subordination is dependent on gendered relations. Gender may be seen as a symbolic construction or as a social relationship (Ortner 1974; Moore 1988:13). Ortner (1974) argues that female subordination is universal, and since this condition is not inherent in the biological differences between sexes, the explanation lies in sexual asymmetry at the level of cultural ideologies and symbols. According to (Ortner 1974; Moore 1988; Whitehead 1981), women’s position is lower than that of men because they are associated with what culture devalues. Since women are symbolically associated with nature, while men are associated with culture, it is their closeness to nature that
contributes to their being controlled and contained. Proponents of this theory further argue that women’s social roles are closer to nature because their involvement in reproduction has tended to limit them in certain social functions which are closer to nature (Ortner 1974; Moore 1988). The differences between men and women can be conceptualised as a set of opposed pairs, which resonate with other sets of oppositions (Moore 1988:15). Therefore the differences between men and women are not biological, but are cultural constructs, which are powerfully reinforced by the social activities, which both define and are defined by them.

It is this study’s contention that, it is these gender differences which extrapolate to power relations in households. Proponents of this theory (Blood & Wolfe 1960; Rodman 1970; Oppong 1981; Mustafa, 1980; Omari, 1995). Wolfe & Blood (1960) argued that resources, control of resources, or simply access to them are determinants to how much power is shared by men and women in the household. This theory further demonstrates that within the household there is unequal distribution of power and access to resources (Whitehead 1981; Sage 1992; Ostergaard 1992). Under this conception, gender inequality inside the household which is constituted of roles in terms of relations of power and dominance structuring the life chances of men and women cannot be ignored Ostergaard (1992). Decision making in the household is a critical element in the status of its members, since it involves the allocation of resources and the distribution of roles within the household. It affects general healthcare and treatment seeking. It is important to note that much as this study was conducted in an institution, organisation of activities fit within the patrilineal framework of distribution of power. In essence, there were hierarchies observed with women occupying lower positions of power and men were largely in administrative positions. Different rules were in place for children to relate as brothers and sisters and men and women had titles of ‘unties’ and ‘uncles’ respectively. In general, decision making theories are still adult-centred with children’s role and contribution rendered invisible. Since in patrilineal communities, power relations are influenced by gender and age, this study integrated the variable age into this theory.

In sum, this study’s question drew from different theories including those focusing on child agency and vulnerability, political economy of healthcare, and constructs of masculinity and femininity stemming from the socialisation process in patrilineal communities. Whereas child agency theorists put emphasis on children’s autonomy and ability to make independent decisions, child vulnerability theories focus on the need for children to be under adult healthcare givers and their limited ability to cope with diseases such as Tuberculosis, tetanus, polio and whooping cough among others. Children below five years are the main target for the intervention. What this study set out to determine are whether children above five years have autonomy in management of common
illnesses. Meanwhile the political economic theory proponents argue that problems of health and healthcare stem from unequal distribution of resources, poverty and the profit motive of healthcare givers. Gender socialisation theories put emphasis on different attributes and values which boys and girls acquire. For example girls are socialised to be community healthcare givers while boys rarely acquire this value. What happens then when boys and girls are on their own for an episode of illness? Do boys and girls easily recognise illness episodes and act upon them?
Figure 1

1.7 Problem analysis diagram for medicine use by children for common diseases
From the problem analysis diagram above, are representations of micro, meso and macro factors in children's use of medicines for common illnesses. At micro level are the children and their role as social actors in their own right (children's agency) in the arena of healthcare. Their role as actors is influenced by their gender and presence of social networks such as having close kin and friends in times of sickness. Graham (1984), documented the importance of community and social networks for illness episodes.

The school structure (physical and organisational) are meso level factors in healthcare of children. Issues of particular importance are whether the school had a sickbay, sufficient sanitation facilities, clean water and drainage system. These are school environmental factors which influence incidence rates and management of infectious diseases. The organisation of the school in terms of sufficient staff who are keen in management of common episodes of illnesses such as presence of a resident nurse or matrons with skill to identify and treat illness episodes also form part of meso level factors. Parents' role and influence of the children's treatment for common illnesses in the popular sector and distribution of remedies are also meso level factors.

At macro level are factors which facilitate management of common diseases and access to medicines. For instance, public healthcare policies for children above five years, media advertisement of medicines including herbal and pharmaceutical remedies and presence of professional and non professional healthcare givers in this arena.

1.8 Justification of Research
This study documented factors determining choice and use of medicines, including pharmaceuticals, by children for the common illnesses they experienced. Such information is vital for developing health services that meet the needs of the more vulnerable consumers of medical services including children in boarding schools.

Further, given that there are three sectors from which illnesses are defined and consequently remedies sought, largely reflect adult-centered views, this rapid ethnographic study was vital in determining how children situate themselves in these systems as actors in their own right.

This research made a significant contribution regarding, as Van der Geest (1996:343-344) puts it, following a good tradition of entering the world of "others" and giving voice to their muted views.
Further, this study made a significant contribution to the social and cultural understanding of pharmaceuticals and alternative therapies by studying children in their own right, not as receptacles of adults. Children, in this case were ‘engaged in conversations as social actors in order to elicit their therapeutic practices and how they managed illnesses. In essence, this study is a ‘thick description’ of illness experiences and medicines used by children as social actors in a boarding school. (See Geertz 1973:26, for an analysis of a ‘thick description’).

1.9 Critical approaches
This section presents studies which have been done with children as social actors deriving from the criticisms of discourses, which portray children as vulnerable and as passive recipients of adult care.

Critics for the social construction of the children as vulnerable include Nichter & Cartwright (1991), who observed that such campaigns separate out the health and well being of the child from that of her household and family. In essence, the understanding of vulnerability seen in children poses a problem when interpretation is through the knowledge and images of adults. Anthropological understanding of vulnerability must be achieved within the context of children's relations and social interactions, those between children's and adults and it must be related to the child’s position in the social structures and cultural frameworks which mediate their experiences Christensen (1994: 58).

Children’s account of illness as reported by Prout & Christensen (1996), showed their experience as not only about different bodily sensations and their significance, but focussed on receiving and responding to different treatments and cures. Children emphasised the social role processes of illness. This suggests that children are engaged in a much wider project where illness episode, represent a broad cultural event through which children experience the structure of their world and the social relations within it.

An overall finding of Prout & Christensen (1996) study was that, children did not spontaneously refer to or mention the role of pharmaceuticals in illness and treatment. This is not because they did not recognise the role of medicine (both as a professional activity and therapeutic substance) but rather that, they did not dwell on this aspect and were not particularly concerned with therapeutic effect, efficacy, or side effects. They stressed that being ill, and being treated and becoming well, is a process that involves both intense care and concern from their household members and relative isolation from non-household age mates. The study further drew attention to the fact that to be socially and culturally classified as ill, “the thermometer” often played a decisive symbolic role Prout
& Christensen (1996:38). The thermometer was given symbolic meaning as an instrument for taking temperatures but also its action signified the possibility of transition from one state to another, thus making and facilitating subsequent steps and stages of the sickness performance for children and adults. This study was carried out in order to assess children’s redefinition and allocating the sick role in developing countries.

Regarding the preceding section, a point of divergence for this study is the fact that due to a more developed popular sector in Uganda and commonality in self-medications in context of commoditisation of Medicare, it is possible that medicines including pharmaceuticals play a significant role in illness definition and experience. It is likely that children’s illness narratives and subsequent recovery from episodes will include the aspect of medicines/pharmaceuticals. In exploring children’s therapeutic remedies, this study examined procedures in narratives or written essays indicating use of pharmaceuticals and alternative medicines by children as social actors.

A study from Kenya showed that among school-age children 10% of the 72 children had extensive knowledge of medicines, were involved in home treatment, and often bought and used pharmaceuticals independently. However, 90% reported that they had been given money and sent by the parents (who were under adult household healthcare giver), to buy medicine when they fell sick. These children relied more on buying medicine from the village drug providers for varied reasons including the location of the provider near the household, those who allowed more flexibility in payment and the ‘cheapness’ of medicines at the shops than in pharmacies (Maende & Prince 2000: 162; Geissler et al, 2000).

It is important to note that results reported were still derived from interviews with children within the framework of traditional households (perhaps nuclear families) which fit well with the public health discourse of health and healthcare where adults were directly involved in children’s health seeking behaviour.

This area of study is quite new since not much has been done yet with children as social actors in the framework of illness management. It is this gap which was filled by documenting medicine use for common diseases in a boarding school and medical pluralistic context.
1.10 Medical Pluralism

The term medical pluralism is used in this thesis to mean the presence of different therapies; herbal and/or pharmaceutical remedies for varied diseases. Available studies show that in Uganda therapy choice can be made from what Kleinman (1980) classified as the biomedical, popular and folk sectors of healthcare.

1.10.1 Pharmaceuticals in developing countries

A wide range of available literature in healthcare and treatment options has focussed on pharmaceuticals or therapies from the biomedical sector. For example studies by (Furguson 1981; Bush & Hardon 1990; Van der Geest 1987 & Whyte 1998), have largely covered pharmaceutical use in developing countries. In the Philippines Bush and Hardon (1990:1043) report an extensive and pervasive, inappropriate use of medicines, some relating to the healthcare systems and some relating to cultural beliefs, traditions, and practices. Other authors report an irrational, wasteful and even dangerous medicine use as a serious problem in developing countries (Bush & Hardon 1990; 1040; Van der Geest 1987; Adome et. al 1996).

The identified causes of drug misuse are varied including; lack of facilities, and measures to ensure proper use of pharmaceuticals Furguson (1981); poor prescribing habits of doctors; unethical promotion by multinational pharmaceutical companies; weak local medical infrastructure and sale of drugs by unqualified persons (Amoa and Ofori-Adjei 1980; Silverman et al 1982; Van der Geest 1987; Yudkin 1980; Whyte 1998: 327). Other studies show that in most countries in Africa, pharmaceuticals are widely sold outside of government health units (Whyte & Birungi (2000). Vendors peddle medicines in buses, pharmacists function like doctors, injectionists serve people at home and local provision shops stock medicines along with household supplies Hardon (1994). None of these studies mentions children's use or interaction with pharmaceuticals.

Moreover, western medicines are becoming indigenised into local traditional medicine practices and efficacy of medicines is frequently perceived to be based on colour, consistency, taste, shape, size, cost, packaging, source and reputed success in treating similar symptoms or in treating problems in similar parts of the body (Bush and Hardon 1990; Whyte 1998: 319).

I must stress here that I do not take the narrow definition of medicines which means pharmaceuticals for this study because medical pluralism in common in Uganda. In addition to use of pharmaceuticals which constitutes 90% of therapeutic choice (Whyte & Birungi 2000: 128; Adome et al 1996), there are other remedies which are readily accessible to patients and healthcare givers. In fact for an illness episode, there is a possibility of having multiple
therapies including pharmaceuticals, Chinese medications and local herbs. This is what Kleinman (1980) called therapies from different healthcare systems namely the popular, folk, and professional sectors. The professional sector consists of the biomedical or pharmaceutical therapies; the folk sector includes what is dominantly termed as traditional healer therapies in Uganda while the popular sector consists of pharmaceuticals for self-medication and herbal therapies. Studies have shown that approximately 70-80% of all treatment is carried out in the popular sector in both western and non-western societies (Prout & Christensen 1996:33; Kleinman 1982: 45).

Although Uganda has a legislation, which aims to separate children and medicines, since the adoption of SAPs in mid 1980s, self-treatment of common illnesses by lay people (including children) is common (Whyte 1998; Adome et.al 1996; Whyte & Birungi 2000; Geissler et.al 2000). Self medication is facilitated by the thriving business in pharmaceuticals including those that ought to be sold only at pharmacies are sold by vendors, grocery shops, supermarkets and private clinics (Adome et. al, 1996; Whyte & Birungi 2000, Whyte 1998: 320).

Geissler, et.al (2000), findings show that western pharmaceuticals used by children were acquired from the small local shops, mainly stalls that were closest to the two study schools. The children were familiar with the shopkeepers, who in most cases were young or even children themselves, and accordingly interacted freely with them. On the whole, children used pharmaceuticals and herbal remedies equally frequently (48% vs. 52%). The percentage for pharmaceutical treatments increased with age for boys. The proportion of pharmaceutical drug use was higher among boys and increased from 62% in the youngest age group to 75% in the oldest age group. Meanwhile, pharmaceutical drug use by girls actually decreased slightly with age from 32% in the youngest age group to 25% in the oldest age group.

Geissler et.al (2000) indicated that children bought drugs from village households including, action, hedex, panadol, malaraquine, capsules, aspirin, PPF (procaine penicillin fortified), dawaquine, kamaquine, actal, ventolin, franol and fansidar. These drugs were bought for treatment of varied ailments without prior prescription. The shopkeepers sold drugs to all customers irrespective of their age. In drug transactions involving children who were observed, the communication was limited to a clear demand from the child.

The number of episodes that were taken to a biomedical provider was very low. Children were taken to the local health centre in 18 out of all illness episodes (1%), to the private biomedical practitioners in 10 episodes.
Although children's use of pharmaceuticals is one of the major concerns in this study, special focus will be on availability of other therapies. It is however, important to note that with the liberalization of Uganda's economy, it is easier to obtain pharmaceuticals from other non-restricted sources by children. Subsequently over 90% of treatments for fever, cough, worms and diarrhoea rely on pharmaceuticals (Whyte & Birungi 2000: 130; Adome et.al 1996; Whyte 1998: 319). Such sources where they can be accessed include, market vendors, drug peddlers and groceries or shops.

In general, the preceding shows a summary of publications in pharmaceuticals. However, this study is in the context of medical pluralism where remedies both pharmaceutical and herbal are used for treatment of illnesses. It is therefore important to discuss studies done on herbal remedies also, as shown in the section below.

1.10.2 Herbal medicines

In a study conducted in Manila, it was found out that among the urban poor of different ethnic backgrounds, few herbal remedies, such as ginger for a sore throat, and guava for diarrhoea, are commonly used by all respondents Hardon et.al (2001:267). It was argued that these were practices reinforced in the heterogeneous ethnic communities in the cities. More culture-specific practices tend to be ‘forgotten’ in urban life. Whyte (1998:220) study in eastern Uganda indicated that many individuals in Bunyole know herbal remedies. These were usually symptom specific and a person knew only a few. S/he might treat family members or neighbours for diarrhoea, pain, or would perhaps go to someone else for stomach ache. Herbal medicines were also sold at weekly markets, these too were symptom specific.

A considerable range of healthcare options were documented in Kenya including western medicine and injections, and non-western or ‘traditional’ medical providers in Usenge village in Western Kenya Geissler et.al (2000: 20).

Regarding the traditional medicines the authors reported no cases where a child visited a private practitioner and traditional healer alone Geissler et.al (2000: 24). The majority of treatments were self-treatments employing pharmaceutical or herbal remedies at home. Of all treatments, 69% used pharmaceuticals and 31% herbs. There was a marked difference between the assisted treatments (77% pharmaceuticals and 23% herbs) and the children’s self-treatments (52% pharmaceuticals and 48% herbs).

Herbal remedies used in self-treatment were found in the bush land around the children’s homes and none were bought from a traditional healer. The plant leaves, roots or the bark were used fresh and after simple preparation,
for example as herbal tea. Complicated combinations of herbs, as were used by mother and healers, were rarely mentioned by the children. A large proportion of herbs, shrubs and trees in the bush were used for medicinal purposes, so that there was always a remedy at hand. If the herb against a particular illness fails, others can be tried, and if the ailment persists for a long time and causes disability or becomes life threatening, an expert, who has to be paid, might be consulted. Treatment of illnesses in local context is practical and based on a generalised knowledge Geissler. et. al (2000: 25).

The majority of the illnesses (58%) experienced by children were left untreated. The percentage of illness episodes treated varied according to the type of tracer condition. As reported by Adome et. al (1996), illnesses mentioned by the children were grouped in four 'tracer conditions' namely, cold, headache, abdominal complaints and injuries. These were very broad and compatible both with children's perceptions of illness and biomedical understanding. The perceived 'seriousness of the condition' seemed to influence whether it was treated.

In sum the preceding section has shown the different therapies available in context of medical pluralism. Therapies include pharmaceuticals and local herbs. It has also been shown that children utilised all these types of therapies at varied levels and there were gender disparities observed in western Kenya. More boys than girls used pharmaceuticals since they were engaged in income generating activities, and part of the income could be used to buy medicines.

However, the questions that remain unanswered are; whether children in boarding schools have access to all these remedies, whether there are gender disparities in therapeutic practices and also how do these children access remedies in context of urban boarding school and medical pluralism. This study contributed significantly to this gap in knowledge by documenting common diseases in a boarding school and gender differentials in medicines use.
CHAPTER TWO
2.0 Methodology

2.1 Introduction

This study employed a rapid-exploratory-multilevel-ethnographic methodology. The purpose of ethnography is to describe a particular culture (See Bailey 1987: 246 for discussion on ethnography). Although the ethnographer's role is to describe the culture and sub-culture as much as possible, including language, customs, values, religious ceremonies and laws and to be a participant observer Bailey (1987:246), such a study requires a longer period of time. Therefore, this study employed a rapid-ethnographic methodology due to the limited time available. The researcher interacted with the study population and key informants through open-ended interviews, semi or non-structured interviews, photography, composition writing, listing, diagrammatic representations and 'participant observation'. Self-administered questionnaires were used towards the end of the study to collect quantitative data. Prout & James (1997:8) and Jenks (2000:71), argued that ethnography is the most effective methodology for studies with children because to be an 'insider', and to be able to grasp the children's point of view or emic perspective requires a more extensive interaction, however, using rapid ethnographic techniques enabled this study to map out issues at different levels in healthcare including professional and non-professional healthcare givers, children as social actors in this arena and the school administration. The results generated could be used to design and implement more child-friendly healthcare programmes.

Regarding multi-level perspectives, children, school administration and healthcare givers constitute micro, meso and macro levels respectively in healthcare. Views from these different levels form the multi-level perspectives in issues of healthcare for children above five years.

2.2 Area of study

This study was carried out at Molly and Paul primary and secondary school complex. The school was selected purposively due to its essay access and willingness of the administrators to participate in the research. It is located in Makindye division about 20 minutes drive through Entebbe road east of Kampala and about 5 minutes drive off Entebbe road. According to the matron for Australia dormitory ‘untie Sarah’, ‘the school had been in existence for two years when she was recruited for her job fourteen years ago”. Implicit in this statement is the idea that this school came into existence with the state adoption of structural adjustment policies (SAPS) in the late 1980s. Prior to adoption of these policies, the state had monopoly of education and all institutions including primary schools were owned by the state.
From discussions with the headmaster, that there were 4000 children when the school had just been opened in the mid eighties. "At that time the school was thriving but 10 years later, the school registered the lowest numbers of 630 children. It is during this time that we experienced some major problems in the boarding section." As it will discuss later, currently the school has 890 children.

Table 2.1: Summary of school enrolment history

<table>
<thead>
<tr>
<th>Year of enrolment</th>
<th>Number of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>4000</td>
</tr>
<tr>
<td>1996</td>
<td>1200</td>
</tr>
<tr>
<td>1998</td>
<td>630</td>
</tr>
<tr>
<td>2002</td>
<td>750</td>
</tr>
<tr>
<td>2003</td>
<td>890</td>
</tr>
</tbody>
</table>

Table 2.2: Gender disaggregated data for children aged above 8 years and above in 2003

<table>
<thead>
<tr>
<th>Class of study</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary three (3C)&amp; (3J)</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>Primary four (4C) &amp; (4J)</td>
<td>72</td>
<td>82</td>
</tr>
<tr>
<td>Primary four (5V) &amp; (5M)</td>
<td>54</td>
<td>73</td>
</tr>
<tr>
<td>Primary six (6M) &amp; (6B)</td>
<td>56</td>
<td>64</td>
</tr>
<tr>
<td>Primary seven (7)</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>260</td>
<td>316</td>
</tr>
</tbody>
</table>

The study population for (children 8 years and above) were 576 children in 2003.

2.3 Study Population

This study was conducted with children and key informants selected purposively. For instance, only children 9 years and above were interviewed. Self-administered questionnaires were distributed to children aged 12-14 years since they had "experience in answering questions without teachers' help and interpretation" as advised by one teacher. Moreover, to discuss gender differentials in medicine use for common illness experiences children were selected by gender. Another criteria was whether they had been at this school for more than two years.

Further, key informants were selected according to their gender and direct role in healthcare provision in boarding schools. For example, health professionals accessible to boarding school children were interviewed in order to conceptualise macro factors including biomedical approaches in therapeutic practices of children. To cater for gender perspectives from key informants, men and women's views were integrated into analysis as shown in chapter four.
Non-professional healthcare givers interviewed included the school matrons, the shopkeepers, canteen managers and some teachers and school administrators. Four parents were interviewed regarding their role in therapeutic practices by boarding school children. Children in leadership were contacted for participation and interviews both independently and in Fgds.

Other factors which determined purposive selection of respondents and key informants included;
- Duration of research which was for a limited period of time.
- The resources available were sufficient to cater for a limited number of respondents.
- School schedule had a wide range of activities even on some weekends.

2.4 Data collection
This study employed largely qualitative methods of data collection including conversations or open-ended interviews, participant observation, focus group discussion (fgds), writing short essays (compositions), diagrammatic representations of common illnesses and medicines used at school and in-depth interviews. However, self-administered semi-structured questionnaires were used for collecting quantitative data towards the end of the study.

Writing short essays (compositions)
Sixty five (65) children were requested to write compositions (short essays). The two thematic areas were “Common diseases at school and medicines we use”, or “The last time I was sick at school and the medicines I used”. Themes which the researcher considered in analysis include descriptions of symptoms or experience of illness, why girls’ and boys’ compositions were different in naming the diseases and medicines, factors determining choice of remedy (medicines), preferences in medication and how their kin, who had similar illnesses have influenced their medicine use.

Diagrammatic representation
Fourteen (14) children were selected basing on their willingness to have an exercise of drawing illness episodes and common medicines in the dormitories. Some of the pictures are included in the thesis. They were given a task of either drawing common medicines or illness episodes common at school. The author was present in one of the sessions and recorded comments of interest as showed in chapter three.
Conversations/unstructured interviews

Regarding this method, the author carried out discussions with the children in groups or as individuals on varied illnesses and medicine use in dormitories. Comments of interest were recorded during the process. Informal interviews facilitated and complemented observation. They were conducted in order to elicit children's perspectives about illnesses at school, their choice of medicines and criteria for choice of medication.

Unstructured interviews were particularly useful for exploring pertinent topics related to this study's problematics to a greater depth. This form of interaction enabled the author to obtain a more systematic coverage of the topic of research.

Prior to the discussions, the author explained to the children the study's objectives and her interest in 'their illness experiences and what medicines they use in the dormitory' and not what they had learnt in class. This explanation was instrumental in reducing biases regarding children's perceptions of what the author wants to hear or the "correct answers".

Semi-structured questionnaires

A self-administered semi-structured questionnaire (Appendix 1) was used towards the end of the study with eighty children. The questionnaires were administered last in order to avoid the error of reproducing what had been learnt in class and also by this time the children knew that the researcher was interested in their experiences and not their ability to reproduce what they had been taught. The questionnaires were distributed to children (12 - 14 years) who had sufficient knowledge in reading and answering questions independently. In order to elicit gender differentiated data, a fairly representative sample of both boys (38) and girls (42) were invited.

Observation

Although in the earlier draft I had mentioned my role as a 'participant observer', I think it is quite erroneous to argue so. For to be a participant observer requires the author to take an active role or 'participate' in activities such as 'sick role', 'use of medicines' and 'defining steps in healthcare for a particular illness episode. Perhaps it is best to refer to the author's role as observer. The researcher observed illness cases and medicines used both in the children's dormitories and checking those they had in class. This method was important in complementing information collected in interviews and diagrammatic illustrations. Particular attention was given to explanations, definition of illness, descriptions of symptoms of the illness and choice of medicines. Comparisons were made where a different type of medicine was used for same illness episodes by different individuals or changes of
medications for similar illness episodes or when an illness recurs. This study also documented gender differentiated medicine use and disease experiences observed.

Focus group discussions

In this method, children in groups of 6-8 were selectively chosen basing on gender, age and length of study in the boarding school. Four focus group discussions which were gender disaggregated were carried out. In which case, the author compared the individual perspectives and those given in groups. Although this study had a specific interview guide (Appendix 3) for this discussion, there were times when children would ‘shift the discussion with their topics of interest’ since the questions were open ended. This method was useful in seeking clarification from the children about interview results, diagrammatic representations and compositions. To facilitate the ‘informalness’ of the fgds, these meetings were conducted in informal settings, and on weekends.

Further, in order to allow the respondents to discuss fully their views, the researcher asked open ended and non-leading questions.

Some of the class procedures such as “first rising up your hands, being picked by the adult, then you stand up before you give an answer” were discouraged. The researcher even distributed some snacks and drinks during the discussion to facilitate the ‘informalness’ of the setting.

The author was able to observe and record comments of interest and non-verbal responses due to the sitting pattern employed. In essence in small groups of 6-8 children per fgd, we sat in a circle instead of the class rows.

Teachers who wanted to “join the discussion” were gently, but firmly told about the criteria of selection of participants for the discussion since their presence would bias children’s discussions.

Generally, in order to elicit responses from both informants and respondents, this study employed what Bernard (1994) calls the echo probe, silent and leading probe. The echo probe responds to an informant’s statement with a brief summary of the statement; the silent probe waits silently for the informant to continue speaking; and the leading probe suggests to the interviewer, to encourage the informant to reveal information that might otherwise be secret.
Photography
Regarding this method, two children (girl and boy) were given a camera on different occasions to take photographs of conditions which contribute to the common diseases at school after a discussion with them. As I will discuss, they were joined by a group of excited children 'helping them to find dirty places, even in the kitchen'. The excitement even caused the teacher in charge of the environment to hold discussions with the author. They were also free to take photographs of the children who were sick at school and were willing to be photographed. Some of the photographs were adopted for the appendices and the main text.

Listing of common diseases and medicines
Children (9-12 years) with less experience of writing compositions and answering questionnaires were requested to "list common diseases children suffer from at school" and the "medicines they have in their dormitories". They were also allowed to list them in Luganda (the commonest local language) which the author could understand. Quantitative data collected is integrated in chapter three.

2.5 Key Informants
This study involved varied key informants including, professional and non-professional healthcare givers, school administrators, canteen managers and dormitory matrons. Regarding the professional healthcare givers, the author interviewed 2 doctors with training in public health, 2 paediatricians and the school nurse. Non-professional healthcare givers included the drug-shops owners near the school, matrons, one medicine hawker and four parents. The aim of holding interviews with key informants as shown in instruments (appendices 3 & 4) was to explore macro factors that influence medicine use by boarding school children and how they interact with children as independent healthcare seekers much as in some discussions extensive discussions focussed on biomedical explanations of diseases.

2.6 Quality control and data management
To ensure quality control of information collected, interviews with children were conducted in less strict settings, in small groups of 6-8 children. This limited reproducing what they have learnt in class and "chorus answers" as it were with entire classroom discussions. Most of the individual interviews were conducted in the evenings, weekends or during children’s free times. These are times when boarding school children expressed their views openly and it was possible to find ‘insider’ practices.

In particular, fgd’s and individual interviews were conducted in the dormitories or classrooms which children selected over the weekends. As mentioned earlier, to make interactions less formal, classroom regulations such
as putting up hands, waiting to be chosen and then the pupil stands up to give the correct answer were not encouraged. The researcher encouraged the children “to interact as with a friend or older sister”. Moreover, during these interactions, the author also provided some snacks and drinks, to ensure the ‘informality’ of the discussions. The sitting set-up was re-organised from rows in class to all the participants sitting in a circle. In these informal settings it was possible to gain insight into common diseases, criteria to define illness and differential illness management by gender. By observation, it was possible to document common episodes of illnesses in the dormitories and those referred for home care or taken to hospital (specialised care) since the school had no sickbay. Medicines children had in class and dormitories and environmental conditions contributing to the high episodes of infectious diseases were also observed.

Moreover, all matrons were interviewed in their respective dormitories where they discussed common illnesses and how they managed them. All discussions ended with showing the researcher medicines they had been given by the nurse.

Interviews were conducted with professional healthcare givers such as doctors who have additional training in public health, paediatricians, and one nurse in order to gain insight to macro factors in medicine use for common diseases. Such factors include public health discourse about the well-being of the child above five years, healthcare givers’ experience with children as active social agents, seeking remedies, and their recommendations.

2.7 Data analysis
Concerning qualitative data, recorded information was transcribed and edited with precision to ensure that the voices of children and key informants were not lost. Later this information was categorised following major themes to ensure easy data management and discussion. Some narratives in compositions and in-depth interviews were adopted and presented as case studies in the main text. Further, diagrams, and photographs were adopted in the main text.

Quantitative data was coded and fed-into the statistical products and service solutions (SPSS) programme. Since there were multiple responses for major categories, the author largely obtained a summary of statistics from multiple response analysis procedure. To ensure clear interpretation of results, some visual data representation techniques such as some diagrammatic representations of medicine and common diseases at school were adopted as shown in the appendices.
2.8 Ethical considerations

The author, prior to commencement of research discussed her intentions and study objectives with the school administration, teachers, some support staff and later with the children. Before administering tasks (as shown in the preceding sections), permission was sought from the class teachers and children too by giving them chance to opt out of the study. Further, dormitories were managed by matrons; hence access to these premises necessitated prior consultations with the administrators.

The main respondents being individuals below eighteen years, prior consent from parents or guardians would be required before an interview. Since these were children in an institutional setting, obtaining permission of study from the headmaster, teachers and matrons was sufficient in covering this gap in legal implications.

Moreover, children and administrators were assured of confidentiality and anonymity in case information contra to school regulations was disclosed. Even cases where the author was an observer of common medicines and diseases in the dormitories, her intentions were already known by the respondents.

However, children filled in their names and gender in compositions, listing, and diagrammatic representations and before answering the self-administered questionnaires in order to help the author in disaggregating data by gender. Permission was obtained from those whose actual names were adopted in chapter three. All the other names in the essay (unless mentioned) are pseudonyms.
CHAPTER THREE

3.0 Presentation of research findings

3.1 Introduction

This study focussed on common diseases/illnesses and medicine used in a boarding school in Kampala. In this study, the terms disease and illnesses are used interchangeably since the distinction can only be made at theoretical level. For example Kleinman (1986) and Unschuld (1986) made a distinction of the two terms that illness is a subjective state experienced by the sufferer and possibly recognized by others in consequence of her/his demeanor and disease is a pathological condition recognized by biomedicine.

The two terms from the phenomenological point of view essentially mean the deterioration in bodily condition from ‘normal’ to ‘not normal’ either due to invasion by pathogens or accidents. Children’s views were elicited through both qualitative and quantitative methods and findings are presented in this chapter. The results are based on the objectives of the study and research questions as presented in chapter one.

The first section presents the school background information and conditions in the study area. In sections that follow, this study presents common diseases at school, how children know when they are ill, and medicines used, criteria for selection of the medicines and sources where children get the medicines. Both qualitative and statistical summary of quantitative data are presented concurrently.

3.2 Background and conditions in the study

As mentioned in the methodology chapter, this study was carried out at Molly and Paul primary and secondary school complex. It was established in the mid 1980s with the state adoption of structural adjustment policies such as privatisation, decentralisation and divestiture.

A statistical summary of self-administered questionnaires shows that the school enrolls children of traders/business men and women (52.5%), teachers (17.3%), support staff, welders and carpenters (11.3 %) and (12.5%) respectively. A lower proportion of (6.6 %) were children of drivers. The business men and women mentioned are largely small-scale traders with retail shops or market vendors as will be discussed shortly. Of all respondents, only 23% were residing in a rural area (residence of about 10Km or more from Kampala centre). The remaining 77% were urban based, most of them indicating residence in the over-populated city suburbs such as Kibuye,
Nsambya, Kalerwe, Bwaise, Kawempe, Namasuba among others. All these places are city suburbs where open markets for agricultural produce and low quality goods are sold. Owners of shops are largely small scale traders with low income and capital. The places mentioned are also major over-populated Kampala suburbs. Implicit in the results regarding parents' occupation is the level of income or economic status of the parents who take their children to Molly and Paul boarding primary school. In general, the school could be rated as largely enrolling children whose parents are from the lower economic echelons from the densely populated suburbs of Kampala.

By observation, and as illustrated on Figure 2, this school complex was originally a structure designed for both commercial and residential facilities for a large homestead as described below. The commercially designed rooms at the fore of the building are now offices for the primary and secondary school.

Behind these offices are sub-complexes with varied purposes. At the immediate hind of the offices is a sub-complex which serves as residence for seven bachelor teachers who are required to teach upper classes both in the evenings and on weekends. Other rooms in this complex are used as the school book store, library, computer room and cycle-styling room. The space which this sub-complex encloses is used for concerts as observed one Friday afternoon when the school hosted a local drama group.

During two guided tours (with 'uncle Mark' and the headmaster), the author observed both school and household activities such as, cooking, washing and normal conversational exchanges by those 'who are at school' and those doing their household work in this sub complex.

From this sub-complex one exits to another sub-complex of washing rooms used by teachers and pupils. The first block is a pit latrine with seven doors labelled, teachers', boys' and girls' pit latrines. There are two other similar blocks with labels, 'girls' toilets', and another 'boys' toilets' which are also used as bathing shelter. Although the headmaster called them flush toilets, during a focus group discussion with seven girls from upper class, they instead referred to them as "pit toilets with water", because one was supposed to "fetch water using the buckets inside them from the nearby water-tap and pour in the pits after use". During fgd with boys also, they indicated dissatisfaction with the 'flush toilets' since they were more unhygienic than pit latrines and they were very often blocked.

...... "And maggots and houseflies can be seen everywhere around the rooms", said one boy who had been in this school for the past six years. "It was better to just remain with pit latrines". Indicated Alex (11 years).
On inquiring from the headmaster, about this disparity between the girls and boys attitude towards the “new sanitation facilities at school which has led to decrease in complaints of itching and candida infections among the girls”, as he and the matrons had indicated before, he at first hesitated, but admitted that,

...’The boys’ side of ‘flush toilets’ were always very dirty and blocked because boys do not want to fetch the water and pour there. It is true that these places used by the boys are of poor hygiene. Even there was a man who was supposed to help them but now he is not keen enough. The case is different with girls’ flush toilets because they enjoy cleaning them’

By observation, there was no significant disparity regarding the hygienic conditions of either the pit latrines or ‘flush toilets ‘. And in one fgd with boys, they disclosed how instead, the buckets for the flush toilets are used for collecting food, especially when a special meal is prepared on visitation weekends or Sundays.

About 1.5 metres adjacent to this sub- complex is the school kitchen. Its floor is not cemented. Since the main fuel used is firewood, it is littered with large saucepans and kettles with a permanent cover of suit. “In order to reduce on fuel expenditure, we prepare food only once in a day and the food for the second meal is kept properly covered” said the headmaster. Adjacent to the kitchen entrance is the water-tap where water for washing, cooking, and toilet use is collected. There is an open ditch here and the surrounding area is damp and muddy. Some houseflies can be observed.

As shown on the diagram of the school below, after the kitchen entrance, on the same block, is a classroom for primary six. Other doors on the same block are for primary three (3J) four (4V) and second stream of primary five (5M) respectively. Due to poor drainage system in the school, water drains through this last class (5M) to the open ditch behind the block. As I will discuss later, there are a wide range of health problems including high malaria episodes which are directly linked to this poor drainage system.

Next to this class which serves as a drainage outlet, is another stream of the primary four (4J). And four more doors on the same block are classes for primary four (4C), three (3C), five (5C) and six (6B) respectively. Another block of classrooms joins this structure, more or less forming a rectangle. At the corner of this block is primary six (6B), followed by the largest of all classes so far, and ... “this is primary twos (D and C)”, said Mark. You can even see from the teaching materials on the walls that they are classes for infants. The door for primary (2C) is adjacent to a small gate for the 'high wall enclosing the girls' dormitories. On the same block of classrooms next to (2C) is primary one. The space in between ‘the high wall’ and these classes is the ‘boys’ dining room’ when it was not raining or wet weather, and spaces between the girls’ dormitories were their ‘dining rooms’. All children had their food from dormitories in case of wet weather since all these spaces were filthy and muddy.
The last block of classrooms is adjacent to the main road. Unlike other blocks described earlier, the windows, doors and the wall observable to passers-by are painted. These classes are also partially cemented. It is divided into three classrooms namely, the baby class, upper class for the nursery school and the primary seven classroom. This block is also quite clean, with fairly new furniture, much as windows and walls not visible to people using the main road are also dilapidated as the case is with all classes. The two classes for nursery school children are separated from the primary seven class by a large entrance "which students use, since the entrance we used, exiting through the sub-complex of residence and offices and later exits to the washrooms and the kitchen is reserved for teachers and support staff" as the two tour guides elaborated.

About 1.5M adjacent to the same sub-complex of the washing rooms and pit latrines is the boys' dormitory. It is a small narrow block with only one door, five broken windows and some beds are easily seen. "Windy rains easily makes them wet" said ‘Uncle Mark’ during the tour. By observation only four beds in the entire dormitory had mosquito-bed nets. There are varied implications of such residence including the spread and prevalence of malaria as I will discuss later.

The girls' dormitories (as showed on figure 2 below) are separated from the boys' dormitory and the kitchen by a high wall. Inside this complex are four blocks which form the young girls (lower primary dormitory), the upper primary girls' dormitory and two blocks for secondary school girls. The first three beds in all these dormitories are reserved for matrons and their families.

During my conversation with the school nurse in Nsumba dormitory, 'Untie Jane' the matron for the lower primary school girls joined us to complain of uncooperativeness of some parents and children who warned her about her now "grown up son" still sharing the girls' dormitory. The girls had expressed their discomfort to their parents about the matron's son who continued sharing with them the same room although he was already in secondary school. Quoting the parents words 'untie Jane' elaborated,

"Well, she confronted and told me that if she ever hears that her daughter was touched or even dreamt of being touched by her son, she will take her to prison. I do not know what to do, but I wish they can put in place a sickbay, so that my son can at least have where to sleep comfortably since I do not have money for him to join secondary school boys' dormitory".

Earlier I had indicated that I would observe common illness episodes and medicines used in school sickbays. It is important, to note that this is the second guided tour around the school, and there is no structure showed to me by the headmaster and ‘Uncle Mark’, which serves as sickbay for these school children. From 'untie Jane's',
assertion above, it is possible that when the school constructs a sickbay, there will be multiple purposes for it. Observation of illnesses and medicines was therefore limited to dormitories, classes and school compound.

In order to find out whether the school had its nurse, I inquired from a mathematics teacher about the school staff both teaching and non-teaching staff. He introduced himself as Joseph. “We are twenty teachers, while referring to the teachers’ attendance book. Most of them are female. The non-supporting staff, we have the cooks, cleaners, one secretary, also librarian, bursar, and matrons”. What happens when a child falls sick at school? I inquired. To this he first hesitated and then his response .......... “we have a lady who is called when a child is sick’ .......... She owns a clinic nearby, and sometimes she may be called both in the morning and afternoon. But sometimes if the sickness is very serious the school takes the child immediately to Namirembe hospital”.

This is consistent with the explanation given to me by the two matrons I met earlier in the day, about what the school does when they have a child who is sick. ‘untie Sarah’ argued;

“If the case is not very serious, we call the school nurse who gives us medicine for the child. But when the case is serious we take the child immediately to Namirembe hospital. At least at Namirembe hospital, you are sure of getting immediate help from the staff even when we have to pay. We once went to Mulago hospital, but we had a bad experience with the sick child”.

When asked to elaborate on the ‘bad experience’ she shrugged and instead asked the researcher, whether she “does not know anything about the long lines of patients waiting to see a doctor, and the poor facilities in this government hospital”.

However, the ‘bad experience’ was disclosed to the author by one parent with three daughters at this school. ....

It is about seven years ago, one child was sick in the boys' dormitory. Although it was about one week of sickness, the school administration was very reluctant to spend any money on good treatment. His fellow dormitory mates kept complaining to the matron that their friend was very sick, could not walk or play and was very weak; but they continued to give him only panadols and chloroquine. It was just by chance that the teacher on duty visited the dormitory and realised that the child was actually very sick. She went to the director and complained about it, since all the headmaster was telling them was that the school had no money for treatment. At this time, there was panic in the school. And even when they brought a taxi to take the child to Mulago hospital, by the time the child was seen by a doctor, he was already dead. Actually it was a serious case, but it was silenced, and most parents begun transferring their children to other schools.

According to one matron and headmaster;

“A case is very serious when the sick child has very high temperature, or very very hot, vomiting everything, severe weakness such that the child cannot move, leave the bed or leave the dormitory or attend class, when the child does not become better even after being given medicines by the nurse and when the child has bloody diarrhoea.”

In the preceding section is the general background information about the school and an overview of interacting factors regarding children’s health and healthcare. For example, the environmental conditions described are important for incidence rates of infectious diseases such as malaria, diarrhoea, cough and flu (acute respiratory tract infections) and skin fungal infections as will be presented in the next chapter. Concerning the existing
washrooms, which are used as 'flush toilets' requiring children to "fetch water and pour there after use", these were already blocked and in poor hygienic conditions just one-week into the school term. Although the headmaster indicated that the girls were keen in cleaning their 'flush toilets', by observation, there was no significant disparity cleanliness of both boys' and girls' flush toilets. Perhaps, underlying the headmaster's explanation regarding 'girls' cleanliness' are gender attributes of femininity since girls are socialised with a value of and are expected to ensure cleanliness of their surrounding as I will discuss later.

The school had no resident nurse and sickbay implying that all episodes of illnesses were managed from the dormitories. In case a child was sick, the nurse was called upon to give medicines, but if "the case is serious", the child is immediately taken to Namirembe (Mengo) hospital. It has also been demonstrated that the school only took the sick children to hospitals only when parameters of 'very serious' as mentioned above are observed. Although the school nurse had no thermometer, the 'very high temperature' was determined through feeling the child's forehead. This is quite an ineffective way of determining high temperature.

In general, this school is a typical example of the boarding school put in place "with profit making motive", to the extent that all dormitories have triple-decker beds, the way space is used, school activities, maintenance, water distribution and preparation of meals reflects high value-maximising motives of the school administration and little emphasis on children's well being.
Figure 2: Sketch of Molly and Paul boarding primary and secondary school

Key
● : Water source
KT : School kitchen
G : Girls dormitories
Admin 1 : Secondary school offices
Admin 2 : Primary school offices
NI: Lower nursery school
NU: Upper nursery school
WC: Washrooms, pit latrines, bathing shelter and 'flush toilets’.
Sub- complex 1: Bachelors residence, computer lab, cycle-styling room and bursars’ office
Roads : 1(Katwe road), 2 (Queen’s way), 3(Entebbe road), 4( Masaka road ), 5 (Makindye road).
C: Canteen.
3.3 Common illnesses at school

One of the critical areas for this study was to document common illnesses at school or the diseases which children above five years experienced more often. The author obtained views regarding this issue from the children, school administration, teachers, parents and some professional healthcare givers. The results are presented in the section below. This study’s main respondents being children, their views are presented prior to key informants’ perspectives.

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Count</th>
<th>% of responses</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria (fever and headache)</td>
<td>73</td>
<td>25.7</td>
<td>91.3</td>
</tr>
<tr>
<td>Diarrhoea (including dysentery)</td>
<td>66</td>
<td>23.2</td>
<td>82.5</td>
</tr>
<tr>
<td>Ringworms (and all skin infections)</td>
<td>53</td>
<td>18.7</td>
<td>66.3</td>
</tr>
<tr>
<td>Cough</td>
<td>43</td>
<td>15.1</td>
<td>53.8</td>
</tr>
<tr>
<td>Flu</td>
<td>32</td>
<td>11.3</td>
<td>40.0</td>
</tr>
<tr>
<td>Typhoid</td>
<td>17</td>
<td>6.0</td>
<td>21.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>284</td>
<td><strong>100</strong></td>
<td><strong>355</strong></td>
</tr>
</tbody>
</table>

Statistics show that there was a multiplicity of common diseases at school with a total of (284 counts) of answers from eighty self-administered questionnaires. Fgds, short essays (compositions) and in-depth interviews, yielded similar results regarding ‘common diseases children experienced’ and diseases were ranked as malaria, diarrhoea, ring worms or skin fungal infections cough, flu and typhoid. As figures suggest, the highest proportions of children named malaria (91.3%), diarrhoea (82.5%), ringworms and skin infections (66.3%), cough (53.8%) and flu (40%) and typhoid was mentioned by (21.3%).

<table>
<thead>
<tr>
<th>Disease</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough and flu</td>
<td>100</td>
<td>145</td>
<td>245</td>
</tr>
<tr>
<td>Malaria</td>
<td>90</td>
<td>122</td>
<td>212</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>13</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>Measles</td>
<td>7</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Typhoid</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Interviews results with the school nurse and as observed in a summary on the table 3.2 above indicate that the common diseases at school are cough and flu, malaria, diarrhoea, typhoid and measles. Results are consistent with findings through conversations with key informants at school including four matrons, five teachers, and the school headmaster that the most common diseases the children experienced were malaria, cough, stomach disorders or diarrhoea and fevers. According to the nurse, most children who presented with flu had cough as
She ranked cough and flu as commonest diseases. Consistent with children's responses, when frequencies of cough and flu are combined a high figure of (93.8%) is obtained. However, she also indicated that malaria is very important as it often causes 'serious cases' in children. She also mentioned diarrhoea as a disease which causes 'serious illnesses' at school. When asked why she had not mentioned ringworms much as it children regarded it as a common illness she reported indicated that "the diseases which are in the register show the frequency of diseases which children report to me for treatment".

Meanwhile measles appeared on the nurse's register when children did not mention it as common illness. "Measles was only seen in two boys last term and they were sent home. So it is not common". Said Brian (14years).

When asked about the 'commonness, of worms at school, both boys and girls indicated that "they cannot know whether there are worms, because they do not see it". "We could have seen it when we take mabendazole or ketrax which the matron gives us, but no one has seen it in the 'flush toilets". Argued Charity.

Some girls begun discussing from a hypothetical point of view indicating that ...... "Although they had never seen anyone with worms, 'someone' with them has a stomach which makes noise all the time, and that someone feels hungry all the time. That is how we know that someone has worms". When asked about the deworming medicines they had mentioned earlier; Charity (13 year old girl) said, "Even when the nurse and matron always gives us mabendazole and zentol because of itching we do not see the worms when we go to the flush toilets. Worms are not common at school." Perhaps the girls could be complaining of candidiasis and not worms, much as the matrons and nurse give them deworming tablets.

Since one of this study's main objectives was to document common illnesses at school, I will limit the discussions to the frequently experienced diseases as observed by children. It is to the common diseases that I now turn.

### 3.3.1 Malaria

Figures on table 3.1 above show that malaria is the commonest disease at school. Of the eighty children who filled in questionnaires and described the most recent episode of illness 73 (91.3%) indicated that they had had an episode of malaria.

Children commonly mentioned in their narratives; "the last time I was sick at school, I was suffering from malaria" or " When I had headache, I touched my body and it was feeling very hot, I went to the matron for medicines and
she told me that I had malaria". "My friend was vomiting in the dormitory and she was feeling like staying in the sun all the time because of malaria" said one Sophie (11 years) in one fgd.

From one composition a boy (12 years) wrote;

"The last time I was sick at school, I was shivering and feeling very weak. I was taken to the hospital, the doctor detected my blood and after detection, he said that I was suffering from malaria. The doctor gave me injections and after a short time he gave me again medicines to swallow like panadols, chloroquine and advised us to slash the compound around home".

A girl (12 years) narrated her last episode of illness at school;

"The last time I was sick at school I was feeling lazy and brushed my teeth. I told the matron about it and she called the nurse. She told me I had malaria and flu. She gave me panadols and chloroquine for curing malaria and cold cup for curing flu".

During three focus group discussions with both boys and girls, they mentioned common diseases at school as malaria, cough, diarrhoea, headache, fever, and ring worms. When told to rank the diseases by commonality both boys and girls fgd’s ranked malaria as the most frequent disease at school. During the exercise, the boys were engaged in an argument where one group gave examples of five children already too weak with malaria in German dormitory, while only two people had diarrhoea. "If it was visitation week, we would say that diarrhoea is most common" said Brian a 13 year old boy. The author also noted similar comments with girls’ fgd’s during the exercise of ranking diseases by their commonality or what children suffer from frequently in the dormitories.

Varied explanations were given to justify their arguments, namely, the ditch behind Australia dormitory, which always has stagnant water hence many mosquitoes come from it and into the dormitories and classes. These are transmitting malaria, and because we are very many in the dormitory the disease can easily be spread said Hellen (12 years).

By observation and during my visit to one of the girls’ dormitories, there were three children whom the matron was giving a second dose of the medicines for malaria. The children were shivering and one of them indicated that it was very cold in the room. All of them felt hotter than usual when the author touched their foreheads. One of the children vomited out the medicines, and the matron gave her two more tablets of chloroquines. This time, she first crushed them in a spoon and mixed it with water.

‘Untie Sarah’, the matron for Australia dormitory discussed how, "this was a bad season for her dormitory, since the pit (open ditch) behind this dormitory is always filled with stagnant water, hence many mosquitoes breed and easily enter our rooms through the windows as you can see".
Similarly, during a short break at the headmaster’s office, ‘untie Betty’ the matron for German dormitory a lower class boys' dormitory, interrupted us to “quickly inform the headmaster about three boys who have severe malaria”. She continued with her narration:

“We should stop giving chloroquines to these children, (she said with a lot of anxiety and panic in her voice); illustrating how the children were shivering, she asserted that “it is better not to waste time but to begin treatment with fansidar or quinine injections ....... Please call the nurse and tell her that, the children in my dormitory are badly off, and at least she can come and change the medicines we should give them”.

The headmaster promised to call the school nurse to come and see the children because during his earlier tour in the dormitory he had seen one of the boys vomiting in the compound. I think malaria is going to “surround” us again this time he said. And, in the word “surround us” there was meaning of ‘ an enemy besieging the school’ an enemy perhaps more powerful than what the school resources can handle easily.

During conversations with one parent, she argued about the way the school treats children with malaria. She indicated;

“when Margaret asks the matron or headmaster to go home, even when it is minor headache, she is immediately sent home. It is even better she is sent home, because when they take her for admission in expensive hospitals, still I am called to pay all the bills”.

Yet another mother narrated how

“The headmaster called me to the hospital when Brian (her son) was admitted, only to find him with a younger friend waiting for bills to be paid before they can get out. It was better the school sent the child home because I would have bought medicines from the shop cheaply”.

Regarding high episodes of malaria in children, one doctor indicated;

“My experience with children above five years (in healthcare) is limited.....yes... sometimes I see them, but of course if they are at school, they are brought by their teachers or parents. They also frequently come with complaints such as malaria”......

3.3.2 Diarrhoea

The frequency of diarrhoea ranks second with 66 (82.5%) of the children indicating that they had had a recent episode of diarrhoea at school.

As noted in discussions during the ranking exercise, “if it was visitation week, one boy argued, then we would write that diarrhoea is very common”. “It is because children eat a lot of food and even keep some for eating the next day” disclosed Gorret (12 year old girl). “.... Aha, aha, the girls laughed in unison in one fgd as one of them repeatedly said, “that week you will find a line at the toilets. Very many children would want to use the toilet at the same time”. But also, Fiona (a 12 year old girl) indicated that “the disease is again more common among boys since when good food is prepared, like on visitation day they use toilet buckets to collect the food. Some of the boys even collect food and porridge using dirty cups”.

Gideon 12 years wrote in a composition;

“The last time I was sick at school, it is the time when I was sick of diarrhoea disease. I was sent home ....there was a woman at our home and my parents asked her what to do with me and she said to take me to the hospital. But me, I refused
because I thought that when they take there the nurse will give me injection. But later they advised my parents to give me oral Rehydration Salts (ORS) after every stool to replace lost water in the body. After some days later I became well.

In a second fgd with the boys, they confirmed using “the buckets” to collect food, but they still blamed the presence of diarrhoea in their dormitories to the congestion, poor hygiene and always blocked ‘flush toilets’. These are other factors which they considered more important in causing diarrhoea among the children. One boy (11 years) took keen interest in photography of areas which may contribute to varied diseases at school to include, the blocked flush toilets, the filled and overflowing garbage bins, the open ditches behind the dormitories, broken windows in the boys dormitory and one class (P5M) where all the water runs through when it has rained or when it is a “washing day” or days of general cleaning. By observation, the lack of a drainage system at school was evident when there was a slight downpour one afternoon; we had to change to P7 from P5M because water from all the class roofs, dormitories and the kitchen flowed through ‘our class’ and disrupted our discussion.

During photography, one teacher in charge of the environment (‘Uncle Simon’), contacted the researcher to inquire whether she is coming from the Ministry of Education (MOE) since the child was doing “more than” what was required for a study on common diseases at school and medicines used. It is important to note that each time the researcher had to clarify objectives of study and promise anonymity to the interviewees because the time of research coincided with the process of closing schools in Kampala district due to their poor sanitation.

After explaining that I am not from the Ministry of Education, and gave him a copy of the letter of introduction, he was relieved and gave me permission to continue with the study. “You could even use the photographs he said, I was only worried because, we are not very keen enough on our sanitation and such a report to the ministry would even mean closure of the school”.

Although all the key informants at school including teachers, headmaster, matrons and school nurse mentioned diarrhoea as a common illness at school, they immediately gave an explanation for it. No one of them has mentioned the poor hygienic conditions and sanitation of the school. For example, ‘uncle Mark’ asserted that;

“Diarrhoea is very common because these ‘children eat whatever they come across’. They eat the cheap food stuffs sold from the neighbourhood which as you can see is not very hygienic. They eat anything without control”.

One teacher preferred to call diarrhoea ‘stomach ache’, “since if the children are treated by the nurse, it takes only two days for them to recover. This disease is very common after school visitation day, when the parents bring oily food for the children who then eat a lot without control”.

Meanwhile the two matrons suggested that;
“Diarrhoea was common among the children when the school had newly been opened in the eighties, since they had few cooks, who did not even know how to prepare the food. But these days, the food is prepared very well and even kept covered. Diarrhoea is common only on visitation weekends, when the children eat a lot of food brought by the parents”.

The matron for the boys’ dormitory ‘Uncle Betty’ argued while showing the author a jarican of boiled water for the children;

“Here, it is very hard for children to have diarrhoea. We boil drinking water for the children. The meals are kept covered, and as you can see from the medicines I have (while putting aside the flagyl tablets wrapped in a clear polythene), we have mainly malaria and cough. Some children may have accidents but the nurse will come when we call her for first aid”.

Since the flagyl tablets were then familiar to the researcher, the matron was asked about the medicines she was putting them aside, and her reply was; “this is my medicine which the nurse gave me for my chest problems”. The ‘boiled water’ was only about five litres, and in fgd’s, the boys disclosed that this water is for “for taking medicines; since during meals and after playing when you want water, you get it from the tap”.

Although the school nurse, mentioned the most common diseases at school as malaria, diarrhoea, cough and flu, typhoid and candidiasis among girls as shown in the table 3.2 above, she also stressed her argument regarding the commonness of diarrhoea that, .......

“... But the diarrhoea is more of a symptom of malaria since we are very strict on hygiene at school. Most of the children who present with diarrhoea to me, are given flagyl, but also with antimalarials”.

The paediatrician from Namirembe hospital where matrons, teachers and the headmaster indicated taking ‘serious cases’, interviewed regarding diarrhoea as “a symptom for malaria” indicated that ;

............ It is also possible for other people with malaria to present with diarrhoea, but it is common in children below five years. Children above five years instead present with headache, temperature rise, vomiting and generalised weaknesses”.

As mentioned earlier, other diseases mentioned are not followed by explanations save for diarrhoea. Even the school nurse (somewhat contradictory with an earlier assertion argued that );

................. “during the visitation week, we often have an epidemic of diarrhoea”. Since this is mainly infective diarrhoea, the antibiotics I have already mentioned such as flagyl, amodium and ampicillin normally treats them effectively”.

3.3.3 Ringworms

Ringworms or any other fungal skin diseases were frequently experienced as suggested by 53 (66.3%) of the children. Varied reasons were listed for its high incidence rates; including sharing of one hair-shaving machine by all children on monthly basis without “the common spirit” a disinfectant as I will discuss later.

According to both boys’ and girls’ fgd results, “the barber uses only one machine for all the children, when he does not even brush off the previous child’s hair. He does not even use spirit after shaving a child who already had ringworms. So like after one week of his coming you find many children with these skin diseases”.

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And in one girls’ fgd, it was discussed how, “on washing days”- Saturdays and Sundays, the matron also gives them about seven basins of water “where all of us wash our clothes and bedsheets”. This can also cause us to get ringworms and “ebiguuna” (skin fungal infection which presents as white patches combined with loss of hair on the head) from others” added Gorret (13 years). While laughing Allen (10 years), described how “late comers always wash in very dirty water without soap, since many people wake up very early in order to find some clean water.”

Another child (12 years) old wrote in a composition;

…… “when our school was dirty, the children got sick of scabies. The scabies used to catch those who missed bathing. When I went home I had scabies. My mother got for me a ‘tube’ but I did not know its name. when I went back to school the children asked what I used to cure skin disease, but I told them I used a ‘tube’ I did not know its name”.

Even boys in one fgd revealed how “some boys only bathe when they are forced to by the matron”. Some boys especially young ones move bare footed even when there was a lot of mud outside (the compound)”. On inquiring how many times they bathe in a week, “about two or three times in a week” the boys revealed in one fgd. Meanwhile girls indicated bathing daily or twice a in a day and they used the “spaces in- between their dormitories as bathing shelter”.

By observation and in some photographs adopted, there were more boys moving around the dirty compound and even to the ‘flush toilets’ described above, bare footed. One girl in a fgd complained about how;

…… “his younger brother brings shame to her when he moves around the dirty compound bare footed. He is always complaining of itching feet at home. Each holidays time, he is given medicines for itching but goes home with the same problem”

Unlike the school nurse’s records which did not have skin fungal infections such as ringworms, children’s narratives indicate a 66.3 % incidence rates. Perhaps the nurse is not aware of it, because the children do manage it with a locally-made mixture of “salt mixed with omo (a detergent)” as I will describe in the section of common medicines at school.

One parent discussed how “her son often comes home at the end of term with ebuguna and ringworms”. She wondered what was wrong with the school.

By observation the dormitories and classes were congested. There was limited water supply at school. Flush toilets were also used as bathing shelter and there were only five. These could discourage children from bathing

In general the preceding section has demonstrated the ‘commonness’ of the ringworms and other skin infections at school. Although the children largely focused on “the barber, who always came to school once in a month to
shave children’s hair”, it is possible that other avenues of getting the infection are body to body contact, since classes are overcrowded, sharing washing facilities, moving bare footed in the dirty compound, use of only five basins of water by all children to wash their uniforms and bed sheets and sharing basins, limited bathing shelter among others.

3.3.4 Cough
A high proportion of children (53.8%) above mentioned cough as a common disease at school. This is basically a respiratory tract infection. Some children can cough “like bullets” joked boys in fgd’s. Girls too mentioned the commonness of “bullets in class especially among boys since most girls fear to be laughed at when they cough a lot. They first go out to cough, even when the teacher is there’. A clear distinction between girls’ and boys’ fgd’s was the labelling of cough. Although girls referred to it as cough, boys called it whooping cough. Consider also the gender differentials in labelling of cough below.

In a composition, one boy Jimmy (12years) wrote;
’when I was sick at school, I felt a disease like ‘whooping cough’. At first I started feeling like I am not breathing . I told my friend Juma. Juma gave me little medicines but that never(finished) me. I told the nurse to give me cold cup. I took the syrup which was pink in colour’.......

Esther (12 years) wrote;
“I remember I was sick. The disease I have suffered from was fever and cough”.

Moses (13years) wrote;
“... It was a rainy season and I was at school. It was too cold, I felt sick. I realised that it was malaria and ‘whooping cough’. Then I was quickly rushed to nurse to give me an injection for malaria and after she sponged to cool temperature. She gave me drinking medicine for cough which was koflin. After she gave me quininie and panadol to cure malaria’.

The ‘herbal man- Juma’s list included only malaria, diarrhoea and ‘whooping cough’ as common diseases at school.

In listing diseases, cough or whooping cough yielded a slightly higher figure of (78.5%).

Children attributed high incidence rates of cough to the dust at school. One thematic description in fgd’s was ...
“All classes and dormitories have a lot of dust when we are sweeping. And if one child came from home with cough then all of us can get it”.

The matron, ‘Untie Juliet’ (teacher and parent) and the nurse discussed how they treated ‘cough epidemics’ by buying a local cough mixture (kyisakyamuzadde) which is given to all children is an effective way of treating cough in boarding schools. The matron also mentioned the use of capsules such as ampicillin and amoxicillin by the school nurse in case of cough.
Results above also demonstrate the importance of medical pluralistic therapies in limiting over-use of anti-biotics and other pharmaceuticals as I will discuss in the section of medicine use.

3.3.5 Flu
A relatively low number of children 32 (40%) suggested that flu was a common disease at school.

Significantly, there was no composition where flu was described. Only serious flu was described by Charity (12 years) as;

"The last time I was sick at school, the disease was pneumonia. I started coughing seriously and then serious flu. My friend called Nakate, went and told Uncle Musana to come and see. I was no longer breathing well. Uncle Musana wanted to take me to hospital but I told him to ring for my father, soon they came for me. The doctor gave me seven injections and syrup which was called koff-koff and then some capsules".

In a listing exercise, there was a lower figure of 19 (29.2%) of the children who mentioned 'sseniga' or flu.

In fgds boys were not keen to discuss flu compared to other diseases since as one of them mentioned .... " it is only common in younger boys of the dormitory and does not even make them weak".

Girls however mentioned flu but it ranked least among the common diseases at school. As I mentioned earlier, it is probable that ‘commonness’ of disease is also interpreted with an underlying meaning of its importance in causing ‘serious’ illness and as mentioned in fgds with boys, an element of ‘making someone weak’, is an important characteristic of the diseases mentioned. The ‘herbal man’s list included only malaria, diarrhoea and whooping cough. There was no flu on his list. Perhaps there was no boy who asked him for remedies for any episode of flu.

In sum, regarding cough and flu, these could be common diseases at school. However, since ‘causing some one to be weak’, or a ‘case to become serious’ is an underlying meaning in ranking of common diseases, other diseases which have these underlying characteristics are ranked more common than others. A gender differentiated finding is that girls simply mentioned cough as a disease but did not qualify it in terms of strength, expression and severity. Boys on the other hand mentioned ‘whooping cough’ which has underlying notions of severity, strength of disease and its ability to interfere with their daily activities. This study attributes this difference in labelling to differential socialisation process of boys and girls in patrilineal societies.

3.3.6 Typhoid
Although not statistically significant 17 (6.0%) children discussed their most recent experience with typhoid. For example Lilian (13 years) indicated,

"...The last time I was sick at school, I had headache, fever and vomiting. The nurse first treated me for malaria, for about one week but I was not getting cured. She told the matron to take me home, and when my mother took me to a big hospital, the doctor, after checking my blood told her that I had typhoid. I was given a bed in hospital for one week and after they had given me all the medicines I was cured and came back to school. The doctor told us that when we drink unboiled water from the tap, we can get typhoid. But at school we drink unboiled water".
In a listing exercise, 40% of the children named typhoid as a common disease at school. More girls (24) than boys (2) mentioned it.

This study also set out to find out whether there were gender differentials in illness experiences among the children. As mentioned earlier, both boys and girls mentioned malaria, diarrhoea, cough, ringworm and typhoid as the common diseases at school. In fgd’s, it was suggested that there were cases of diarrhoea and malaria among boys than girls. This was because their dormitory windows had broken glass, and they used buckets for the flush toilets to collect food when special meals were prepared on Sundays and visitation weekends. Boys too were no very keen with “Cleaning their toilets after use as indicated by the headmaster, hence their toilets are often very dirty and blocked”. Moreover, even simple tasks like cleaning their plates and cups after use were ignored by boys. In fgd’s and interviews with some boys, they revealed that “the children can re-use the plates and cups to collect food the following day, and the cook just give them food in the dirty cups and plates”.

In order to triangulate the above findings regarding the gender disparities in illness experiences, the author with the help of SPSS, selected cases by gender and performed a multiple analysis of common diseases disaggregated by gender as shown on the table below.

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Count boys</th>
<th>Count girls</th>
<th>%boys</th>
<th>%girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>35</td>
<td>38</td>
<td>25.4</td>
<td>26.0</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>34</td>
<td>32</td>
<td>24.6</td>
<td>21.9</td>
</tr>
<tr>
<td>Cough</td>
<td>20</td>
<td>23</td>
<td>14.5</td>
<td>15.8</td>
</tr>
<tr>
<td>Ringworm</td>
<td>25</td>
<td>28</td>
<td>18.1</td>
<td>19.2</td>
</tr>
<tr>
<td>Typhoid</td>
<td>8</td>
<td>9</td>
<td>5.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Flu</td>
<td>16</td>
<td>16</td>
<td>11.6</td>
<td>11.6</td>
</tr>
<tr>
<td>Total</td>
<td>138</td>
<td>146</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Essentially, both boys and girls described their experiences with malaria, diarrhoea, cough, ringworm, typhoid and flu. Although not statistically significant, results show that there were more cases (24.6%) of diarrhoea in boys’ narratives than among girls. Perhaps these children’s arguments are valid regarding differential incidence rates of diarrhoea by gender.

From compositions sixteen (16) children, only boys indicated that “the last time I was sick at school I was suffering from diarrhoea”. Girls instead showed that episodes were more common among boys than girls.
Children showed knowledge regarding their health conditions since they had varied signs and symptoms to determine that they were sick. These were appetite loss, vomiting, temperature rise, diarrhoea, and weakness as I discuss in the next section.

3.4 Signs and symptoms of illnesses

Results in table 3.4 below show that there were higher totals of count (241) than those of interviewees (80) because this question was open-ended yielding multiple responses. In general, girls had more counts of (133) compared to boys' (108). It is possible that girls had more indicators to illnesses than boys. Girls could be keener with their healthcare and noticing any bodily changes needing therapies than boys. Perhaps this phenomenon correlates with the socialisation attributes of women as healthcare givers with skill in recognising bodily symptoms needing medication.

Table 3.4: Gender disaggregated data of how children know they are ill

<table>
<thead>
<tr>
<th>Name</th>
<th>Count boys</th>
<th>Count girls</th>
<th>%Cases</th>
<th>%Boys</th>
<th>%Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appetite loss</td>
<td>31</td>
<td>13</td>
<td>18</td>
<td>38.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Temperature rise</td>
<td>72</td>
<td>34</td>
<td>38</td>
<td>90.0</td>
<td>31.5</td>
</tr>
<tr>
<td>Weakness</td>
<td>39</td>
<td>18</td>
<td>21</td>
<td>48.8</td>
<td>16.7</td>
</tr>
<tr>
<td>Headache</td>
<td>32</td>
<td>13</td>
<td>19</td>
<td>40.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>28</td>
<td>12</td>
<td>16</td>
<td>35.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Vomiting</td>
<td>39</td>
<td>18</td>
<td>21</td>
<td>48.8</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>241</td>
<td>108</td>
<td>133</td>
<td>301.3</td>
<td>100</td>
</tr>
</tbody>
</table>

3.4.1 Temperature rise

In general, temperature rise/fever was mentioned by 90% of cases. Common thematic categories respondents indicated were; I know when I am sick when .... "My forehead feels very hot " or "I feel like staying under the sun all the time" and "when I touch my body, it feels hotter than other days".

Harriet (12years) wrote in a composition;

*the last time I was sick, I was suffering from fever and little cough. I went home but my parents were not there. But the good thing is that they left some with the housegirl. So we used that money to buy medicines like hedex, panadol, action and chloroquine. I used that medicine but nothing changed. I started crying because I thought I was going to die by that time. All my sisters and bothers were very unhappy. Then the housegirl went to somebody who is older than us to ask for treatment for fever and cough. Then the lady came at our home and told us to use mululuza and bombo. Mululuza for fever, and bombo for cough. After we used that medicine, I changed my life to normal life".

In one composition Esther (12years) wrote;

"The last time I was sick at school, I remember the disease I suffered from was fever and cough. They took me to hospital, the doctor measured me and said that I am really sick. He gave me an injection and told me to take chloroquine, panadol and I may even take Cofta, vickskingo for cough. I took the medicine as the doctor ordered me. But I was not yet okay, I went back to the doctor and added me another injection and told me to go back the next day to get another injection."
Perhaps there are more episodes of malaria at school than any other disease. Children immediately recognised temperature rise as a sign for malaria, and in compositions above, fgds and depth interviews, (as I will discuss later) show that they then took antimalarials, both in form of pharmaceuticals and herbal remedies.

In the two compositions, is the idea of ‘not recovering’ after taking the medicine either bought from the drug-shops or clinics. Also another theme is that these are ‘market drugs’ such as hedex, panadols, action and chloroquines. As I will discuss in the section of implications to self medication, these are some of the direct effects stemming from a market oriented healthcare system whereby, it is not well being per se of citizens which is promoted, but amount of money which can be got from the business.

Although not statistically significant, results show that there were more boys (32%) compared to girls (29%) who mentioned temperature rise as a sign for illness. This could be due to more episodes of malaria among boys than girls.

As argued by one paediatrician at Namirembe hospital, that high proportions of children 72 (90%) mentioned temperature rise as sign of illness could be because it is a “wide spectrum symptom.” “However, most commonly it is a symptom for malaria in children of that age group”

As showed in some adopted photographs of the boys’ dormitory, and figure 2 above, the dormitories were so congested that infection rate is high once one person has the malaria parasites which are transmitted by mosquitoes.

Additionally in fgds with girls, they indicated ease with which they can tell when the body temperature is hotter than the usual even for their friends. Boys also indicated that they could tell when the temperature was hotter than usual, but still they added that it was difficult to tell. It is body ‘weakness which is the easiest’ said one boy while other nodded in agreement.

3.4.2 Vomiting and weakness

A slightly high number of respondents 39 (48.8%) named vomiting and weakness as a sign for illness. An equal number of responses were obtained for these two variables. These were also regarded as symptoms for malaria. A slightly higher proportion of boys (16.7%) than girls (15.8%) mentioned weakness as a sign of illness. For example one of the major themes is the essays written by boys on their previous illness experience at school was
One boy Tom (12 years) narrated;

"I suffered from a fever called malaria. I didn’t have power, my parents decided to take me to Mulago hospital so that I would recover earlier in order to go back to school. But I did not have power to walk. The doctor (in nearby clinic) gave me sugerquin tablets everyday up to the last day of the week. When the last day of the week reached, I did not recover, so we went back and we were told to go to a bigger hospital."

Another girl wrote (14 years) indicated in a composition;

"it was a cool day since it had rained from morning to afternoon. Due to a lot of coldness, I was feeling, I had fever. This was real sickness and I begun shivering from that moment. When I shivered and shivered, the next outcome was vomiting, but it was good that I vomited when it was not class time, instead it was break. When I went home, the situation was worsening. I decided to buy some panadol tablets and took them. After a few minutes I found my mum and she took me to doctor. So the doctor told us that the actual disease was malaria. He gave us medicine. among medicine I was given there was quinine for injection, chloroquine tablets and then the panadol ones."

Andrew Owens (13 years) also indicated in a composition;

"The day I was sick, it was my first time to come in this school in boarding section. I got malaria. When I was in class I felt unsettled and then went in the dormitory and slept without treatment. I never wanted to take medicine not until saw I was dying then I went and (told the matron) that I was sick and they gave me chloroquine and panadol, then I went to sleep. But I got scared and I woke up and shouted, they knew malaria was very high and they decided to take me home. My father took me to hospital and doctors gave me serious treatment then I begun to be better. I spent two days in the hospital."

Yet another boy Norman (13 years) wrote;

The last tie I was sick at school, I remember it was a Thursday. I woke up and went to school and as we were studying, I started feeling dizzy."

Results also concur with the argument by 'untie Betty,' their matron that there are more accidents among boys because they are so 'stubborn'. Pointing at the most recent victim who had his arm bandaged due to dislocation she said, "it is just three weeks since we begun the term but you see. This one was running after his friend when he stumbled over a metal bar in the nursery children’s play ground". The good thing, she added is that the nurse can be called easily to come and give first aid.

Significantly, the boy had an older brother, who was responsible for all his needs including, changing his bandages, and administering pain killers regularly. On inquiring why he had not allowed his brother to go home for better treatment, he was amazed, since "whatever the younger brother needed was already at school" he said. This and other findings which I will discuss later which show underlying masculinities among boys in boarding school, have implications regarding quality of healthcare that boys receive when they are ill. Another reason significant issue here is the political economy of healthcare. If the school of study had "all that was required for healthcare" for the two brothers, then it is likely their home is less equipped to handle such issues.
However, the boy with a fractured arm being attended to by a fellow sibling may pose dangers to the rate of recovery since he was unable to offer specialised care. The matron was not willing to comment of this issue directly, although she indicated that...

"Such accidents are common among boys, and the funny thing is that they are not willing to be taken home, because of fear of punishment by their parents. If the boys can decide to keep quite when they are suffering from malaria, till they are unable to walk, for fear of being sent home, or being injected, then those who have accidents and break their hands or legs but refuse to go home are some of the health problems I am getting used to.

During fgd's with the boys, it was discussed at length how boys who are close friends "make agreements with each other so that they do not tell the matron or nurse that they are sick". One boy Joseph (12years) has been at school for the last five years, discussed his and others' experience, of how the agreement can only be broken when "His friend becomes very weak" or "Cannot leave his bed anymore or sleeps a lot in class due to weakness". It is at such a time that the nurse or matron is told about the sickness.

In this case, he said, the nurse always administers injections because of the delay to report the sickness. As I will discuss later, the nurse concurred with this, during a discussion when she said.....

"the diseases which are common among these children are easily treated. But the boys are a bit difficult because, they do not report as soon as they feel sick. They wait until they are "very weak" before they can report that they are sick. In that case, for malaria, I often give quinine injections immediately".

Furthermore, unlike the girls who preferred to be given a "gate pass" when they were sick, so that they can go home for better care, boys were reluctant even to report that they were sick. They even preferred to first self-medicate for all diseases they experienced. For example in one fgd, one boy Juma (13years) had been in this school for seven years was labelled "a herbal man". He always carried a wide range of pharmaceuticals and herbal remedies to school. In his dormitory he showed the researcher about 1 liter of locally made cough mixture (Kyisakyamuzadde), two packets of hedex, action, panadols, Lugave (a liquid for wounds and stomach problems including diarrhoea), chloroquine (20 tablets) and flagyl tablets. He described their functions, pointing at each of them as ..... "for treating cough, headache, stomach pain(for some boys who have ulcers) and diarrhoea, chloroquine is for malaria and also flagyl is for diarrhoea". When asked how he distributed his medicines, he indicated no particular criteria, however he insisted on symptom-relief as described above. He had no specific dosage, since the boys would not come back to him when they feel a bit better.

Consistent with Juma's argument, in a depth interview Jimmy (12years old), discussed "the last time I was sick at school, I asked Juma to give me some medicines, but he had little left. When he gave hedex and kyisakyamuzadde, I drink them, but they were not enough. So the next morning, because I was weak and my body was feeling hot, I went to the matron for more medicines"
The two parents interviewed concurred that "children in school are able to tell when they are sick". 'Untie Juliet' narrated how it is his son who tells her that he was sick. "How else would we know, since we do not see them when they are in school? He comes and tells me when he has headache, fever or even diarrhoea."

3.4.3 Headache
As shown on table 3.4 above, headache was mentioned by 33 (40%) of the children. Significantly, a slightly higher proportion of girls (14.3%) mentioned this symptom compared to boys (12%). Other children had mentioned headache as a disease in itself, although coding categories immediately classified it as malaria. This was with the advice of the paediatrician interviewed who indicated that, headache is not recognised as a disease on its own.

Joan (12 years) wrote;

"The last time I was sick, I was feeling a little headache and fever with a high body temperature. I told the teacher that I am sick. He told me to go to the dormitory to have a rest. I decided to go to the school nurse. When I reached there, they checked me and told me that I had malaria. Then after she gave me fansidar, hedex and panadol. Then I went back home slowly, my father asked me what happened and I told him that I am sick. He told me to go to the hospital then I told my father that the school nurse had given me medicines for malaria. After one week I recovered from the disease and I came back to school".

Another girl (13 years) wrote;

"And I even had headache. Then they took me again to the nurse. The nurse treated me by giving me aspirin. After passing one week I got healed and became happy"

In one composition, Matthias (13 years) wrote:

"The last time I was sick at school, I went outside (the gate) to look for medicines which can cure headache and fever. When I reached at the clinic, I had forgotten the names of medicine for the two diseases. My friend told me the medicine for headache is panadol and for fever is chloroquine".

3.4.4 Appetite loss
Other criteria used to determine illness at school were appetite loss (38.8%). In narratives this would feature as "what I eat tastes bitter/ I do not feel like eating anything even when I am hungry". And "I feel like vomiting everything I have eaten" was an indicator of appetite loss. In fgd's with girls appetite loss was emphasised than in fgd's with boys.

In a conversation with one girl, she told her story;

"The last time I was sick at school. I woke up, and brushed my teeth, after brushing, I went for porridge, but I could not finish even one cup. I was feeling bad and porridge was not sweet".

Another girl indicated in a composition;

"last week my sister was suffering from malaria. She was too weak and could not eat or drink anything. The nurse came and gave her a cup of milk and she drunk half a cup. She then gave her panadol and malarast".

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Although not statistically significant more girls (14%) than boys (12%) mentioned appetite loss as a sign of illness. These gender differentials in illness recognition perhaps relates to the attributes of femininity as I will discuss later.

3.4.5 Diarrhoea/ Running stomach

Children also knew that they were sick at school when had diarrhoea. Although only 28 (35%) of the children mentioned it as a sign of illness, diarrhoea was ranked second 'commonness' in fgds, photography, interviews and self administered questionnaires. It is likely that diarrhoea is more regarded as a disease and not a sign of disease. If that distinction is valid, then it is the reason that we have this disparity in ranking of frequency in commonness and criteria for identification of illness.

Christine (14 years) wrote in a composition;

"One day at night again I felt sick of diarrhoea and they took me to the hospital. The doctor told me that I avoid drinking unboiled water, gave me some medicine and advised me of washing hands before or after eating food and washing hands after visiting latrine"

Both girls and boys knew a wide range of medicines for treatment of disease and symptomatic relief. The medicines largely included pharmaceuticals of varied qualities and herbal remedies. It is to the common medicines at school that I now turn.

3.5 Common medicines used at school

As mentioned earlier the term medical pluralism is used in this thesis to mean the presence and use of both pharmaceuticals and herbal remedies at school. Results below show that both pharmaceuticals and herbs were commonly used.

3.5.1 Pharmaceuticals used at school

In general, children were able to mention and describe, draw and colour some of the medicines as shown in appendices. For example in their narratives, compositions, fgds and conversations for the recent illness episodes, pharmaceuticals were mentioned. As Martha (13 years wrote): "The last time my sister was suffering from malaria at school, I gave her paradols and fansidar".

In all compositions, children described 'the last time they were sick at school and medicines used'. Listing exercise yielded a total of (342) count of medicines including pharmaceuticals and herbal remedies.
Looking at the table 3.5 below, the total of count (345) in second column below is higher than the eighty interviewees because children had multiple responses for common medicines at school. Meanwhile the percent of cases (431.3%) in fifth column reflects a sum of individual respondent’s views regarding that particular medicine.

Table 3.5: Gender disaggregated data of common pharmaceuticals used at school

<table>
<thead>
<tr>
<th>Name</th>
<th>Count</th>
<th>Boys</th>
<th>Girls</th>
<th>% Cases</th>
<th>%boys</th>
<th>%girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroquines</td>
<td>76</td>
<td>36</td>
<td>40</td>
<td>95.0</td>
<td>22.8</td>
<td>21.4</td>
</tr>
<tr>
<td>Panadols</td>
<td>59</td>
<td>29</td>
<td>30</td>
<td>73.8</td>
<td>18.4</td>
<td>16.6</td>
</tr>
<tr>
<td>Flagyl</td>
<td>48</td>
<td>19</td>
<td>29</td>
<td>60.0</td>
<td>12.0</td>
<td>15.5</td>
</tr>
<tr>
<td>Fandidar</td>
<td>44</td>
<td>20</td>
<td>24</td>
<td>55.0</td>
<td>12.7</td>
<td>12.8</td>
</tr>
<tr>
<td>Quinine</td>
<td>41</td>
<td>18</td>
<td>23</td>
<td>51.3</td>
<td>11.4</td>
<td>12.3</td>
</tr>
<tr>
<td>Capsules</td>
<td>29</td>
<td>15</td>
<td>14</td>
<td>36.3</td>
<td>9.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Hedex &amp; Action</td>
<td>25</td>
<td>12</td>
<td>13</td>
<td>31.3</td>
<td>7.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Magnesium &amp; others</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>15.0</td>
<td>3.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Vitamins</td>
<td>11</td>
<td>3</td>
<td>8</td>
<td>13.8</td>
<td>1.9</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>345</strong></td>
<td><strong>158</strong></td>
<td><strong>187</strong></td>
<td><strong>431.3</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The pharmaceuticals mentioned include chloroquine (95.0%), panadols (73.8%), flagyl (metonidazole) (60.0%), fandidar (55%), quinine (51.3%), hedex (31.3%), vitamins (13.8%), and majority of them girls. They took vitamins regularly for “beautiful skin and good health” said one girl in fgd. Another girl however indicated that she was simply given the vitamins by her mother, and she did not know why.

Statistics further show that more pharmaceuticals were mentioned by girls (187) than boys (158). This could be indicative of differential healthcare practices between girls and boys of the same age. Apart from capsules which had a slightly higher value for boys (15) compared to girls (14), all the other pharmaceuticals were more represented among girls. It is probable that girls use more pharmaceuticals than boys of the same age group. A confirmative idea for this finding is that figures show that girls identify and readily report illness episodes to the matrons and the school nurse. Moreover they were keen to request for a “gate pass” so that they can go home for better healthcare.

From fgds and diagrammatic representations in the appendix, the most common medicines used were chloroquine, injections, capsules (the red and yellow; and red and black which were always given to them by the nurse due to cough) and flagyl for diarrhoea. “This one (flagyl) works so fast, and just after two hours of swallowing it, you can go to the toilet, but you find you are well already” said one child while drawing. A negligible number of children of less than 12 named Oral rehydration salts (ORS). No matrons or nurse had these packets. Perhaps children had them pre-packed from home and they knew how to use it.
Results are consistent with the school nurse list of medicines which included ant-malarials such as chloroquine, quinine and fansidar; antibiotics such as amodium and flagyl for diarrhoea, septrin for cough and other medicines for injections such as expane, pfp, gentamycin. Pains and aches are treated with panadols, brufen and aspirin. While medicines for deworming included ketrax, mabendazole and zentol. She however added;

"...there are a wide variety of medicines to choose from, and at the pharmacies, I am always told about and even reminded of other drugs to buy, some of which may be of the same kind like the ones I have already bought, but still the sellers always insist that I should try them as well. It just depends on what I think works best for the children, otherwise, it may be difficult to choose from a wide range of medicines available now from the pharmacies".

Implicit in the preceding explanation by the school nurse is the effect of 'commoditisation' of healthcare sector in Uganda since adoption of structural adjustment policies. For example, since the late 1980s, distribution of pharmaceuticals is in the private sector. Individuals here are actors in a competitive market where companies find an outlet to sell their pharmaceuticals to the public.

I find it significant the nurse did not mention ORS, neither did she purchase it or distribute it to the matrons as shown above. All the diarrhoeal episodes were managed with anti-biotics such as flagyl and amodium. Whereas the paediatrician argued that, "it is best to treat secretory diarrhoeas (non-bloody) with ORS and use antibiotics for bloody diarrhoea", the school largely administered antibiotics for types of diarrhoea. As I will discuss later, one of the implications of this practice is what one doctor called "abuse and over-use" of antibiotics.

Moreover, results are quite contradictory if compared with the general discussions regarding "the common diseases at school where diarrhoea mentioned was only due to over-eating, or eating oily food since the school is strict on hygiene" or "the diarrhoea which is a symptom of malaria" as the nurse explained earlier.

It is likely that, the nurse is administering antibiotics for episodes of childhood diarrhoea at school, because all cases reported are infective or bloody diarrhoea requiring antibiotics. In which case, the argument that epidemics of diarrhoea experienced during the visitation week and on weekends especially among the boys is of infective type or pathogen-related due facilitation of oral-fecal route mode of transmission during this period as already explained.

**Chloroquines**

The fact that children largely mentioned chloroquine (95%), is an indicator that they are aware of the medicines needed for malaria treatment.

Common thematic areas in compositions regarding malaria included, "The doctor gave me panadols and chloroquines" or "I went to the matron and asked for some medicine and she gave me chloroquine......". Yet another child indicated "forgetting the medicines for fever and headache, and his friend told him to buy panadols for headache and chloroquine for fever".
These are quite limited examples since most essays adopted or their excerpts in this text still show being given or children buying chloroquines for malaria and fever.

In a composition by Matthias (13 years) above, he indicated use of chloroquines for fever and panadols for headache.

Another girl wrote (14 years) indicated in a composition;

"It was a cool day since it had rained from morning to afternoon. Due to a lot of coldness, I was feeling I had fever. This was real sickness and I begun shivering from that moment. When I shivered and shivered, the next outcome was vomiting, but it was good that I vomited when it was not class time, instead it was break. When I went home, the situation was worsening, I decided to buy some panadol tablets and took them. After a few minutes I found my mum and she took me to doctor. So the doctor told us that the actual disease was malaria. He gave us medicine. Among medicine I was given there was quinine for injection, chloroquine tablets and then the panadol ones".

By observation, there were chloroquine tablets in all the matrons’ drug containers. The herbal man and four girls interviewed showed that author their medicines and chloroquine was included. All the respondents knew that the chloroquines were taken in case of malaria or fever/ high temperature of the body.

The paediatrician interviewed regarding children's use of chloroquine in case of malaria, first inquired

"...where they were getting the medicines, since pharmaceuticals are dangerous to them. Did they have them with them in complete doses or just a few? He however, recognised that if they are using it for cases of malaria which largely presents as fever, headache, temperature rise, they could be managing it quite well. However, the MOH recommended combined treatment involving both chloroquine and fansidar"

As I will discuss later, implicit in the above finding is the public health definition of children as vulnerable, and in need of or always under adult healthcare givers. He had packets of medicines which he showed to the researcher with the main focus on its caption "medicines should be kept out of reach of children". At least up to 12 years he added. Children should not be allowed to handle pharmaceuticals without supervision. He was further sceptical about children’s ability to "be disciplined in completing the dose: and yet the recent way of managing malaria has changed to administering both fansidar and chloroquine (combined treatment) due to high incidence rates of drug-resistant malarial parasites which these children do not know.

Panadols
This pharmaceutical was mentioned by (73.8%), of the children who answered structured questionnaires. A slightly higher proportion of 83% of the children mentioned panadols as a common medicine during the listing exercise.

By observation, this was the most common pharmaceutical among the children. In one class the author was showed panadols by 25 out of sixty five children. Of the 25 children 20 were girls. "We use panadols for many
diseases, such as headache, stomach ache (dysmenorrhoea), flu, malaria and sometimes when you are having cough. You only take two tablets at a time” said Julia (13 years). “My mother told me to always take some panadols when I feel headache" said one boy in fgd.

During one fgd, there were varied thematic areas arising regarding self-medication, such as over-use of panadols, under dose and even abuse of this pharmaceutical. For example, even after describing all symptoms of malaria, three boys in their compositions mentioned taking panadols, hedex and action. All these are pain killers and no particular remedy had been used against the malaria parasites.

In one composition, a boy narrated;
"The last time I was sick at school, I went outside (the gate) to look for medicines which can cure headache and fever. When I reached at the clinic, I had forgotten the names of medicine for the two diseases. My friend told me the medicine for headache is panadol and for fever is chloroquine. So the ‘doctor’ gave me medicine and I took it. That was my sickness at school”.

Flagyl
Flagyl (metonidazole) was mentioned by (60.0%), as a common medicine at school. As mentioned earlier, even the nurse listed it as one of the “medicines which she must buy when she goes to shop for the school medicines. This is one very effective against infective diarrhoea. Especially during the visitation week and some weekends, I must give a lot of them to the matrons”.

The idea that more girls mentioned flagyl in (table 3.5 above), yet on (table 3.3) there were more cases of diarrhoea among boys than girls relates to the gendered healthcare seeking behaviour mentioned earlier. In line with results too is the fact that (table 3.1) suggests that, more girls than boys report to the nurse for same illnesses than boys.

As mentioned earlier, children knew the use of flagyl. For instance during diagrammatic representation of medicines, the author joined a discussion where one child indicated, “This one (flagyl) works so fast, and just after two hours of swallowing it, you can go to the toilet, but you find you are well already” . The matrons and some children had flagyl tablets since the “Many children always complain of diarrhoea during visitation week and on some weekends”.

Quinines
A significant proportion of 51.3% of the children mentioned quinine. Results obtained from listing yield a higher figure of 51% among the boys and 41% among the girls. Significantly, quinines (mainly the injection form) was used for ‘serious cases’ of malaria as indicated by the nurse. This could be the likely reason why more boys than girls listed quinine as a common medicine. The possible reason being that boys’ practice of ‘making agreements’
until they were weak before they disclosed that they were sick, prompted the nurse to often use quinine injections, since by then the sick boys were 'serious cases'.

Also the 'injectable' type of quinine is not commonly sold as a market drug since it is relatively expensive. The general population will also wait for a 'qualified person' such as a nurse to administer injections. These are some of the accounting factors for the non-commonness of quinine pharmaceutical.

Hedex and Action
A slightly high percentage of (31.3%) mentioned hedex and action in structured questionnaires. In compositions, more boys (40) out of 65 children mentioned use of either action or hedex. Additionally, there was a higher proportion of children who mentioned hedex during the listing exercise for common medicines in school. By observation, Juma the herbal man and Annet, had 2 packets of hedex and action each. "We use it for headache they said". “Because it is a very powerful medicine, only one tablet is enough for the whole day". Said Juma

Joan (12 years) and Harriet (12 years) composition excerpts above also show how they purchased action, fansidar, hedex and chloroquines for episodes of fever, headache and high body temperature.

These being 'market drugs', they can be easily bought from private pharmacies and clinics, drug shops, groceries, people with retail shops can also store them. Drug hawkers also stock these drugs.

Fansidar
55% of the children mentioned fansidar as a common illness at school. In fgds and depth-interviews with boys, fansidar was not commonly mentioned in comparison to chloroquines and quinine. A slightly lower figure of 30% was obtained in listing exercise for this pharmaceutical. As mentioned earlier, that chloroquine tablets are more common than fansidar, is an indicator that the school has not yet adopted the MOH recommendation for management of malaria. All the doctors interviewed indicated that due to high episodes of drug-resistant malaria, the hospitals no longer administer chloroquine alone.

This study therefore demonstrates the inadequacy of procedures in the popular sector. For example, the use of chloroquines alone could be the reason that there are many cases of "difficult to manage episodes of malaria at school. We normally send such children home for better treatment", said the nurse.

Capsules
About thirty six percent (36.3%) of the children mentioned capsules as common medicines in structured medicines. As shown in diagrammatic representations, capsules especially the red-yellow were commonly represented. In fgds with both boys and girls, children indicated that they often got these capsules from the matrons when they had serious cough. By observation all the matrons had varied packets of the red-yellow and red-black capsules in their 'plastic containers'.

Charity (12 years) as;

"The last time I was sick at school, the disease was pneumonia. I started coughing seriously and then serious flu. My friend called Nakate, went and told Uncle Musana to come and see. I was no longer breathing well. uncle Musana wanted to take me to hospital but I told him to ring for my father, soon they came for me. The doctor gave me seven injections and syrup which was called koff-koff and then some capsules".

Vitamins

Some children (13.8%) mentioned vitamins for its commonness, 8 out of 11 of them girls. During one fgd with girls, one girl discussed the importance of vitamins which she always carried to school. One boy too, shared his experience with vitamins every visitation day, brought by his parents.

Magnesium and others (Vickskingo, ORS, Robs, Cofta Flu-feds, Cough-cough, Calamines and Honey).

Although not statistically significant, 15% of the children mentioned magnesium and other medicines listed above as a common medicine at school. By observation three children who had ‘stomach ache and ulcers’ had magnesium tablets in class. This, they indicated sharing with those who wanted. The ‘herbal man’ also had magnesium in his plastic container of medicines.

Like any “market drugs” these are advertised as good for varied reasons on radios and TVs. They are available in a wide range of places such as drug shops, groceries, private pharmacies, and drug hawkers and retailers. For instance Vickskingo and Cofta feature as “strong medicines for irritating cough”, Robs are “medicines to relieve muscle aches and headache. Honey was mentioned in all fgds, 3 in-depth interviews and compositions as a remedy for cough.

Rob, Cofta, Flu-feds, Cough-cough and Honey are all instrumental in symptomatic relief for ARIs. It is possible that this disease ranks high on the list as shown by the nurse’s list, much as children listed it third after malaria and diarrhoea. Could it be because they are more equipped for its management through symptomatic relief remedies listed above?

Interview results from one doctor regarding the public’s self-medication using “market drugs” show:

"Firstly, the largely sold cheap medicines are not recommended by MOH, hence the public uses them at their own risk. Secondly, the affectivity of these remedies are questionable, because the 'ingredients' used are not known to have significant value regarding exact cure for illness episodes such as malaria, infective cough and diarrhoea". They are however, quite good for symptomatic relief such as hedex, action, ‘dawanols and the like".
3.5.2 Herbal remedies

Interview results from the school staff show medicine use in context of medical pluralism. Although the nurse largely mentioned pharmaceuticals, such as antimalarials like chloroquine, quinine, fansidar and antibiotics such as flagyl, amodium and antipyreics like panadols, the school also purchased locally made herbal medicines for cough. As disclosed by matrons, parents interviewed and one teacher, the school largely uses Kyissakyamuzadde, a locally made mixture for cough from kikubo'. By observation this is a deep brown mixture sold in varied sizes of plastic containers in the open markets in Kampala. The school purchases the medicine in large quantities for treating cough, since it has proved more effective and even cheap.

'Untie Juliet' further explained,

"Rarely do we use expensive medicines here at school, since most of the readily available cheap ones are effective. For example, we can have about 6-10 sick children per dormitory at a time, so it is better that we use the medicines which we can afford to buy. Other medicines which are locally made for fever include even the fence plants you saw as you came in, the leaves are boiled and given to children to drink. It is effective in treating cough as well. Of course, now there are few herbals used at school since it is hard to find them in this enclosure, but at these children's homes, a lot of herbals are used".

Statistics below demonstrate that children used herbal remedies at school. We use Bombo (Momordica foetida), mululuza( Vernonia amydalina), Ekigajji (Aloe spp) and kyisakyamuzadde a locally made cough mixture obtained cheaply from the markets. No ingredients are indicated for 'commercial reasons'

"We use Mululuza and Bombo for malaria, cough and diarrhoea" were common assertions in f.dgs with both girls and boys and general classroom discussions. "For all of them (herbs) we get the leaves, crash and mix with water to drink or bathe", indicated one girl (10 years). At home you can first boil water before you mix with the leaves, but here it is hard to get boiled water. We just use water from the tap indicated another. When asked where they got them, they indicated varied places including the school garden, behind the school fence, or ring to parents to bring for them. "And where it is very difficult to get the herbs around the school, I telephone to my parents to bring for me some", said Juma.

Ekigajji was also used for cough and pains. Its leaves and flowers were crushed, mixed with water, for drinking. There were no significant statistical differences between boys' and girls' use of the herbal remedies much as girls' responses were higher than that of boys. This could be due to the "learnt practices from parents in the popular sector".
Table 3.6: Gender disaggregated data on herbal medicines used at school

<table>
<thead>
<tr>
<th>Name</th>
<th>Count</th>
<th>Boys</th>
<th>Girls</th>
<th>% Cases</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mululuza</td>
<td>74.3</td>
<td>33</td>
<td>41</td>
<td>86.8</td>
<td>32.7</td>
<td>35.7</td>
</tr>
<tr>
<td>Bombo</td>
<td>75</td>
<td>35</td>
<td>40</td>
<td>92.1</td>
<td>34.7</td>
<td>34.8</td>
</tr>
<tr>
<td>Kyisakyamuzadde</td>
<td>46</td>
<td>22</td>
<td>24</td>
<td>57.9</td>
<td>21.8</td>
<td>20.9</td>
</tr>
<tr>
<td>Ekigajji (Aloe spp)</td>
<td>21</td>
<td>11</td>
<td>10</td>
<td>28.9</td>
<td>10.9</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>216</strong></td>
<td><strong>101</strong></td>
<td><strong>115</strong></td>
<td><strong>265.8</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Figures still indicate the higher proportions of medicine consumption among girls (115) compared to boys (101). There are however more totals for counts of pharmaceuticals (345) than herbal remedies (216). This could be due to the training of the nurse and her bias in pharmaceuticals. In general, there is reservedness regarding the use of herbs for common illnesses because their effectiveness compared to pharmaceuticals is questioned. Consistent with this finding, is (Adome et.al 1996; Whyte & Birungi 2000) studies that over 90% of remedies in Uganda are in form of pharmaceuticals.

Although only 57.9% reported use of kyisakyamuzadde, a higher figure is expected since the school administered this locally processed herbal remedy to all children during cough epidemics. This could be due the way the medicine was administered by the matron, in small spoons –just like other pharmaceuticals in syrup form. It is also possible that the children easily associate the nurse with ‘imported medicines’, hence they do not easily distinguish between herbal remedies and pharmaceuticals given to them by the nurse.

It is amazing how mululuza and bombo obtained from the bushes, school garden and from parents were mentioned by 86.8% and 92.1% respectively. Perhaps, it is the general definition of herbal remedy which is problematic here, since the children indicated that “the nurse often had only imported medicines”. It is probable that what the nurse administers is not categorised as a herbal remedy, much as the same cough mixture from fellow children in the dormitory was regarded as “herbal medicine”.

3.6 Criteria for selection of medicines

One of the research questions was to find out the criteria children used in selecting medicines in context of medical pluralism. It was established in this research and as summarised on table 3.7 below, that children had varied ways of selecting medicines including, effectiveness (or when I already used it before and I got cured), according to the disease (where specific examples of diseases and medications were mentioned). Although not statistically significant, fast cure was mentioned by 12.8% of the children, and according to what the nurse, doctor or parent advised was given by 9.7%.
It was established to that nomenclature of pharmaceutical too helped in guiding selection of pharmaceuticals. It is especially "market drugs" which exploited this property as will be explained. For instance, hedex (is a pharmaceutical for headache), and those for malaria have similar metonyms such as chloroquine, quinine, dawaquin, and metakelfin among others. It is probable, that it is sufficient to select medicines basing on the disease, but is also likely that varied media advertisements are influential in this arena as I will discuss later.

Moreover, since adoption of SAPS, it is easy to obtain a wide range of pharmaceuticals without prescription. It is the amount of money which could be limiting factors to clients. Age, disease and prior consultations with the biomedical doctors is not a prerequisite or barrier to accessing these medications. Therefore the pharmaceutical companies are using varied marketing strategies. In one fgd when the author inquired about the use of medicines like hedex, flue-fed, cough-cough, action, malarest, all children were giving chorus answers. Some even expressed "happiness over such easy questions they are made to answer".

Table 3.7: Gender disaggregated data to criteria for selection of medicines

<table>
<thead>
<tr>
<th>Name</th>
<th>Count</th>
<th>Boys</th>
<th>Girls</th>
<th>%Cases</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>40</td>
<td>22</td>
<td>18</td>
<td>36.7</td>
<td>40.7</td>
<td>32.1</td>
</tr>
<tr>
<td>Disease</td>
<td>42</td>
<td>17</td>
<td>25</td>
<td>38.5</td>
<td>31.5</td>
<td>44.6</td>
</tr>
<tr>
<td>Nurse/ doctor/parent</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>11.9</td>
<td>16.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Fast cure</td>
<td>14</td>
<td>6</td>
<td>9</td>
<td>12.8</td>
<td>11.1</td>
<td>16.1</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>54</td>
<td>55</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Results are not consistent with previous reports concerning indigenisation of pharmaceuticals. Although (Bush and Hardon 1990; Whyte 1998: 319) reported that western medicines were becoming indigenised into local traditional medicine practices and efficacy of medicines is frequently perceived to be based on colour, consistency, taste, shape, size, and packaging, this study established that it is according to disease, effectiveness of a pharmaceutical, fast cure and what the nurse or doctor recommends which are criteria for choice of medicines.

In fgds and depth interviews, some children indicated that they considered the expiry date of the medicine before purchase. They also added that there are clinics which "sell expired medicines to sick people, and that is the reason why they do not recover even after taking the medicines". In one fgd, Lillian (12years), mentioned that "for cough it is better to use kyisakyamuzadde instead of the syrups since most of them are expired".
It was very difficult to verify this argument about "expired drugs" from any drug shops, pharmacy or clinic, since all the owners denied selling the medicines which are expired. However, at one of the private hospital pharmacies visited, the pharmacist indicate that it quite difficult for the unsuspecting public to know whether the medicine is expired or not. First, the importers are very keen on re-packing the medicines into different containers, and they can re-stamp the expiry dates. The hospital can know of the changes when such an import gives a relatively low price quote compared to the others, and also it is the policy of the hospital to buy medicines which are 2-3 years before expiry date and from known/authentic drug companies" he said.

It is also common knowledge that medicines sold in clinics are cheaper than those in hospitals. It could be due to the above reasons. However, it is also possible that "the cheapness" also relates to the company manufacturing them.

Since it is the nurse to buy the medicines used at school, I posed the question to her of how she chose the medicines. To this she acknowledged that

...... "These days it is very hard to choose medicines from a pharmacy. There are a lot of medicines which treat the same disease; some are more expensive than others...... It all depends on the school budget. But even when you have already bought your medicines, they always convince you to try out the "new medicine"...... so that you can give them a feedback whether it works or not".

"Market drugs" such as hedex, action, dawaques, panadols, flu feds, are on the other hand readily available, since the pharmaceutical companies have invested in their advertisement and distribution in a competitive market.

For instance, during the period of research the medicines which featured in advertisements in television channels, radios and announcements on the streets were promoting action, hedex, panadols, kyisakyamuzadde, and sugarquine as follows Hedex tablets were advertised as "tablets which relieve pain and headache fast, so that you can be a winner again". Meanwhile panadols featured as a young boy able to box and knockdown a middle-aged man with a caption "Panadol, strong on pain but gentle on you". Meanwhile Action tablets "are medicine with three powerful ingredients that relieve pain fast". Perhaps, that is where children got their knowledge regarding criteria to selection of medicines. Significantly, (24%) mentioned fast cure as a criteria for selection of medicines. Moreover, gender aspects are clear in that boys were more likely to choose such medicines which act fast, strong and with powerful ingredients than girls.

Data from table 3.7 above also shows that girls largely chose medicines according to disease (44.6%). They first defined the illness or were told by their parents or physicians in order to select medicines. The boys on the other
hand selected medicines because of their effectiveness (40.7%), ability to cure disease fast and previous experience. This is a significant gender difference since “choosing medicine by disease” is in line with high knowledge in a wide range of pharmaceuticals as shown above when girls had a higher count for list of medicines; but also, this criteria is consistent with accessing largely “market drugs” whose nomenclature is similar to disease such as hedex, malarest (fansidar), flu caps and flu-feds; cofta, dawanols among others. Meanwhile choosing medicine by effectiveness demonstrates a notion of inability to define disease, or attaching more importance to the medicine and less significance to the type of disease.

Although statistically insignificant on table 3.7 above, (12%) of the children mentioned fast cure as criteria for selection of medicines. It is likely that media advertisements have impact on children’s selection of the pharmaceuticals and herbals. What is not known however, is whether the medicines are really effective as advertised, and whether the medicines have side effects at all. Moreover as already mentioned, some of the pharmacies would like to know “whether the medicine has been effective or not from their clients”.

In sum, this study has established that children had a wide range of criteria in selecting medicines including effectiveness, according to disease, or what the nurse, parent or doctor gives, and fast cure. However, beyond the listed criteria, were underlying themes derived from media advertisements and influence, accessibility, source of remedy, affordability and role of healthcare givers.
3.7 Source of medicines

Table 3.8: Gender disaggregated data showing source of medicines

<table>
<thead>
<tr>
<th>Name</th>
<th>Count</th>
<th>Boys</th>
<th>Girls</th>
<th>% Cases</th>
<th>%Boys</th>
<th>%Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic</td>
<td>74</td>
<td>38</td>
<td>36</td>
<td>94.9</td>
<td>30.9</td>
<td>28.1</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>51</td>
<td>21</td>
<td>30</td>
<td>65.4</td>
<td>17.1</td>
<td>23.4</td>
</tr>
<tr>
<td>Shop</td>
<td>50</td>
<td>22</td>
<td>28</td>
<td>64.1</td>
<td>17.9</td>
<td>21.9</td>
</tr>
<tr>
<td>Hospital</td>
<td>29</td>
<td>16</td>
<td>13</td>
<td>37.2</td>
<td>13.0</td>
<td>10.2</td>
</tr>
<tr>
<td>Home</td>
<td>29</td>
<td>16</td>
<td>13</td>
<td>37.2</td>
<td>13.0</td>
<td>10.2</td>
</tr>
<tr>
<td>Market</td>
<td>18</td>
<td>10</td>
<td>8</td>
<td>22.1</td>
<td>8.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td>123</td>
<td>128</td>
<td>321.8</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Results in the table 3.8 above indicate a wide range of sources (251 count) from where children obtained their medicines. Significantly, the highest proportion (94.9%) of children obtained pharmaceutical from the clinics. Shops (drug shops) and pharmacies were suggested by 64.1% and 65.4% respectively. A slightly lower proportion of children (37.2%) got medicines from home or hospitals. Although not statistically significant, 22.1% indicated that they can get medicines from the market.

As I will discuss later, these areas mentioned as basic sources of medicines are largely profit oriented arenas, and a wide range of pharmaceuticals are sold to clients without prescription. It is also important to note that what one doctor referred to the largest varieties of medicines in these areas as “market drugs”. These drugs are not used by hospitals because they are not recommended by MOH. The medicines such as hedex, action, sugarquines, and dawanols are largely bought from these sources for self-medication.

More boys mentioned clinics (30.9%), hospitals (13.0%) home (13.0%) and market (8.1%) compared to girls (28.1%), (10.2%) and (10.2%) and (6.3%) respectively. This could be explained by the gender differentials in healthcare seeking behaviour mentioned earlier.

Statistics further show that more boys than girls obtained medicines from home and markets. This could relate to the presence of a herbal man- Juma in the dormitory who administered medicines to all the children at school. He waited for parents to bring for him more medicines from home in case the ones he had were completed. Since his collection of drugs included both pharmaceuticals and herbs remedies such as kyisakyaamuzadde bought from markets, this accounts for the high figure for source of medicines from the market among boys.
Although not statistically significant, more girls than boys on table 3.8 above mentioned pharmacies (23.4%), shops (22%) in addition to clinics (28.1). It is possible that when girls obtain "gate passes" they go home to be taken clinics by their parents, or they are given money to buy medicine from pharmacies and drug-shops.

Results from one parent interviewed confirm this, as she argued,

"...For me, I have always told them... if my child reaches a level that they cannot handle, they should send the child back to me. I will see what I can do, instead of gambling around with the child’s illness. ...laughs, my daughter Miriam, then took advantage of the whole issue and she would even come home when she is not sick or for very minor conditions".

Similar findings can be observed from the essay by Joan (12years) quoted above who requested to go home, even after the nurse had given her "medicines for malaria".

Consistent with the above, the higher consumption of pharmaceuticals by girls as results in earlier sections show that they could be getting "market drugs", which provide symptomatic relief, and since they are not effective for parasitic infections, then they may need to take more pharmaceuticals for the same illness as boys.

Clinics

Figures from table 3.8 above show that the highest proportion of children (boys 30.1%; girls 28.1%) obtained medicines from clinics. It is here that children mentioned preference for healthcare seeking since most of them were "near home", "They are known at the clinic" and "they can go there alone, so that the parents can be called upon to pay the charges later". In one narrative a boy (12years) indicated;

"...When I went to the hospital alone, I first went to a place where there were many women and young children. The doctor there told me to go back and come with my parents. But when I went home, our neighbour gave me some money to go to the nearby clinic to buy medicines. So it was not good to go to the hospital alone" Samuel (12years).

Another narrative further indicated, "getting lost at the hospital", or "being asked by the nurse to go and pay money first, and I did not have it" revealed one girl (13 years).

An excerpt from one child Matthias (13years) quoted earlier showed purchase of pharmaceuticals from a clinic.

Chi-square (X²)

In order to find out whether there is a relationship between gender and accessing medicines in clinics, a chi-square test was performed. Chi-square test is the most commonly used test of significance for independence for tables containing nominal and ordinal variables is chi-square Bailey (1988:384). It is also argued that the critical
value for a non-directional test at the 0.05(5%) level of significance is 5.99. If the observed chi-square exceeds the critical value, the null hypothesis is rejected.

**Table 3.8.1; Summary of chi-square test for the relationship between gender and accessing medicines at the clinics.**

<table>
<thead>
<tr>
<th>Chi-square</th>
<th>Value</th>
<th>Degree of freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>5.896</td>
<td>1</td>
<td>0.015</td>
</tr>
</tbody>
</table>

From the table 3.8.1 above, there is a quite strong association between the two variables at 1.5%. Therefore, this study concludes that there is quite a strong relationship between gender and accessing medicines at the clinics. As discussed, it is possible that girls who easily identify illness conditions and request for ‘gate passes’ go home, and subsequently buy the medicines the nearby clinics or drug shops.

The level of association is however, not a very strong one in reference to the 5% mentioned above, this implies that gender is not the only determinant factor in buying pharmaceuticals at the clinics. There are interacting factors to accessing pharmaceuticals from clinics including affordability, proximity to the healthcare seeker, ability to access pharmaceuticals over-the-counter and when an illness is not regarded as ‘very serious’ among other factors (see above).

In essence, it is probable that children above five years are rarely seen at the hospitals because they go to the clinic to buy medicines when they are sick. It is therefore, not convincing to argue that children above five years are rarely seen at hospitals because they are a healthy group.

Shortly, I will discuss how dependence on clinics which offer healthcare services according to how much you would like to pay have implications in managing the most common diseases such as malaria. For example, results on table 3.5 above demonstrate that children mentioned chloroquines (95%) while fansidar (55.%) when the MOH recommends combined treatment of both chloroquines and fansidar due to high rates of malaria –resistant parasites'.

This study further finds it significant that in fgds, conversations and some compositions, children mentioned that they waited for their parents to take them to the hospital because “they are the ones with money”. One boy (12 years) wrote .... “when I went to the hospital I was told to pay money first before I could see a doctor, I did not have money, so I went home”. It is this commoditisation and profit- motive of healthcare givers which this study attributes to the vulnerability of children as social actors in the arena of healthcare.
Pharmacies and drug shops

Significantly, results show that children obtained medicines from drug shops (64%) or pharmacies (65.4%). In fgd and questions about their interaction with doctors, children mentioned that “they were told to buy medicine from the pharmacy or drug shops”. Some even suggested that they bought medicines from the shops which sell other household items. The idea that there are varied sources of pharmaceuticals is in line with commoditisation of healthcare. Since the mid 1980s, even pharmaceuticals are one of the profitable ventures.

Persons with or without training in pharmacy can readily obtain trading licences in order to engage in pharmaceutical business. As mentioned earlier, the increasing numbers of pharmacies and non-professional healthcare givers have implications in the arena of healthcare, especially regarding the fact that the only criteria for accessing pharmaceuticals is “the amount of money one can pay as indicated by one drug-shop owner”. Moreover, other medications are made cheaper than usual, especially when they are expired or tending towards expiry date.

This study’s concern being children as social actors in such a complex healthcare system, the author is interested in the implications of commoditisation of the healthcare system especially with regards to how children from low income households will manage illnesses effectively.

Hospitals

This study, as shown on table 3.8 above, has demonstrated that a small proportion of 32% of the children obtained medicines from hospitals. There are varied reasons for this phenomenon. It is important to note that, at the hospitals, patients are not allowed to negotiate treatments or “buy what they can afford” from a list of pharmaceuticals, and much as their pharmaceuticals are expensive, much as an individual will get authentic drugs, recommended by the MOH.

However, since the mid 1980s, the state managed hospitals have been getting minimal funding for their maintenance or purchase of pharmaceuticals. Subsequently they are dilapidated, with few professional healthcare givers. Although the state wavered-off cost sharing in these public hospitals, it is common for patients to be told as some respondents mentioned “to go and buy medicines from the clinic or pharmacy”. It is likely this process has instead made seeking healthcare at the clinics as shown above the norm.
Closely related to the access of medicines from hospitals is the "thriving of private hospitals" since they charge user fees. However the paediatrician interviewed indicated that "he rarely saw children above five years; probably because they have other sources of healthcare".

In one composition of a boy (14 years) narrated

"Last holiday I went to the hospital alone. I found myself in a place where only women and very young children were sitting. I tried to find where children like me go but I got lost. So I went home and asked our neighbours money for buying medicine in the clinic"

A girl (13 years) argued,

"Yes, I have ever gone to the hospital alone. But when I reached a place where there were only women, I was told by the nurse to go to another place where they can give me medicines. I got lost since I could not find the place".

Implicit in the two narratives could be the effect of the neutral public health policy in implementation of healthcare programmes with emphasis on children below five years (where the boy above found women with young children) and the antenatal clinic (where the girl above found only women). Since they subsequently could not find where their age group converged, it is likely that that is why both narratives show ‘getting lost’ and enable to be helped at the hospital.

In addition, the nurse's ordering for the boy above to go and collect his parent shows the implicit public health assumptions that children are always under the adult healthcare giver (WHO 2000a; WHO 2000b; MOH 2001; UNICEF 2003).

Home/ market

Slight proportions of 37.2% on table 3.8 above named home as a source of medicines. This could be due to parental involvement in healthcare as professional or non-professional healthcare givers. It is important to note that all the herbal remedies such as bombo, mululuza, ekigajji are obtained from herbal gardens at home or nearby bushes and forests. Underlying the highest proportion (95%) of children access of drugs from clinics than home or markets, is the “commonness of pharmaceuticals” in therapeutic practices compared to herbals.

'The herbal man'- Juma wrote his composition of the last time he was sick at school;

One day when I was sick, I was suffering from malaria and I used panadol, chloroquine, maxaquine and quinine. And my brother got a strong cough and he was told that he was going to lose his ribs. I gave him kisakyamuzadde, kofur, kofta and he was cured. That is my composition about school diseases.

Implicit in the above composition is the presence of the popular sector or what Kleinman (1980) referred to as home treatment. By mentioning home as a source of medicine, children were acknowledging that there were varied remedies at home. They were further aware of how to use the medicines available at home.

Although not statistically significant, 22.1% of children as shown on table 3.8 above, mentioned the market as a source of remedies. It is at the markets where locally processed herbal remedies such as kisakyamuzadde are obtained. Other
remedies include ointments from India such as balms, samona crèmes and soaps and some medications as described earlier (omo mixed with salt) are made from home and as indicated by one teacher, it may be difficult to get herbs from within the fence, but these are always available in the markets.

What is significant in the section regarding source of medicines is the idea that underlying the highest proportion (95%) of children access of drugs from clinics than home or markets, is the “commonness of pharmaceuticals” in therapeutic practices compared to herbals. However, implicit in the main source of medicines, are higher chances of accessing “market drugs”, buying medicines according to what you can afford, danger of poor management of episodes since as discussed earlier, “hospitals now administer double treatments for malaria”, yet media advertisements only mention “effectiveness of chloroquines for malaria”. Since our medicines advertised and accessed here are symptom-relief drugs such as hedex, action, cofta and dawaquines, it is possible that more children are “not getting well” or “recovering” because these pharmaceuticals are not effective in treating the underlying cause of the illness.

3.7.1 Social networks at school

Social networks have been documented as critical in the arena of health and healthcare (Graham 1984; Igum 1983). Regarding the importance of social networks at school, it was indicated in all fgd that the presence of sisters or brothers is very important when one is sick. “Even there are close friends who are more than sisters or brothers”, said Florence (11 years), who has been in the school for five years. “When you are sick, it is your friend or sister/ brother who will help you to get food, tell the matron or report to the headmaster, or take you home, otherwise you have to suffer to move alone or go home alone when you are sick”.

The girls’ fgd also mentioned washing for you, which was not mentioned by the boys. And boys also indicated that they only collected food “when requested” by the sick friend which is unlike the girls who were forced to eat when they are sick (and some vomited afterwards). Perhaps, these are some of the gender differences in illness experiences between boys and girls.

Another disparity realised among boys and girls’ fgd is that there were more herbal therapies among boys than among girls. One boy ‘Juma who was called a herbal man’ has been in this school for seven years and he is well known for his herbal medicines. In his composition he wrote how he ‘gave’ his brother who had strong cough Kyisakyamuzadde, kofur and kofta, and he got cured. And as indicated earlier, another boy Jimmy indicated how when he was sick, he asked his friend Juma for some medicines, but he was given little medicine which did not “finish him”. He later went to the matron for more medicines.

During one fgd, he mentioned the medicines he always carried with him as kyisakyamuzadde for whooping cough, lugave cough mixture, bululu- a purple mixture and lugave for all types of wounds and simply using ice rubbed on the swollen area. Mumps also are common but this one is easy to treat with ice of cold water said one of the boys.
CHAPTER FOUR

4.0 Analysis, discussion and conclusions of research findings

4.1 Introduction
In this chapter, is the analysis, discussion and conclusions of the research findings. Particular thematic areas in this study's problematics have been analysed and conclusions drawn basing on the objectives and research questions in chapter one. Analysis has also been done in relation to the theoretical framework, problem analysis diagram and literature reviewed.

4.2 Common diseases at school
As shown in the preceding chapter, this study found out that children above five years largely experienced infectious diseases including malaria (91.3%), diarrhoea (82.5%), ringworms and other skin infections (53.8%), cough (53.8%), flu (40%) and typhoid was mentioned by (21.3%) of the children.

Malaria, cough and Flu
Although key informants and the children ranked malaria as the commonest disease, the school nurse's register indicates cough and flu. This study's interpretation, is that, the difference in lists between children's ranking and the nurse has an underlying aspect of severity or, the ability of the disease to become serious. Significantly, the nurse also ranked malaria highest when considering cases which become serious.

It is likely that much as children above five years are frequently exposed to cough and flu, it is because of ‘their immunity levels’ that the two diseases may not be of much significant importance in comparison to malaria.

Significantly, malaria presents with severity signs such as weakness, vomiting, headache and shivering. As it will be discussed later, these are signs which both boys and girls used to determine severity of illnesses. Since malaria presents with signs above, this could be the likely reason why children readily identified it as the most common disease. Importantly, malaria is not a *self-limiting* disease. Hence its commonness is also attributed to the fact that children require medication before recovery unlike other diseases where recovery is possible without prior taking of medications.
This study also attributes commonness of Malaria to increasing incidence rates of drug-resistant strains of its parasites. As already mentioned, the MOH attributes presence of difficult-to-treat episodes of malaria to poor self medication habits, where low quality market drugs and under doses is a common practice.

This study, further, accounts for commonness of malaria in relation to the school structure on figure 2 above, showing deteriorated environmental conditions, broken windows in some dormitories and open-ditches of stagnant water. Only a few children had mosquito nets. All these factors provide favourable conditions for the spread of malaria parasites by mosquitoes.

**Diarrhoea**

Further, results show that diarrhoea is the second highest in frequency, with about eight three percent (82.5%) of the children recognising its commonness. Teachers, nurse and matrons interviewed also mentioned that diarrhoea is common at school. However, unlike other diseases mentioned, presence of diarrhoea was followed by numerous explanations/justifications or its avoidance. In general, themes key informants adopted were to relegate the causes of this disease to factors 'outside the school'. For example one informant argued that children commonly suffered from diarrhoea at school due to eating without control or eating whatever they came across including a lot of oily food which parents brought on visitation days. Some key informants even denied whether the common episodes should be diarrhoea but stomach ache; stomach pain or disorders which are easily treated with antibiotics such as flagyl and amodium.

By observation, the school hygienic conditions and sanitation were deteriorated and as I will discuss shortly, the state could use this criterion to close it. These factors have a direct link in transmission of pathogens causing diarrhoea through the oral-feacal route of transmission (MOH 2001; WHO 2000a; WHO 2000b). Significantly the same premises which used to accommodate 4000 in mid eighties, are not sufficient for the current figure of 930 children. There was no sign that the school premises had regular renovation as evident from the dilapidated structures.

It is also important to note that this study falls within a ‘critical time’ when the state has already closed six private schools in one of the divisions of central Kampala due to poor sanitary conditions. Prior to their closure, the city council-education department assessed whether, the schools had a particular number of pit latrines or toilets in relation to the number of students, school location and hygiene of its immediate surrounding. It is possible that by this time, the school administration and staff are sceptical about discussing ‘hygiene related diseases’ such as diarrhoea which is common in school.
For example, three weeks into the school term, all flush toilets were blocked. Respondents indicated fear of going there and some of the children instead defecated ‘outside’ or in the school compound. As mentioned earlier, through photography children ‘teamed up’ to get pictures of all the ‘dirty places’ including the kitchen, garbage bins, classrooms and blocked flush toilets. All these factors attract houseflies which are vectors for the oraf-feecal route transmission of diarrhoeal diseases. Ingestion of contaminated food is likely to cause diarrhoea or diarrhoea epidemic during the visitation period which is on monthly basis during the school term.

In line with the preceding argument, by observation, the school garbage bin was over-flowing by the third week of research, and being a rainy season, some classes such as P5M were deserted, because that is where all the water flows- through to the outside ditch. Nsumba girls’ dormitory also acted as a water-outlet from the girls' dormitories, connecting through an open ditch to P5M then to another open ditch outside the school fence. Mud had accumulated in the school compound; the school kitchen entrance was muddy. Some girls complained of the bad smell from the flush toilets and garbage bins which reach the dormitory.

Closely related to diarrhoea as a disease of poor hygiene is what the matrons indicated as a ‘common complaint of itching in girls of all age groups’. Since a possibility of commonness of worms was less likely, this ‘itching’ could be due to candidiasis. Consistent with this, even giving mabendazole- a medication for deworming was a futile remedy. The school nurse also attributed high incidence rates of candida to poor hygienic conditions which affects girls and to changes in the reproductive system with onset on menstrual cycle. However, the issue of changes in the menstrual cycle is questionable since the complaint was from girls of all age groups. It is possible that the high frequencies of ‘itching in girls’ could be accounted for by re-infections facilitated by limited washing facilities and poor hygienic conditions.

In sum, diarrhoea is a common disease at school, but it can be more common at particular times of the school term. Some children pointed out the use of ‘toilet buckets’ as food utensils, eating cold food stored in dormitories, eating without washing hands, and these tend to be more frequent during the visitation week. From photography and fgd's, children argued that the school had many dirty places which bring houseflies. Moreover, one girl argued in fgd about the presence of a line of children at the toilets during the visitation week which is an indicator that toilets are few for the children. It was also mentioned that much as they were aware of washing plates and cups, there was a line at the only one water-tap at school after meals which made it difficult to get water.
Results also show that there were gender differences in incidence rates of diarrhoeal diseases. There were more episodes of diarrhoea among boys than girls. This study attributes the difference in incidence rates to the hazardous practices among boys such as use of toilet buckets to collect food, using dirty cups and plates and non washing of hands prior to eating which were not observed among girls.

By observation, food was prepared in unhygienic conditions. As mentioned earlier, food was prepared in the morning and once served for lunch; the remaining is kept till evening for the next meal. There was no dining room seen and children had their meals in the open where houseflies could be seen. There was poor garbage disposal and toilets were in close proximity to the kitchen, dormitories and some classes. The compound being small, the garbage bin is close to the classes, and shades which children used as eating shelter. Matrons were selling food stuffs of varied sorts to the children, but apart from these, the author saw no other persons selling food stuffs to children. Children were not allowed to freely move in and out of the gate and therefore, the likelihood of getting diarrhoea from 'outside the school' was limited.

My own conclusion is that diarrhoea is common at school due to factors inside the school as mentioned above. Since teachers, children and matrons mentioned increase in frequency of diarrhoea episodes during the 'visitation week', an external cause is also possible.

Critically looking at records (albeit conservative) given to the author by the school nurse, there were 13 cases of diarrhoea among boys compared to 14 cases among girls. It is easy to conclude that diarrhoea is more common among boys than girls since the school had more girls (538) than boys (342).

In relation to the theoretical framework and problem analysis diagram, diarrhoea is a disease widely discussed by proponents of political economic issues in health and healthcare as a disease which affects mostly the poor (Doyal, 1981; Doyal & Pennell, 1981; Hardon et.al 2001).

**Typhoid**

Typhoid was also mentioned by children as a common disease at school. One composition showed that drinking un boiled water from the tap was the likely reason. As already discussed, the idea that it is from one water tap where water for flush toilets, cooking, washing and bathing could be a source of contamination. But also, water supply system in Kampala is quite unhygienic, and people are advised to first boil water before drinking. Since the school did not boil the water for drinking, it is possible that typhoid infection is though the water.

**Skin fungal infections**
Regarding *ebiguuna* or ringworms, as a common disease mentioned by children, varied reasons were attributed to it as already discussed. What this study finds significant is that the nurse and other key informants at school did not mention it. Perhaps this is because, children can live with it. The other reason is that children made a mixture of a detergent and salt for self-medication. Others indicated using ‘tubes’ or Indian and Chinese origin as excerpts from compositions above show.

Such a finding relates to child’s agency and cognitive abilities in management of common diseases (O’Kane 2000; Prout & Christensen 1996; Hartzema 1996).

In relation to the problem analysis diagram also, it is possible that it is parents’ ideas in the popular sector have been learnt by the children in the arena of healthcare.

**Worms**

Although the nurse indicated commonness of worms in this age group, and the list of drugs often included deworming medicines such as mabendazole, ketrax, zentol, as shown in chapter three, children did not consider worms as a common disease at school. Even through a silent probe in fgds, the author got hypothetical discussions.

In relation to the above finding, it is possible that the nurse is basing from the erroneous public healthcare programmes for school age children focussing on oral hygiene and deworming (Jamison 1999; WB 2000; WHO 2000a; WHO 2000b; MOH 2001). It is possible that even when worms are not common, the school still spends on this aspect of healthcare due to the already existing unclear healthcare policy for children above five years.

Although Prout & Christensen (1996) report on children’s account of illness indicated that children showed only ‘their experience as only different bodily sensations…..’ children in the present study were able to mention the type of disease and where possible sought for medications in their own right. This study attributes the difference including ability to name the disease to the commonness of such diseases in the study area. Due to the high episodes of illnesses and high frequency in which these children experience different illnesses, it is possible that with time they are able to describe adequately such diseases. Moreover, as mentioned in the background and Webb (1988:1), most of the children in developing countries are healthcare givers to their siblings.

In sum, the preceding section has shown that contrary to the existing public healthcare policies for children above five years emphasis on deworming and oral hygiene, the common diseases which these children experienced...
included malaria, ARIs, diarrhoea, skin fungal infections and typhoid. The findings also demonstrate that the existing neutral healthcare programmes for children in the study population influences even planning and provision of healthcare needs for them.

This study has further demonstrated that the common diseases mentioned cannot be isolated from the environmental conditions. The school poor sanitation, lack of drainage facilities, use of flush toilet rooms as bathing shelter, over-flowing garbage bins, over-crowding and generally poor hygienic conditions are significant contributing factors to the high incidence rates of communicable diseases. Another important issue regarding the preceding section is the differences in which children and adults ranked common illnesses at school. For example whereas children ranked diarrhoea second, key informants at school, had conflicting arguments regarding its commonness. It is this study’s contention that it is likely that children’s argument regarding the high incidence rates of diarrhoea at school is valid because, by observation, there were a wide range of opportunistic conditions facilitating its spread. Such conditions include, poor sanitation, inadequate washing rooms for both children and teachers, overflowing garbage bins, use of toilet buckets as food utensils among other reasons.

The theoretical framework draws upon theories regarding children’s agency and vulnerability. Essentially children were autonomous in ranking and observing the common illnesses at school. Vulnerability aspects can be explained by the fact that much as the children knew the causative links such as dirty and blocked pit toilets, exposure to skin fungal infections from the barber, and the issue of broken windows, they were less able to implement possible solutions.

As mentioned in chapter one regarding children’s cognitive abilities, O’ Kane (2000), and they are able to interpret changes in their bodily processes and act upon them Hartzema (1996). Although children have often been viewed as ‘not yet developed’ and under the adult healthcare givers (Christensen 1996; WHO 2000a; WHO 2000b; MOH 2001), the preceding section shows that children have agency. They may require adult intervention, but there are areas in healthcare where they can be active social actors in their own right.

4.3 Signs and symptoms of common illnesses

Children were able to identify symptoms such as temperature rise, vomiting, loss of appetite, weakness and diarrhoea as signs of illnesses.

Gender differentiated symptoms for recognition of illnesses were also documented. Whereas more boys mentioned weakness, temperature rise and vomiting as signs of illness, girls largely mentioned appetite loss,
headache in addition to the highly reported attribute of temperature rise. This study attributes these gendered differences to values of masculinity and femininity. In essence, boys are more likely to succumb to episodes of illnesses when they lose the attributes of power, strength and control, while the girl’s feelings of vulnerability, safety and beauty come into the fore.

Essentially, it is difficult to comprehend why the public health policy relegates children to passive positions requiring adult healthcare givers to bring them for healthcare and ‘speak on their behalf’. It is also questionable as regards one finding that ‘children above five years are a healthy group and that is why they are not often seen at the hospital.’

4.4 Common medicines at school

As mentioned in this study’s background and literature review, medicines in contemporary Uganda are in form of both pharmaceuticals and herbal remedies. This is what is referred to as medical pluralism in this study. Studies by Adome, et.al (2000) show that over 90% of remedies for illnesses are in form of pharmaceuticals.

4.4.1 Pharmaceuticals used at school

In general, children mentioned varied pharmaceuticals as remedies for common diseases at school. Significantly, there were more counts (345) of pharmaceuticals than (216) for herbal remedies. The pharmaceuticals mentioned included chloroquines (95.0%), panadols (73.8%), flagyl also called (metonidazole) (60.0%), fansidar (55%), quinine (51.3%), hedex (31.3%), vitamins were mentioned by (13.8%) of the children, majority of them girls.

Pharmaceuticals named were correlated with the disease it treats in compositions, questionnaires and listing. Some of the adopted essays in the text above show varied medicines children used for particular diseases. In general pharmaceuticals mentioned above are cheap medicines or market drugs.

In relation to the theoretical framework, the political economic issue in healthcare concerning the influence of the capital economy in this arena is clear. To highlight on just a few areas in line with the study objectives, the nurse as a client on behalf of a value-maximising school always had a list of medicines to buy. She had to limit herself to this list to avoid persuasion by the profit-oriented healthcare sector to buy and ‘try out knew pharmaceuticals’ in the market. I think it is important that ‘pharmaceuticals are being sold, in order to get a feedback as regards how it works’. It is possible that the quite weak policies on importation of pharmaceuticals since the adoption of SAPS, has much undocumented effects to the general health and healthcare of Ugandan citizens.
Although it was established in this study that several factors contributed to selection and use of medicines, such as effectiveness, according to disease, instruction from the doctor, knowledge of authentic pharmaceutical companies and setting limits of the expiry date prior to purchase at hospital pharmacies, the purchasing capacity of the individual still played a great role. For instance a hawker and drug-shop owner also indicated that the criterion for buying medicines was ‘the amount of money a client had’. They sold largely ‘market drugs’ and cheap pharmaceuticals which the highest proportion of the population could afford. Similar findings regarding weak local medical infrastructure and sale of drugs by unqualified persons were discussed by (Amoa and Ofori-Adjei 1980; Silverman et al 1982; Van der Geest 1987; Yudkin 1980; Whyte 1998: 327). Other studies show that in most countries in Africa, pharmaceuticals are widely sold outside of government health units Whyte & Birungi (2000).

Additionally, the notion of ‘market drugs’ has an underlying idea of ‘profit-orientedness’ with no motive of promoting a curative purpose per se but reaping of profits. As it is will be discussed in the section of implications to self-medication below, ‘market drugs’ are not recommended by the MOH because they are known for symptom-relief effect but not effectivity for common diseases such as malaria.

Underlying the notion of ‘cheapness’ of drugs is their numerous negative side effects and not being effective in treating such conditions as drug-resistant malaria. Also another political economic issue here is that it is the poor who largely use these cheap medicines since the more effective ones are quite costly. For instance, the MOH recommends use of chloroquines and fansidar as a combined treatment. However, due to poverty, and as I will discuss later, the children largely indicated using chloroquines and panadols only, much as chloroquines should be always used together with fansidar.

Although Prout & Christensen (1996), study showed that children did not spontaneously refer to or mention the role of pharmaceuticals in illness treatment, this study has showed that children recognised the importance of pharmaceuticals for illnesses they experienced. They were even able to select particular pharmaceuticals for the common diseases mentioned. The difference in finding could be due to the differences in the disease experiences in the area of study compared to that of Prout & Christensen (1996). It is also possible that children in the current study largely suffer from diseases such as malaria which are not self-limiting and often require pharmaceuticals for their cure.

Findings in this study also show that more pharmaceuticals were mentioned by girls (187) than boys (158). This was interpreted as girls’ use of more pharmaceuticals. This is not consistent with Geissler et.al (2000), study that the proportion of pharmaceutical drug use was higher among boys and increased from 62% in the youngest group
to 75% in the oldest group. This difference in the current study’s finding could be due to the ‘keenness’ of seeking healthcare among girls than boys as already discussed. Importantly, and as results in the section on ‘how children knew they were ill’, boys ‘made agreements with close friends not to disclose illness episodes’ or waited until they were ‘too weak to play’ or ‘too weak to leave bed’ before they reported to the school nurse or matron for healthcare. Delays in seeking healthcare has the advantage that for self-limiting cases such as allergic flu, some episodes of diarrhoea and cough, recovery is possible without taking any pharmaceuticals or herbal remedies. However, there is a danger in delays to seek healthcare because for diseases which are not self-limiting, the episodes may become ‘serious cases’ as shown with malaria above.

Another probable reason for the fact that girls used more pharmaceuticals than boys is because when they get ‘gate passes’, they go home and subsequently purchase drugs from the nearby drug shops, clinics and groceries as compositions adopted and results from fgds indicate. These sources of medicines largely sell affordable or cheap remedies and ‘market drugs’ which largely provide symptom-relief effect. Consequently more pharmaceuticals are consumed before recovery.

Findings further demonstrate that the social network in boys is stronger than in girls concerning illness management. Previously mentioned was the herbal man who had a wide range of pharmaceuticals and herbal remedies which he distributed to all who contacted him when they were ill. It is possible that more remedies for common illnesses are obtained through this process, hence low frequencies in pharmaceutical varieties known among boys. Additionally, girls could be finding it easy to approach the school nurse and matrons because of the same gender. The author finds it is important, that even boys’ had matrons not patrons.

The preceding section also relates to the theoretical framework issues regarding the political economy of healthcare child agency and vulnerability and gender aspects in healthcare. As I will discuss in the section of implications to self medication, the fact that the highest proportions of pharmaceuticals for malaria treatment were the cheap options of chloroquine, panadols and other market drugs shows the level of affordability of these children. Moreover, from questionnaires, the highest proportions of the children were from over-populated city suburbs and low income families. The MOH recommends that chloroquine should be used together with fansidar as combined treatment. Since the children were not yet implementing this aspect in treatment, this study concludes that they are also vulnerable.

Children had agency and were informed about the medicines for example chloroquine was used for fever and panadols for headache. In relation to common thematic areas in compositions above, fgds and depth interviews, one of the main categories children mentioned was ‘I took medicines but I was not cured’, or ‘I took the medicines but they did not finish me’ and one matron above suggested ‘stopping to give children only chloroquines and panadols since they were not effective’.
Underlying these themes are possible findings relating to the fact that there are high incidence rates of drug-resistant malaria parasites, the drugs could also be less effective in treatment of episodes, and the is a likelihood that children are taking ‘under doses’ since it is the amount of money that determines the quantity and quality of pharmaceuticals one can acquire.

In sum, medicines mentioned as commonest pharmaceuticals at school are also the cheapest for the diseases experienced. In general, these are cheapest for the diseases mentioned. Since they are cheap, they are commonly stored in schools, drug shops, groceries and hawkers move about with some of them. Other drugs such as hedex, flu cap, action, are commonly advertised in varied media as discussed. My own experience is that there are pharmaceuticals which have not been mentioned here, which although costly are effective in management common illness episodes like malaria. Moreover, they have few side effects and like metakelfin is taken only is a single dose of two tablets. Artemether, rarely available in drug shops, groceries and smaller clinics is currently the best remedy for malaria. However, it is quite expensive much as it has few side effects.

### 4.4.2 Herbal remedies
Herbal remedies mentioned such as bombo, ekigajji, mululuza were mentioned by children. These were accessed with no prior consultation with a folk sector healer. For example children got these herbal remedies from homes, herbal gardens, school fence and from the bush as other indicated. The children even knew how to use them. However, my own experience is that drugs above may not be the best for the diseases mentioned. There are varied new drugs which children could not mention and were not stored in school. This could be because they are quite costly and have limited circulation in the market.

What the author finds significant in the section on medical pluralism is the easy discussion by the school teachers, matron and children of the “processed local remedy kyisakyamuzadde” as a good medicine. Although children readily mentioned herbal remedies, adults were reluctant to mention its use at school. Moreover, by observation the crushed leaves were commonly observed in bathing shelters. Perhaps this shows the changing pattern in herbal remedies preferences, from the processed to unprocessed.

### 4.5 Implications to self medication
For purposes of this study, self-medication means the access and use of pharmaceuticals and herbal remedies without prior consultation with the health professional whether biomedical or indigenous. There were varied implications to self medication including under dosage since medicines were taken according to amount available or amount the distributor is willing to give out.
Regarding effectiveness of herbal remedies such as ‘Kyisakyamuzadde for cough’, one paediatrician interviewed indicated that, its being effective depends on the type of cough it is used to manage. For instance kyisakyamuzadde may treat cough due to irritation of the throat but it may not treat ‘infective cough’. If infective cough is poorly managed, patients may develop pneumonia.

Other studies documented generation of drug resistant strains of pathogens including malaria MOH (2001).

Over-consumption of anti-biotics such as flagyl for stomach-ache since it was perceived that stomach-ache would progress to diarrhoea is yet another danger of self medication by these children. Moreover some tablets used for ulcers such magnesium were sometimes eaten as sweets.

The other disadvantage for self-medication in relation to source of pharmaceuticals is that expiry dates are not supervised by the national drug authority. It is common that there were more expired drugs of these nature sold to the public. Since they provide the public with symptomatic relief and no exact cure, it may be difficult to treat such people who report late for specialised care.

More to it, it is possible that self-medication is dangerous due to the presence of these drugs not recognised by the MOH, but due to the market –orientedness of the manufacturers, the public is persuaded to buy them through aggressive advertisements and making them more accessible through the shops, drug shops, clinics, groceries, markets and drug hawkers.

What remains unanswered are questions regarding, storage problems since all the pharmaceuticals were stored in the same plastic container. Although each type of medicine was in separate envelops, some had spilled into the container. All the matrons had their medicines mixed together, and it is colour, symbols of manufacturing companies, shape, and size of pharmaceuticals that were easily recognised.

Of significant importance, the medicines are readily accessible to the children and their parents too, without prescription. Since the adoption of SAPS in Uganda from the mid 1980s, even the healthcare was commoditised. Uganda has welcomed numerous numbers of investors, some of whom have invested in the area of healthcare. Their main motive is to reap profits and the citizens are of recent faced with the difficult tasks of selecting from a wide range of pharmaceuticals some of which are may not be authentic or are expired.
For instance during this research there was a report in the local press when a senior official at national drug quality control and quantity assurances said;

"National drug Authority (NDA) chiefs endangered Ugandans' life when they ordered for the drugs from Ningbo, No2 pharmaceuticals Ltd, an internationally condemned factory. The NDA authorities imported three containers of fake ear and eye drops, and anti-malarial drugs on September, 6/2002. The Chinese government had also blacklisted the pharmaceutical factory after the death of seven people who used drugs manufactured by the company" www.newvision.co.ug/ 5/June/ 2003.


Further, this study established that children used varied herbs remedies and locally processed medications such as kyisakyamuzadde- local cough mixture, mululuza ( vernonia amygdalina), bombo ( Momordica foetida) either in combination with pharmaceuticals or independently as discussed above. All these medicines could be accessed from clinics, drug shops, markets, herbal garden or bushes and from homes.

Other remedies of Chinese and Indian origin were also mentioned. These included, inhalers, vickskingo, flu caps, and fluefed ointments. By observation, there were varied, non-professional healthcare givers at the bus stops and parks with these medications, selling them even to the children.

In the conceptual framework, it was anticipated that the healthcare practices of parents in the popular sector impacts on children’s therapeutic practices. And in fgds and compositions, this was a common thematic area regarding which medications children used and their source(s). For example, the herbal man was a son of traditional healer. He mentioned that, his father, had taught him, a lot of herbal medicines, although he at the same time encouraged him to use chloroquines, and other pharmaceuticals in case of malaria.

Implicit in the above findings is that, the Ugandan public largely manages common diseases in the popular sector using both pharmaceuticals and herbal remedies. Although it is largely pharmaceuticals which are used, there are implications which as discussed may be harmful than useful to the citizens. For instance with self-medication, it is commonly the ‘market drugs’ which are used. This study has demonstrated that the market drugs such as hedex, action, coftas, vickskingo and dawanols may provide symptomatic relief, but are not effective in curing of...
diseases. Further, due to the political economy of healthcare, the people in lower echelons in the economic ladder largely depend on these pharmaceuticals. It is possible that the poor are more affected by these problems since they are more likely to buy the cheap pharmaceuticals much as they are not recommended by MOH due to their lack of effectivity.

When press reports show that the NDA may not be supervising sufficiently drug imports, it is possible that properties of pharmaceuticals especially the ‘market drugs’ such as their effectivity, side effects, their expiry dates, authenticity are unknown. However, the unsuspecting public is still persuaded by a wide range of media advertisements mentioned in the text to buy and use these medicines.

Although the MOH largely recommends that due to the high incidence rates of malaria-resistant parasites, a combined treatment should be done in case of malaria, for a market oriented healthcare system, it may be difficult to implement this since the public will purchase according to what it can afford. Significantly, the study has revealed that hospitals now manage malaria through administering both chloroquine and fansidar; however, the popular sector still depends largely on the cheaper chloroquine drugs and more market drugs for symptomatic relief. It is probable that in the problem of generation of drug-resistant strains of the common diseases such as malaria may require a much more complex recommendation including advising the public about the market drugs which the MOH has been silent about.

Closely related to the above is the issue of children as independent healthcare seekers in the already complex, adult-centred, market oriented, medical pluralistic healthcare system. This study regards this as a critical issue putting into consideration that although children above five years are also exposed to infectious diseases such as malaria, diarrhoea, cough and flu, typhoid and skin fungal infections, the public health policy still regards them as a "healthy group" needing intervention in the arena of oral-hygiene and deworming.

Subsequently these children have to deal with the problem of going to the hospital and not finding a specific place for them, may go to the clinic to purchase these medications.

Although there are changing patterns in hospitals, results show that some medicines are still kept out of reach of the children. It is only common drugs such as chloroquine, panadols, and syrups which are largely accessible to children. Additionally, since adoption of SAPS the state owned hospitals are quite inadequate in provision of healthcare. Children who indicated going to such a hospital were advised to buy medicines from the pharmacies.
It is important to note that citizens can even choose to buy what is affordable from the list of prescriptions as indicated by one drug shop owner and pharmacist.

4.6 Conclusions

This study concludes that unlike the existing public healthcare discourse about children above five years which focuses on deworming and oral hygiene, this age group largely experienced infectious diseases such as malaria, diarrhoea, cough and flu, skin fungal infections and typhoid among others.

This study's conclusion which also has theoretical implications is that children have agency and they can be actors in the arena of healthcare but they are also vulnerable. Regarding children's agency, this study established that it is the differential socialization of boys and girls in a patrilineal society which largely influences how children exhibit their autonomy. For example, whereas girls employed their agency in context of feminine values, boys' agency manifested within the framework of masculine attributes. What is clear in the gender differentiated values in disease management are feminine attributes of vulnerability, weakness, in need of care, while masculine values include power, control, perseverance and strength.

Concerning vulnerability, children above five years met obstacles in the process of healthcare seeking including limited focus in public healthcare planning and implementation of programmes for children above five years, an adult-centered and market oriented healthcare system, presence of market drugs which are readily available but only provide symptomatic relief. These market drugs are not recommended or supervised by the MOH.

Children are social actors in the arena of healthcare since they are able to define illness condition and recognise changes in their health through varied signs such as headache, vomiting, appetite loss, weakness and temperature rise. They also used a wide range of remedies including herbs and pharmaceuticals like chloroquines, panadols, fansidar, magnesium, action, and hedex as mentioned in the text. Regarding this issue, this study concludes that children can be social actors in their own healthcare in defining illness conditions and using remedies.

This study further concludes that there are gender differences in management of illness episodes at school. Whereas both girls and boys identified temperature rise as a sign of illness, girls additionally emphasised appetite loss and headache while boys suggested vomiting and body weakness. These differences in areas of emphasis were attributed to masculinity and femininity values such as power, control and beautiful body, cleanliness and vulnerability.
These gender differentials in areas of emphasis were used to explain why boys got medicines from hospitals, homes and market while girls got them from clinics, drug shops and groceries. The same finding explains why girls consumed more pharmaceuticals than boys since they could be using largely market drugs. The market drugs are symptom-relief based; hence girls compared to boys could use more pharmaceuticals for same illness. However, girls are socialised as community healthcare givers. It is possible that this gender value contributes to how they will define any bodily changes and subsequently opt for remedies.

This study also concludes that incidence rates of infectious diseases relate significantly with environmental conditions. For example, it the poor sanitation of hygienic conditions at school contributed to the episodes of diarrhoea, broken dormitory windows, dusty and sometimes muddy classes, and congested dormitories are other environmental factors which this study attributes to the high episodes of infectious diseases at school.
CHAPTER FIVE
5.0 Summary of findings and recommendations

5.1 Introduction
This study's main focus was medicine use for common diseases in a boarding school. Although it was largely a qualitative study, a self-administered questionnaire was used to verify individual children's experiences. Findings in this study have demonstrated methodological, theoretical and policy issues regarding healthcare seeking by children above five years. The theoretical issues in the preceding chapter highlight child agency and vulnerability, political economic issues and gender differentiated aspects of the problematics. Issues are in line with the research questions and problem analysis diagram of the study such as; how children know when they are ill at school, what medicines they use in context of medical pluralism and whether macro factors such as easy access to over-the-counter medications and public health policy regarding health and healthcare of children above five years had a significant influence regarding the topic of research.

5.2 Summary of findings
This study established that children above five years largely experienced infectious diseases such as malaria (91.3%), diarrhoea (82.5%), skin fungal infections (66.3%), cough (53.4%), flu (40%) and typhoid (21.3%). Although the nurse and matrons regularly gave children deworming tablets, children indicated that they had not seen anyone with worms at school; even after we have taken the medicines, in both boys' and girls' fgd.s. Results also show that the nurse did not mention ringworms, much as children ranked it the fourth commonest disease at school. Perhaps this is because no child reported to her for remedies, since they made a mixture of 'omo' and sodium carbonate for its remedy. Whereas the nurse ranked diarrhoeas among the least frequent disease, children ranked it second to malaria. It is possible that the nurse, together with the school administration are cautious about discussing hygiene related diseases since the state had passed a legislation to close all schools with poor sanitation.

Since commonness of a disease also had an underlying element of seriousness or severity of such a disease, some diseases which children mentioned and were not mentioned by the nurse or school matrons could be severe according to children's judgement and not to the key informants.
Whereas the matron suggested the presence of candidiasis among girls due to changes in menstrual cycle, all girls interviewed argued that they had that problem because of using dirty pit latrines. However, with flush toilets they no longer had the problem. Consistent with these assertions were the headmaster and matrons' arguments regarding the low frequency of this disease among girls. The contradictory information surrounding this issue could be attributed to the general silence around reproductive health issues. It is also likely that the 'cleanliness at school' has solved the problem. The author did not consider this issue further, since one of the objectives of this study was to identify common illnesses at school as defined by the children. It possible that 'itching' is still common among girls since pit latrines and 'pit toilets' were not hygienic.

Children knew when they were ill. There were varied signs and indicators to illnesses including high body temperature, vomiting, headache, weakness, appetite loss and diarrhoea.

In general increase in body temperature ranked highest among both boys and girls. However boys emphasised body weakness and vomiting in addition to body temperature rise as major signs of illness. Meanwhile girls ranked appetite loss and headache as important factors in addition to increase in body temperature. It is important to note that there were no thermometers to verify the rise in body temperature, much as children could compare the heat generated from their own bodies with that of their healthy friends.

Underlying the fact that, boys largely knew they were sick when they are 'weak' or too weak to go to class, or play are attributes of masculinity in terms power, strength and attributes to males in patrilieal societies. Boys also made agreements with their friends when they are sick, not to tell the matron or nurse. The agreements were only broken when the friend is too weak to go to class or leave bed. This further led to gender differences in administered therapies. The nurse confirmed that she often administers injection to the boys because by the time they come to her, they are too weak with the illness. The delays in reporting make treatment of illnesses among boys more complex.

Gender differentials in identification of illnesses among the children have been interpreted with varied attributes of masculinity and femininity. For example, the notion of weakness among boys tallys with the masculine attributes such as strength, power, and control, while vomiting and appetite loss, compare with feminine attributes of the healthy, clean and beautiful body.

The infectious diseases were largely treated with pharmaceuticals such as chloroquine (95%), panadols (73%), flagyl (60%), fansidar (55%), quinine injections (51%), action and capsules (amoxicillin and ampicillin) (31%),
among other medicines. These were obtained from the clinics (95%), drug shops (64%), pharmacies (65%), home or markets (22%). Some children got the pharmaceuticals from the school nurse and matrons. The school allowed them to come with their own medicines. By observation, each dormitory had about four children whose parents were either non-professional healthcare givers or were working in health institutions. These children were depended upon to give or share their remedies with their peers. This study finds this noteworthy because such children could be involved as peer health educators and a ready source of medicines for common diseases.

As argued earlier, children mentioned skin fungal infections as a common disease at school, much as the nurse did not recognise it. This is because they had their own therapies and did not complain to the nurse about it. In all fgds, it was indicated how easy it was to treat ringworms or any skin infection. Other children indicated use of Indian medicines such as, soaps, ointments and crèmes which they come with from home. It is also important to note that, the nature of this disease allows the child to go on with it without seeking treatment. Therefore the fact that children recognised its commonness could be due to its high frequency in occurrence.

Findings further show that there were gender differences regarding the incidence of diseases at school, medicines used, illness experience and criteria for selection of medicines. Although not statistically significant, there were more cases of diarrhoea, among boys. This was because of their unhygienic practices such as use of 'toilet buckets' as food utensils, and reluctance in cleaning their feeding utensils.

Closely related to the above is the criteria used to select therapies by gender. Unlike the girls who largely mentioned according to disease as a criterion, boys preferred medicines due to their effectiveness and 'fast cure' or 'powerful action'. Findings as already discussed show that criteria for selection of therapies correlate to the source of medicines. Whereas girls were keen to identify that they were sick and subsequently seek remedies, boys were even reluctant to disclose that they were sick. The practice also posed a problem to the school since the girls often wanted to go home even for illnesses which the school could easily manage.

It was established in this research that boys used more herbal remedies than the girls. This was because of the presence of 'herbal man' in the dormitory who had often carried a wide range of remedies, and was ready to administer them to his kin. In essence, the children referred to report to him for medications prior to the nurse. The practice was less common among girls.

Due to medical pluralism, there were a wide range of herbal remedies 'got from the bush', 'from the herbal gardens' 'behind the school fence' or from the market. These included Mululuza, Ekigajji and Bombo. These were
supplemented by locally processed therapies such as kyisakyamuzadde, samona crème, soaps for skin fungal infections and a wide range of Indian remedies. The locally made therapies of salt and omo complemented the medicines at school.

Choice for these remedies was based on criteria such as according to disease viz; - chloroquine for malaria, hedex for headache and panadols for aches and pains. Medicines were also selected according to past experience with it, or whether the nurse or parent had recommended it.

This study has further demonstrated that children above eight years can be independent healthcare seekers. For example one boy indicated having fever and headache was not helped at a drug shop but was advised by his friends to “buy panadol for headache and chloroquine for fever. Implicit in this finding are structural barriers which hinder children’s ability to be actors in the arena of healthcare in their own right. For example, the drug shop owner could be reluctant to give advice on medicines to buy, since his main aim is to reap profits. He may not be able to advise on medicines to buy since there are a range of pharmaceuticals for one symptom. Regarding neutral public healthcare planning for children above five years; common themes to the question why children wait for their parents to take them to the hospital were getting lost at the hospital, being sent home to collect a parent and more importantly that it is parents who had the money. Other children instead went to the clinic where they were known and payment could be made at a later date.

Thematic areas in the preceding section are indicative of the effect of neutral public health planning for children above five years basing on their discourse that they are a 'healthy group', and that they are always under the adult healthcare giver. The hospitals also have the paediatrics, antenatal and general medicine clinics, but now unit for children in this study's age group. Additionally, political economic issues come to the fore. For example, with the adoption of SAPS such as privatisation and commoditisation of healthcare, there are varied implications in the arena of healthcare seeking by children as social actors. Although respondents indicated some level of decision making, the parents were still instrumental in meeting the costs incurred for specialised care.

Publications available have indicated dangers generated through self-medication including under-dosage, over-medicalisation of the citizens by profit-oriented pharmaceutical companies, generation of drug-resistant strains of pathogens. This study has added to this literature by showing that in the schools and due to self medication, the MOH recommendation for effective management of malaria through combined treatment was not adopted yet. The school nurse still administered chloroquines, till the case becomes serious. Also not prior documented in other studies, is fear to buy expired drugs. It is probable that children were taken advantage of in the process of
self-medication. It is also not uncommon to find drugs being sold in re-packaged form such as all tablets are mixed together in one container for sale as observed in two drug shops. This makes the issue of selling expired pharmaceuticals even more critical because clients are unable to tell the dates of expiry from such containers.

This study has also found out that due to the profit-orientedness of private boarding schools, there is little spent on the general healthcare of the children. It is instead preferred that cases of sick children are given "gate passes" so as they can go home for care. This was especially an issue because cases sent home also included children with measles. The practice is not only hazardous regarding the spread of such as highly contagious disease, but also costly in terms of control in case there is an epidemic.

Moreover, the school had no sickbay and all illness episodes were managed from the already-overcrowded dormitories. Although the practice may be commendable for reducing on costs for healthcare, this study predicts that more cases of illnesses will be observed in the dormitories since disease transmission is easy from the sick to the healthy due to sharing of small space available.

5.3 Recommendations
In this section, the author provides recommendations which could be adopted to improve the health and healthcare of children in boarding schools and perhaps children above five years in developing countries. Ideas from which recommendations are based were identified during fieldwork and issues observed in the school of research.

5.3.1 Recommendations to children
This study found out that some of the diseases at school are due to children's own negligence. For instance, the use of toilet buckets by boys to collect food, or keeping the plates unwashed and later use it for another meal. The boys themselves could avoid this through good hygienic practices.

Results also show that the broken windows were left unattended to because boys always engage in rigorous exercises and throwing stones to each other. Since by now the boys have seen the disadvantages of engaging in violent activities including sleeping in dormitories without windows for years, it is advised that with replacement of these windows, boys should endeavor to preserve and not destroy them.

Further, there was sharing of medicines by both boys and girls. The implications of these are varied. Although there may be symptomatic relief through the process and helping the others when the nurse is not around, there is
a possibility that the remaining dosage may be inadequate for their kin. As mentioned earlier, the MOH, has attributed development of drug resistant strains of malaria and cough to under dosage or taking expired, fake or poorly stored drugs. It is therefore recommended that children consult with the nurse even after taking some medications to ensure that they take a complete dose.

This study found that due to delays to report illness episodes to the matron or nurse by the boys, the nurse had to administer more powerful drug options such as injections. Moreover the cases reported were by then difficult to treat. Additionally the school found boys' illness episodes 'very serious' since they reported when they were very weak requiring 'immediate rushing to hospitals'. Such expenditures could be avoided by prompt reporting of cases. It is recommended that boys begin to co-operate in this aspect in order to ensure prompt management of illnesses.

In general, girls were keen at reporting those who were ill to the matron or nurse. However, persistent requests for the "gate pass" may have implications especially for highly contagious diseases discussed earlier.

5.3.2 Recommendations to the school administration
This research established that children experienced varied communicable diseases at school including malaria, diarrhoea, cough, skin diseases such as ringworms and flu. Some of the diseases are directly linked to the poor sanitary conditions at school such as lack of a drainage system, poor hygienic pit latrines and blocked toilets, over flowing garbage bins, children sleeping in dormitories with broken windows and open ditches with stagnant water. Some of these factors are breeding sites for vectors such as houseflies and mosquitoes. The vectors facilitate transmission of disease causing organisms for malaria and diarrhoea. The school could therefore minimise the high episodes of malaria and diarrhoea by, ensuring that the places namely the garbage bins, the pit latrines, and toilets are cleaned regularly and high hygienic standards maintained. Since the children already bring to school large numbers of toilet papers, the school should ensure a constant supply of them to the toilets, since one of the reasons for toilet blockage is use exercise books.

Closely related to the above is the boys' use of buckets for 'flush toilets' to collect food and their use of dirty utensils for food without restriction by the cooks. Perhaps, the cooks should inspect and discourage some of these practices, since they could be contributing to the high incidence rates of diarrhoea among the boys on weekends and visitation week as discussed earlier.
Moreover, the school administration should invite an architect to design for them a drainage system, since even a slight downpour leads to flooding of some parts of the school and some parts become muddy. Water freely flows through primary five (P5M) and one of the girls' dormitories to the open ditch outside the school fence. These are some of the hazards which the school could begin investing into to minimise the disease episodes among the children.

Further, results show that the main cause of typhoid was drinking unboiled water at school. If tap-water has micro-organisms responsible for typhoid, the school could avoid these diseases through boiling water that children will drink.

This study recommends a simple activity such as replacing the broken windows especially in the boys' dormitories to the school administration. This would be instrumental in reducing the transmission of malaria parasites among these children since a negligible percentage had mosquito nets.

It was also established that the school prepared meals once and kept the rest for the next meal. This is commendable, if the reason is to save on expenditure for fuel. However, it is recommended that children be given hot meals. Closely related to the above, boys used toilet buckets when good food is prepared. Perhaps the frequency of preparing 'good food' could be increased so that children are not overwhelmed by any changes in meal type.

Significantly, the school already indicated willingness to participate in the National Environment Management Authority (NEMA) guidelines for environmental audit introduced to them by the author. It is expected that they will work towards achieving a healthy environment and a productive school.

Other recommendations are long term. For example, since the acquisition of the school property and buildings, there have been no efforts for renovation. Since beyond the painted office and the block overlooking the main road are dilapidated buildings, there is need for renovation and restructuring of the entire school in the near future.

Also, accommodating children on triple-decker beds is quite congested. Perhaps the school may need extra space to construct large and modern dormitories for its children.

Regarding the area of healthcare, the school needs to set aside a block for a sick bay because it is quite easy for diseases such as measles which the school experienced the previous term to spread to the entire school if sick
children are left in the already over-populated dormitories. Moreover, this study also recommends that sending home children who are perceived to have contagious diseases such as measles, mumps and typhoid or simply for better care be discouraged since these children have siblings at home who may be exposed as well. Perhaps, quarantining them in the school sickbay would be the best option.

The nurse too should advise the matrons on pharmaceutical storage because by observation all the medicines including chloroquine, flagyl, panadols, capsules and eye ointments were mixed together in one container for each of the dormitories. Moreover, one matron disclosed that in case some children have eye infections one tube of ointment is used on all the children in her dormitory so that others will not get infected. The use of the eye ointment for prevention may be an inappropriate activity because more children may instead be infected in the process.

The school's use of kyisakyamuzadde- a local cough mixture bought cheaply from the markets, when there is a cough epidemic is commendable. However, for the infective coughs, use of kyisakyamuzadde may only worsen it and delay effective treatment. Some children may develop pneumonia. Therefore, it is recommended that the school nurse should sometimes use antibiotics, albeit in combination with the locally made cough mixture.

Allowing children to bring to school pharmaceuticals and herbal remedies is commendable. However, by observation, the children were unable to store them hygienically. One of the boys also called the 'herbal man' had juice and other herbal mixture spilled over packets of chloroquine, panadols and capsules. It is recommended that the school start to supervise storage and use of medicines by children.

Although already mentioned to the school headmaster by the children, this study also mentions to the headmaster to discourage use of one machine for shaving all children’s hair without ‘spirit’ or disinfectant. The practice has been attributed to the high incidence rates of ringworms or skin fungal infections especially in the heads.

5.3.3 Recommendations to parents
This study recommends to the parents to request exploring the school facilities which the school has prohibited them. Perhaps some of them will make worthwhile recommendations to the school regarding children’s well-being and more specifically in the area of healthcare.

Regarding the school visitation weekends, the parents could be instrumental in comparing existing assertions that it is the parents responsible for high episodes of diarrhoea because they bring for children oily food and too much
of it. Perhaps these results could be verified, by also comparing the school sanitation at that moment in time, especially in dormitories, garbage bin and kitchen hygiene.

5.3.4 Recommendations for healthcare providers
In general, biomedical healthcare workers interviewed including the paediatricians, nurse and two doctors with training in public health indicated that they normally require a child to come with an adult or to be sent by an adult before they can administer meaningful treatment. This study recommends a wider view of children by these practitioners since Uganda is one of the leading countries with orphans, some of them living in child-headed households.

Moreover, this study has already showed that children are social actors in the arena of healthcare. For instance there was ‘the herbal man’ who administered medications in boys’ dormitories and some girls too indicated sharing medicines with sick friends. Additionally there was sharing of information among peers even regarding medicines to buy. This study recommends that MOH and professional healthcare givers use this ‘resource’ to reach children adequately. Children could be effective peer health educators in use of pharmaceuticals.

One of the doctors indicated non-willingness to give adequate medications to a child as an independent healthcare seeker. Such fears reflect the ideals in household structure which the public health discourse adopted in its policies. However, findings in this research show that children will even hesitate to take medicines until they are too weak. And that the restrictions put in place by the hospitals have instead diverted the children to seek healthcare from clinics (drug shops), shops, markets and they only go to big hospitals with parents. This study therefore recommends that a short awareness course could be designed for health professionals to highlight the issue of children as seekers of healthcare in their own right.

Unlike the prior focus of public health programmes for children above five years to antihelminthes and oral hygiene, results show that the immediate healthcare needs for this age category are programmes for prevention and prompt management of infectious diseases as discussed above. It is therefore recommended that the public healthcare policy be redesigned in order to meet the healthcare needs of this age group.

Meanwhile it is clear in this study that at the pharmacy and drug shops are profit oriented entities, where the child or adult will always find a drug tallying with the amount of money they can raise. It is also clear how the commoditisation of healthcare system may pose more complex issues which the state did not foresee. Firstly there are numerous persons selling these pharmaceuticals, with only the ability to “advice basing on the price”,
and more so, this is the major source of healthcare for children as independent healthcare seekers. This study recommends that the state put in place guidelines regarding importation and sale of pharmaceuticals. Moreover, it is also recommended that the MOH- Uganda enhances its project of training non-professional healthcare givers, in basic skills regarding use and importance of dosage of pharmaceuticals. This project could be beneficial if children too were integrated into the target population as peer educators.
References


Hardon, A ( 1994) “People’s understanding of efficacy for cough and cold medicines in Manila, the Philippines”. In Etkins, N.L & M.L Tan (eds) Medicines; meanings and contexts. Quezon city, Philippines: Health international network.


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### Appendices

**Appendix 1: Structured questionnaire**

#### Socio-economic variables

1. Names
2. Age
3. Genders: Male, Female
4. Class of study
5. Occupation of parents
6. Place of residence

#### Illness experiences and therapeutic practices

7. Common diseases at school
8. How did you know you were sick?
9. What medicines did you use?
10. How do you choose the medicines?
11. Where do you get the medicines?
12. When you have used medicines and you do not recover, what do you do?
13 Have you ever gone to the hospital alone?

14 Write a short story about your going to hospital alone.

15 Why do you always wait for parents (your mother) to take you to hospital?

16 How did you tell the doctor/nurse what you were sick of?

17 What instructions did you receive from the doctor/nurse?

18 What herbs/local medicines do you use at school?

19 Where do you get the local medicines/herbs?

Thank you very much for your co-operation
Appendix 2: Interview guide for key informants

For professional healthcare givers

Tell me your experience with healthcare seekers of different age groups.
What is your experience with children in healthcare?
Are their gender disparities in healthcare seeking by children above five years?
What factors influence children’s healthcare seeking behaviour?
What are your recommendations regarding children’s healthcare seeking in their own right?
What are common illnesses children above five years report to you with?
What medicines do you prescribe?

For non-professional healthcare givers

What are their experiences in healthcare giving to people in different age groups?
What is your experience with child healthcare seekers?
Are there differences between adolescents health seeking behaviour?
What factors influence children’s healthcare seeking behaviour?
What are your recommendations regarding children’s healthcare seeking in their own right?

For school administrators

General children’s health seeking behaviour
Your role in ensuring well-being
Your role in healthcare and therapeutic practices
Views regarding children’s role in healthcare seeking and use of medicines

For parents

General children’s health seeking behaviour
Your role in ensuring well-being
Your role in healthcare and therapeutic practices
View regarding children’s role in healthcare seeking and use of medicines
Appendix 3: Interview guide for focus group discussion

What was the recent time you were ill?
How did you know you were ill?
How did you determine the type of sickness?
Who did you determine its severity?
What medicines did you use?
How did you get the medicines?
If you did not take any medicines, what did you do in order to become well?
Why did you choose other remedial procedures?
What is the role of peers in case an individual is ill?

Parents' contribution
What are some of the medicines you are allowed to bring to school?
Do you buy medicines when you are sick?
What are these medicines?
Where do you buy them?
Appendix 4: Guidelines for writing compositions

1. Write a short story about the last time you were sick at school and the medicines you used.
2. Write about common diseases in the dormitories and the medicines you commonly use.

Appendix 5: Guidelines for listing exercise

1. List common diseases children suffer from at school
2. List common medicines you use in the dormitories

Appendix 6: Guidelines for photography

With this camera, (you may team up with your friends), photograph at least eight different places at school which could be contributing to the common diseases at school.
Boys managed illnesses such as accidents at school. This boy had an older brother to 'take care of him'.

One of the boys' dormitory windows. They were frames without glass.

Deserted PSM. All waste water flowed through it to the open ditch behind the school fence.
Part of the photography team. About 20 children joined the photographers to show them dirty places.

The only water-source at school. Water for cooking, drinking, flash toilets and for washing.

One of the dirty pit toilets where children were supposed to fetch water and pour their...
...Inside the girls' dormitory. Children used tripple-decker beds which were quite congested.

...water trench behind one dormitory. Water flows through it to p5M

...'Washing day'. Few basins of water were provided to all children for washing.