Acknowledgement

I would like to thank Sudan University of Science & Technology particularly the Institute for Family and Community development of this research. I have enjoyed the research and look forward to for implementation of the findings in school health among local community in West Darfur State and in national setting.

Many persons have helped me to conduct this study. Most of all, I am grateful to Professor Fatama Abdu EL Manhood who has supervised this study, and has offered her continuous guardianship.

Also, most appreciation, to my co- supervisor for providing wide facilitates Dr Ebtisam.

I would like to acknowledge the efforts made by the State Ministry of health team, as well as State Ministry of education team, all representative of Parent Teaching Associations of schools, all the participating school and all the NGOs in West Darfur Sate from the various disciplines, who voluntary spent time and energy and worked wholeheartedly for preparing and implementing the study on time in spite of instable situation in Darfur My family has shown great support for this project and I thank them for their patience and understanding

Finally, special thanks go to Save the Children/USA health team who provided all the technical support needed and their continued assistance throughout the study

May I forget some persons, but any one did a favor to me, I am so grateful to him

God help me to do the beast to all of them

Abstract

This is a descriptive study and a cross-sectional, School – based Student Health Survey. The purpose of the study was to:

To conduct an in depth review of the school health status in West Darfur State with the view of proposing a comprehensive and community-based model

The survey was administered to schools directors and students aged 11to 15 years old in 46 schools across West Darfur State chosen through a two stage cluster sample design. Data was weighted to adjust for non response and varying probabilities of selection. The survey included questions on alcohol and other drug use, dietary behaviors, hygiene, mental health, protective factors, violence and unintentional injuries, Tobacco use and attitudes towards sexual; reproductive health and HIV related knowledge and health services coverage and school health fund.

Result indicated several areas of concern. Related to risk behaviors and protective factors leading to causes of mortality and morbidity among youth and teenagers, the results are presented overall and by gender. As well as low school health services coverage and lack of fund to run school health activities

A recommendation act to promote school health services and to evaluate, modify the present educational programs, develop and design up to date programs, and developing guidelines for teaching staff, students, parents, and health providers that promote health of students and surrounding communities through improving their level of knowledge and awareness, attitudes, behavior, gaining skills and healthy practices.

خلاصة الأطروحة

دراسة وصفية مقطعية للمسح الصحى المرتكز على تلاميذ المدارس والتى تهدف الى :

ً اقامة مراجعة عميقة للوضع الصحة المدرسية في ولاية غرب دارفور من خلال رؤية ترتكز

على النموذج المجتمعي الشامل

شملت الدراسة الإداريين بالمدارس والتلاميذ الذين تتراوح اعمارهم بين 11الى 15 عاما فى 46 مدرسة بولاية غرب دارفور . تم اختيارهم عن طريق تصميم عينة ثنائية عنقودية . مع مرعاة التمثيل النسبى احكاما للمفارقات الاحتمالية وعدم الاستجابة في الاختيار .

اسئلة الدراسة شملت الاتى: تعاطى الخمور والمخدرات,السلوك التغذوي, النظافة العامة والصحة الشخصية , الصحة العقلية , عوامل الوقاية, العنف والاصابات غير المتعمدة, تعاطى التبغ , السلوك الجنسى والصحة الانجابية و المعرفة المتعلقة بفيروس نقص المناعة البشرى المسبب لمرض الايدز وكذلك اسئلة خاصة بتغطية خدمات الصحة المدرسية وتمويل انشطة الصحة المدرسية.

النتائج تحصلت على عدة محازير وسط تلاميذ المدارس عموما وكذلك من خلال النوع تتعلق بالسلوكيات الخطرة التى تهدد صحة التلاميذ وعوامل الوقاية التى لها علاقة باسباب المراضه والوفاة بين فئة الشباب واليافعين مع التدنى الحاد فى تغطية خدمات الصحة المدرسية وانعدام التمويل لتسير انشطة الصحة المدرسية.

التوصيات العمل على تطوير خدمات الصحة المدرسية و تقييم وتعديل البرامج التثقيفيه الحالية وتصميم واستحداث برامج تثقيفيه جديدة واستحداث ادلة تثقيفية وتدريبية لهيئة التدريس والمرشدين الاجتماعيين, والتلاميذ , الاباء وأولياء الامور التلاميذ ومقدمى الخدمات الصحية التى من شأنها أن تعزز صحة التلاميذ و المجتمات المحيطة بالمدارس من خلال تحسين المعرفة و الوعى, المواقف, السلوكيات, اكتساب المهارات والممارسات الصحية

List of abbreviation:

- ADEA: Association for the Development of Education in Africa
- AFRO: Regional Office for Africa
- AIDS: Acquired immune deficiency syndrome

- ALC: Active learning capacity
- ADB: Asian Development Bank
- CAPT: Northeast Center for the Application of Prevention Technologies
- CDC: US Center for Disease Control and Prevention
- CIDA: Canadian International Development Agency
- CRC: Convention on the Right of the Child
- CTL: Condition of teaching and learning
- CFNI: Caribbean Food and Nutrition Institute
- CRS: Catholic Relief Services
- CTC: Child to Child Trust
- CBS: Central bureau of statistics (UNFPA)-Khartoum.
- DALY: Disability- adjusted life year
- DASH: Division of Adolescent and School Health(at CDC)
- DFID: UK Department for International Development
- DOH: Department of Health
- EDC: Education Development Center
- EFA: Education for All
- EI: Educational International
- ENHPS: European Network of Health Promoting Schools
- EMRO: Eastern Mediterranean of regional office WHO.
- EURO: WHO Regional Office for Europe
- FAO: Food and Agriculture Organization of the United Nations
- FRESH: Focusing Recourses on Effective School Health
- FOMH: Federal ministry of health.
- GPA: WHO Global Programme on ADIS
- HBSC: Health Behaviour in School Age Children
- HHD: Health and Human Development Programmes (at EDC)
- HIV: Human immunodeficiency virus
- HIS: Health information system
- IBE: International Bureau of Education
- IQ: Intelligence quotient
- IRC: International Water and Sanitation Center
- IDA: Iron Deficiency
- INDB: Inter American Development Bank

- J.ch.H: American journal of school health.
- MLA: Monitoring Learning Achievement
- MOE: Ministry of Education
- NGO: Non- governmental organization
- PAHO: Pan American Health Organization
- PCD: Partnership for Child Development
- RAAPP: Rapid Assessment and Action Planning process
- PHC: Primary health care.
- PEM: Protein energy Malnutrition
- RH: Reproductive Health
- STD: Sexually transmitted Disease
- STI: Sexually transmitted Infection
- SPSS: Statistical package for social sciences
- SH: School health.
- SHP: School health program.
- SMOH: State ministry of health.
- SC/US: Save the Children(USA)
- UN: United Nations
- UNADIS: Joint United Nations Programme on HIV/ADIS
- UNDP: United Nations Development programme
- UNDCP: United Nations Drug Control Programme
- UNFPA: United Nations population Fund
- UNESCO: United Nations educational, scientific & cultural organization.
- UNICEF: United Nations Children's Fund
- USAID: US Agency for International Development
- UNEP: United Nations Environmental Programme
- VAD: Vitamin (A) Deficiency
- WCEFA: World Conference on education for All
- WFP: World Food Programme
- WHO: World Health Organization
- WWW. World Wide Web
- YRBS: Youth Risk Behaviour Survey

List of tables and charts

- Table (1) Dietary behaviors among school age children
- Table (2) hygiene related behaviors among school age children
- Table (3) Violence and unintentional injury among school age Children
- Table (4) Physical activities among school age children
- Table (5) mental health among school age children
- Table (6) Tobacco use among school age children
- Table (7) Alcohol use and other drug use among school age children
- Table (8) Reproductive and sexual health attitudes among school age Children
- Table (9) Protective factors among school age children
- Chart (1) Percent of NGOS that stated support foe secific school health, nutrtion and protection activiteies.
- Chart (2) how school healt services are delivered to students.
- Chart (3) time spent onisite by school health professionals.
- Chart (4) other providers of emotional/social health services to students
- Chart (5) how school health services are funded
- Chart (6) most important unmet health needs of students
- Chart (7) belief that increased health services would help raise academic achievement
- Chart (8) additional services that would benefit student's top three responses provided

Chart (9) how additional school health services should be funded

Table of Content

	Pages
Acknowledge	
Abstract	II
Abstract in Arabic	III
List of abbreviation	IV-V
List of tables and Charts	
Table of contents	
1.Chapter one Introduction	1
1.1. Prefatory	1
1.1.1. What is school health?	
1.1.2. Role of health in schools	
1.1.3. Focusing Resources on the School Age Child	4
1.1.4. The Basic Framework for an Effective School Healt	
Nutrition Programme	6
1.1.5. Core frameworks for action: four components that she	
made available together in all schools	
1.1.6. Supporting Activities	
1.1.7. Evolution of school health	
1.1.8. School health problem	
1. 2. Objectives:	
1.2.1. General	
1.2.2. Specific	
2. Chapter two literature review	
2.1 Health Services	
2.1.1. Unique functions	
2.1.2. Access to Health and Nutrition Service	
2.1.3. School Based Health Services	
2.1.4. Lessons related to the rationale for school feeding prog	•
2.1.5. Health Problems	
2.1.6. Helping orphans and other vulnerable children to stay	
2.1.7. Psychological and Emotional Distress	
2.1.8. Addressing the issue	
2.1.9. School Health management and Planning	
2.2. School health Donor and Agency Support	
2.2.1 United Nations Organization, Funds and Agencies	56

2.2.2. Multilateral Finance Agencies	65
2.2.3. Bilateral Organizations	69
2:3.The link between health and learning	78
2.3.1. The role of school health and nutrition at the education for	
All conference	78
2.3.2. Call for action at Jomtien	79
2.3.3. A growing body of evidence: the link between learning and	
Health	80
2.3.4. Effective strategies at past decade	
2.3.5. Suggestions for EFA 2015	88
2.3.6. Conceptual frameworks: the principle that drive action	92
3. Chapter three Study design and methodology:	118
3.1. General out-lines	
3.2. Study area	
3.3. Study population	118
3.4. Sampling	
3.4.1 Schools survey	119
3.4.2. Case study	
3.4.3 Sample size equation	119
3.5. Survey administration	120
3.6. Ethical consideration	
3.7. Methods of data collection	
3.8. Methods of data processing & analysis	122
4. Chapter four Results and discussions	123
4.1. Part I risk behaviours and protective factors	
4.1.1. Dietary behaviors	123
4.1.2. Hygiene related behaviors	125
4.1.3. Violence and unintentional injury	128
4.1. 4. Physical activities	
4.1.5. Mental health	132
4.1.6. Tobacco use	
4.1.7. Alcohol use and other drug use	135
4.1.8. Reproductive and sexual health attitudes and HIV	related
knowledge and HIV related knowledge	
4.1.9. Protective factors	
4.2. Part II School health services	
4.2.1. Providers of school health servoces	
4.2.2. Funding of school health servicres	
4.2.3. Unmet health needs of students	
4.2.4 .Additional health services needed by schools	146

4.2.5. Future funding sources	147
5. Chapter five Conclusions and recommendation	149
5.1. Conclusions	149
5.2. Recommendation	152
6. Annexes:	157
6.1. List of references	157-182
6.2. Questionnaires and cheic list	183-202
6.3. West Darfur State Health Services Map	203
6.4. West Darfur State Education Services Map	