

Community Attachment for Training, Research and Services (CARES) program as a strategy for Community-Based Hospital Rotations and Research in Training Health Professionals

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Definition of Community-Based hospital rotation

- Community based hospital/clinical rotation is the placement of health care professionals on training in community health care facilities located in the rural or urban underserved areas (Mudarikwa *et al.*, 2010) .
- Hospital rotation - clinical placement/ clinical training in rural health facilities or urban underserved areas

Introduction

- The preparation of students in all healthcare disciplines relies heavily on clinical training.
- The students need the experience of direct interactions with the individuals, families, groups, and populations that they will be caring for when they enter professional practice (Amalba *et al.*, 2020)
- There is a growing trend toward providing care in smaller community-based clinics instead of academic hospitals (Yahata *et al.*, 2020)

Introduction cont.

- The traditional site of clinical training for students in many health professions has been the teaching hospital, often affiliated with a university or other academic center. However, large academic medical centers represent only a small percent of all hospitals.
- To address workforce shortages and community needs, the provision of health care is shifting away from expensive and centralized hospitals to encompass more lower-cost, community-based settings.

Importance of clinical training in community based settings

- It exposes medical students to the **unique healthcare needs** of rural and underserved populations and **prepares them to serve these communities** after graduation.
- It is increasingly vital to student development. Community-based clinical training affords students the opportunity to apply what they have learned in the classroom to **real-world situations** to gain a better understanding about the **effect of physical and social environments on the health** of both patients and communities .
- Research shows that training in rural and underserved areas leads to **practice in those areas**

Importance of clinical training in community based settings cont.

- Students can develop systematic approaches for assessing health problems, learn health promotion techniques, and understand **community resources and interventions to address community health problems** (Taylor *et al.*2024)

Current Challenges in clinical training

- The number of health professions students admitted to educational programs is increasing.
- A shortage of clinical training sites is affecting schools across health disciplines. Recent surveys have indicated that schools of medicine, schools of nursing are all reporting concerns about the insufficient number of sites and preceptors is limiting their ability to accept qualified applicants or sustain the program's growth.
- Challenge in today's health-care environment is providing health professional students ample opportunities in the limited traditional hospital settings to develop the critical thinking and practical application skills necessary to meet their required learning outcomes (Franzese, Pecinka and Schwenk, 2020)

CARES program- an approach for community based clinical training/ hospital rotation

- The purpose of this presentation is to demonstrate how CARES program has been implemented in training of health professionals (students in Medicine, Pharmacy, Nursing and medical lab) at Maseno University.

What is CARES?

- Community Attachment for Training, Research and Service (CARES)
- A school-wide activity and not a department
- All members of the school are involved
- Theory
- Clinical
- Field Activities
- CARES BScN Year 2
- CARES BScN Year 4

ACTIVITIES AT CARES 1

- A two-week course work – multidisciplinary; Public health, clinical medicine, maternal and child health specialists, nutrition
- 4 weeks fieldwork based in rural health centers.
- Community Based Hospital Rotation activities
 - Triaging and record keeping
 - Sharing of health messages through giving health education
 - Clerkship
 - Administration of medicines
 - Conducting laboratory investigations
 - Participation in MCH/FP services
 - Rotation at PHO department

Cont...

- Community based clinical activities
 - Community assessment and diagnosis- assessing families in their households, collecting information about families using questionnaires, data analysis, presentation and report writing
 - Home visiting
 - Conducting school health program
 - Meat inspection and visit to water and sewerage treatment plant

WEEK 1: COMMUNITY ENTRY AND MAPPING

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	<p>Develop Clinical Rotation Schedule</p> <p>Meeting the Health Center Staff</p> <p>OPS (O-Observe, P-Participate, S-Serve in clinical service area under supervision)</p>	<p>Community Entry <i>Meeting the sub-County Health Management Team (sCMOH, Nursing Officer, s, sub-County Public Health Officer, sub-County Clinical Officer, sub-County Nutritional Officer, sub-County Health Services Focal Person, sub-County Medical Laboratory Technologist, Coordinators)</i></p>	<p>OPS</p>	<p>Community Activity (Data Collection) <i>Community Mapping</i></p>	<p>Tutorial (TP 1)</p>
Afternoon	<p>Tutorial (TP 1)</p>	<p>Meeting the County leaders <i>(Sub-County Commissioner, Chief, sub-Chief, village elders)</i></p>	<p>Out-Patient Health Talks <i>Each student to present health topics on emerging health issues</i></p>	<p>Community Activity (Data Collection)</p>	<p>Home visiting Assess the family and establish the diagnosis</p>

WEEK 2: PRIMARY HEALTH CARE ACTIVITIES/ COMMUNITY BASED ACTIVITIES

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	OPS	Primary Health Care (PHC) and community Based programs overview PHO to conduct the learning session CHEW to present	Field Activity (Data collection) Meat inspection in local abattoir (observe right PPE, Prepare to wake up very early in the morning)	<i>OPS</i>	Tutorial (TP 2)
Afternoon	Tutorial (TP 2)	PHC overview Participate in PHC and or community-based activities in the isolated community unit	Field Activity (Data collection) Inspection of water and sewage treatment plants	School health program	Home visiting Prepare plans to address the diagnosis with the family Start implementing the plans

WEEK 3: COMMUNITY DIAGNOSIS

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	OPS	Field Activity (Data collection) <i>Student to conduct diagnosis in selected community unit</i>	Data Processing (Analysis) OPS	Field Activity (Data collection) <i>Student to continue with diagnosis in selected community unit</i>	Tutorial (TP 3)
Afternoon	Tutorial (TP 3)	Field Activity (Data collection) <i>Student to conduct diagnosis in selected community unit</i>	<i>Student to enter and analyze diagnosis data</i>	Field Activity (Data collection) <i>Student to continue with diagnosis in selected community unit</i>	Home visit Implement interventions with the family

WEEK 4: COMMUNITY FEEDBACK

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	OPS	Home visiting Evaluate the interventions and provide evidence to the tutor	Feedback to the Health Center <i>Student to give feedback to health center team on the results of community diagnosis data</i>	Tutorial (TP 4) Feedback to the community Student to give feedback to the community assessed on the results of community diagnosis data	Return to Maseno University
Afternoon	Tutorial (TP 4)	Data Processing (Analysis) <i>Student to process data and obtain results on community diagnosis data</i>	Data Analysis and Report Writing <i>Student to analyze and write report on community diagnosis data as per the template provided</i>		

Community Based clinical training activities

- Inspection of sanitary facility



- Inspection of water source- a spring



- Education on water and sewerage treatment process



Community Health Diagnosis- component of community Based clinical training activities

- Is the process of appraising the health status of a community, including assembly of vital statistics and other health related statistics and of information pertaining to determinants of health, and the examinations of the relationship of these determinants to health in specified community.

Community diagnosis con't

- Community diagnosis aims to understand many facets of a community including culture, values and norms, leadership and power structure, means of communication, helping patterns, important community institutions, and history



Community Assessment Methods

- Surveys
- Descriptive epidemiological studies.
- Key Informants Interviews.
- Focus groups.



- Types of data to collect about the community include:
 - Community characteristics
 - Environmental characteristics
 - Socioeconomic characteristics Community Characteristics
 - Community organizational power and structures including the key players in local health organizations and media groups.
 - Demographic data and trends such as sex, age, race, marital status, and living arrangements.
 - Community health which can include a variety of health statistics such as the causes and rates of disease, disability, and death and the population's nutrition problems.
 - Existing community services and programs that can be used to pinpoint gaps where services are needed.

- COMMUNITY DIAGNOSIS OF SABATIA, KWA SHEM AND WEKUDZA VILLAGES, SABATIA VILLAGE IN SABATIA SUBLOCATION, VIHIGA COUNTY.
- DATE CONDUCTED: 4TH , 5TH SEPTEMBER 2022

Sabatia sub-county Hospital –

The total staff of Sabatia hospital is 49.

- Nurses -10
- Clinical officers- 10
- Lab technicians- 05
- Nutritionist- 01
- Cardiologist- 01
- Records personnel- 02
- Bio medics- 02
- Pharmacist- 03
- Clerks- 03
- Dentist- 01
- CHEWS- 05
- Administrator- 01
- Public health officer -01
- Social health worker -01
- Revenue clerks- 01
- Office assistant – 01
- Accountant -01

Cont

Range of services offered at Sabatia

- Outpatient services including ANC, imaging services, consultations)
- In- patient services (maternity and general admission)
- Special clinics (CCC, dental clinic, nutrition clinics etc.)
- Laboratory services
- Community services
- Immunization services

Catchment population and vital data

- The total catchment population of the hospital for the year 2022-2023 was 26,659.

Households- 1294

Children < 1 yr-773

Children > 5 yrs. -4665

Under 15 -10423

Women of childbearing age- 6078

Pregnant women- 826

Number of deliveries-826

Live births- 800

Patients attended to at the health facility, 2022

	OUTPATIENT (FILTER CLINICS)	SPECIAL CLINICS	MCH/FP	DENTAL CLINIC	CASUALTY
JULY	953	35	1118	30	90
AUGUST	433	00	1305	24	116
SEPTEMBER	845	30	1330	00	126

Qualitative research findings on community assessment

- Ethnic groups of sabatia community - The ethnic group is Maragoli, from Abamaragoli
- Historical events- they migrated from Mungoma. Two brothers formed two different clans: the Gusii clan and Maragoli clan. The Gusii clan migrated to Kisumu but were advised to move to Kisii since it was more fertile. The Maragoli clan decided to move to the hilly Sabatia land.

Cont

- Major economic activities- farming, livestock farming and trading.
- Cultural practices- male circumcision, wife inheritance and polygamy

Quantitative research findings- assessment of Sabatia community

Sampling

Kwa Shem village- 40 households were sampled out of 77 households.

Sabatia village- 30 households were sampled out of 109 households.

Wekudza village- 30 households were sampled out of 86 households

Cont

- **The data collection methods included;** key informants interviews, focused group discussion, structured questionnaires and observation method

Community assessment summary findings- Sabatia community

- Teenage pregnancies is a major concern in the Sabatia community, basing on the few sampled homes
- Dietary diversification is not implemented in many homes,
- Exclusive breastfeeding is not adhered to by many mothers.
- On the positive side, families have maintained a high percentage of immunized children and child welfare clinic visits.
- Most women have known the importance of hospital delivery and importance of antenatal check-ups.

Limitations of CARES

- Limited duration of rotations
- Resource constraints
- Geographical accessibility
- Variable learning opportunities
- Supervision and support
- Evaluation challenges
- Limited generalizability
- Sustainability concerns

Recommendations for the CARES Program

- Evidence-Based Curriculum Development
 - Incorporate recent literature and studies on community attachment, rural healthcare, and nursing education to inform the design and implementation of the program (Heller, & Oros, 2019).
- Faculty Development and Training
 - Provide faculty members involved in the CARES program with ongoing training and professional development opportunities(Lambley, & Elliott, 2016).
- Integration of technology
- Community Partnerships

Cont

- Interdisciplinary Collaboration
 - Foster teamwork and communication skills through interprofessional education initiatives and collaborative research projects (Barr, *et al.* 2017).
- Student Support Services
 - Offer mentorship, counseling, and resources for academic and personal development (National League for Nursing, 2015).
- Evaluation and Quality Improvement
 - Collect data on student outcomes, community health indicators, and programmatic inputs (Harden, *et al.* 2016).

Conclusion

CARES should be adopted in training health professionals as an effective and practical method of training health care professionals to meet the changing needs of communities, to improve health care professional's skills and empower them to address health problems in the community.

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