

## Abstract of Master's Dissertation

No.1

Course	Master of Science Health innovation course	Name	Kohei Fukushima
Thesis Title	Utilizing formal and informal community pharmacies (Duka la Dawa) to increase access to severe acute malnutrition diagnosis and treatment in rural Kenya: A feasibility study		

### **Abstract of Master's Dissertation**

#### **Background :**

Globally, only 20% of children with Severe acute malnutrition (SAM) under 5 years old have access to SAM treatment. Several previous studies have been conducted to increase access to SAM treatment, however, few studies of utilizing private pharmacies/drug shops, here referred to as Community pharmacies (CPs), have been conducted to increase access to SAM treatment (currently CPs do not usually provide SAM diagnosis and treatment). I aimed to assess if utilizing formal and informal CPs could be a feasible strategy to increase access to SAM diagnosis and treatment.

#### **Objective :**

The three specific objectives are as follows: (I) Accessibility: to compare distances between households and CPs, households and Public health facilities (PHFs), households and Community health workers (CHWs); (II) Acceptability: to explore caregiver's health seeking behavior in case SAM diagnosis and treatment are available at CPs; (III) Availability: to evaluate CP's capacity to conduct SAM diagnosis and treatment.

#### **Method :**

I conducted a descriptive cross-sectional study collecting data by face-to-face interviews with caregivers of children under 5 years old and CP staffs/managers and CHWs using structured questionnaires together with mapping CPs within the study area and additional analysis of routine HDSS geographical data in Mbita, western rural Kenya, between January and March in 2020. Exit interviews with caregivers were conducted at 3 PHFs and 5 CPs. Snowball sampling method was used to capture CPs and a staff/manager was enrolled from each CP. Simple random sampling was conducted to recruit CHWs from the sampling frame of the list gained from public health office.

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No.2

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<p><b>Result :</b></p> <p>142 and 110 caregivers were interviewed at PHFs and CPs, respectively. 31 CPs were found (9 were formal and 22 were informal) and 30 CPs participated in interview. 62 out of 109 CHWs participated in interview. 1) Accessibility: CPs were more accessible than PHFs and less accessible than CHWs from geographical data (e.g. 51.14%, 15.44% and 82.76% of households [15,466] located within 15 minutes by foot from CPs, PHFs and CHWs, respectively) ;2) Acceptability: a certain number of caregivers (more than 40%) would seek SAM diagnosis/treatment if SAM diagnosis and treatment are available at CPs; 3) Availability: CPs could conduct SAM diagnosis properly since CP staffs/managers have enough skills (80% have medical background), CPs seemed to have less stockouts of key items than CHWs (36.67% vs 85.48%) and CPs could have a capacity to conduct SAM treatment if RUTF is affordable (90% of CPs had current stock of the other essential items [not including RUTF] or could get them through their supply chain except for Vitamin A).</p> <p><b>Conclusion :</b></p> <p>This study illustrated that utilizing formal and informal CPs (Duka la Dawa) could be a feasible strategy to increase access to SAM diagnosis and treatment, although procurement of RUTF was the most challenging part due to low demand in the area and cost of RUTF. Further research is needed to assess this concept and the price reduction of RUTF is also necessary for CPs to procure RUTF.</p>			

\* The abstract, containing the objective, method, result and conclusion should not exceed 300-500 words.