

# **DEVELOPMENT AND EARLY FINDINGS OF A HYPERTENSION MANAGEMENT CLINIC IN HAITI**



**Cyndi Cortes, DrPh, MSN, MRE, CPNP-PC**



# HAITI: MAP



# HAITI

- **POOREST COUNTRY IN WESTERN HEMISPHERE**
  - **\$1220 PER CAPITA INCOME**
- **LOW LIFE EXPECTANCY**
  - **62 (AT BIRTH); 76 (AT BIRTH FOR THE REGION)**
- **LOW HEALTHY LIFE EXPECTANCY**
  - **52 (AT BIRTH); 67 (AT BIRTH FOR THE REGION)**
- **PREVENTIVE HEALTH CARE UTILIZATION**
  - **PRENATAL CARE AND CHILDHOOD IMMUNIZATION RATES BELOW REGIONAL AVG**

• WHO. (2012). *HAITI: HEALTH PROFILE*. RETRIEVED FROM [HTTP://WWW.WHO.INT/GHO/COUNTRIES/HTI.PDF?UA=1](http://www.who.int/gho/countries/hti.pdf?ua=1)



# **PROJECT BACKGROUND**

- **EARTHQUAKE - JANUARY 2010**
- **CHURCH BASED CLINICS YEARLY**
- **TREATMENT FOR ACUTE CONDITIONS**
  - **INJURIES**
  - **INFECTIONS**
- **NO CHRONIC DISEASE MANAGEMENT**
- **WEAK INFRASTRUCTURE**

# **HYPERTENSION IN HAITI**

- **35.5 % MALES OVER AGE 25**
- **28.1 % FEMALES OVER AGE 25**
- **STROKE LEADING CAUSE OF DEATH IN 2012**
- **CARDIOVASCULAR DISEASES 2<sup>ND</sup> RESPONSIBLE FOR BURDEN OF DISEASE IN HAITI**
- **24 % OF TOTAL DEATHS DUE TO CVD**
  - **NCDS ACCOUNT FOR 48% OF TOTAL DEATHS**
- **WHO. (2014). *NONCOMMUNICABLE DISEASES (NCD) COUNTRY PROFILES, 2014*. RETRIEVED FROM [WWW.WHO.INT/NMH/COUNTRIES/HTI\\_EN.PDF?UA=1](http://WWW.WHO.INT/NMH/COUNTRIES/HTI_EN.PDF?UA=1)**

# COMMUNITY HEALTH PROMOTER



# **HYPERTENSIVE MANAGEMENT CLINIC**

- **PLANNING**
  - **HAITI**
    - **LOCAL PARTNERSHIPS (LIAISON)**
    - **LOCATION**
    - **COMMUNICATION**
  - **UNITED STATES**
    - **TREATMENT ALGORITHM**
    - **MEDICATIONS**
    - **HEALTH CARE PROVIDERS**

# INITIAL ALGORITHM

- **DEVELOPED BY NEPHROLOGIST**
- **TREATMENT STARTS IF SYSTOLIC BP  $\geq$  140**
  - **WORKS OUTSIDE OR HAS CRAMPS AT NIGHT:  
AMLODIPINE 5 MG**
  - **WORKS INSIDE OR NOT A LABORER:  
HCTZ 25 MG**



# MARCH CLINIC

- **1322 PATIENTS SEEN IN CLINIC**
- **623 PATIENTS  $\geq$  25 YEARS OF AGE**
  - **47%**
- **195 PATIENTS WITH SYSTOLIC BP  $\geq$  140**
  - **31%**
- **115 PATIENTS TREATED FOR HYPERTENSION**
  - **60%**

# **FOLLOW-UP CLINIC ALGORITHM**

- **SYSTOLIC BP <140: NO CHANGE**
- **SYSTOLIC BP  $\geq$ 140 OR GREATER:**
  - **IF TAKING AMLODIPINE 5 MG: ADD 5 MG MORE FOR AMLODIPINE 10 MG**
  - **IF TAKING HCTZ 25 MG AND NOT CRAMPING: AMLODIPINE 5 MG**
  - **IF TAKING HCTZ AND CRAMPING OR DIZZY: STOP HCTZ AND START AMLODIPINE 5 MG.**

# **MAY FOLLOW-UP CLINIC**

- **22 OF 115 RETURNED FOR HTN MANAGEMENT**
  - **19%**
- **3 PATIENTS SEEN IN MARCH BEGAN ANTIHYPERTENSIVE MEDICATIONS**
- **5 NEW PATIENTS BEGAN MEDICATIONS**
- **16 BP CHECKS; NO MEDS**
- **46 PATIENTS SEEN**

# **JULY FOLLOW-UP CLINIC**

- **10 (OF 115) SEEN MARCH, MAY, & JULY**
  - **(8.7%)**
  - **1 PATIENT'S MEDICATION WAS DISCONTINUED**
- **8 PATIENTS SEEN MARCH AND JULY**
- **3 PATIENTS SEEN MAY AND JULY**
- **22 NEW PATIENTS**
- **28 BP CHECKS; NO MEDS**
- **71 PATIENTS SEEN**



# SEPTEMBER FOLLOW-UP

- 7 OF 115 SEEN ALL 4 MONTHS (6%)
- 1 PATIENT SEEN MAY, JULY, & SEPTEMBER
- 13 PATIENTS SEEN JULY & SEPTEMBER
- 26 NEW PATIENTS RECEIVED MEDICATIONS
- 2 PATIENTS SEEN MARCH, MAY, & SEPTEMBER
- 6 PATIENTS SEEN MARCH, JULY, & SEPTEMBER
- 3 PATIENTS SEEN MARCH & SEPTEMBER
- 40 BP CHECKS; NO MEDS
- 98 PATIENTS SEEN

# **OTHER RESULTS**

- **OF THE 39 PATIENTS SEEN IN MARCH AND AT LEAST ONCE MORE, BLOOD PRESSURES WERE CONTROLLED FOR 13 PATIENTS.**
- **OF THE 22 PATIENTS SEEN IN JULY AND AT LEAST ONCE MORE, BLOOD PRESSURES WERE CONTROLLED FOR 4 PATIENTS.**
- **OF THE 14 PATIENTS SEEN IN SEPTEMBER AND AT LEAST ONCE MORE, BLOOD PRESSURES WERE CONTROLLED FOR 4 PATIENTS.**

# **PATIENTS SEEN ONCE AND DISPENSED MEDICATIONS**

- **80 PATIENTS: MARCH**
- **5 PATIENTS: MAY**
- **7 PATIENTS: JULY**
- **8 PATIENTS: SEPTEMBER**
- **5 PATIENTS: OCTOBER**
- **39 NEW PATIENTS SEEN IN JANUARY**

# **STRENGTHS**

- **LOCAL PARTNERSHIP**
- **COMMITTED U.S. TEAM**
- **INITIAL TRAINING FOR COMMUNITY HEALTH PROMOTERS**
- **MORE PATIENTS SEEN AT EACH CLINIC**
- **OPPORTUNITY TO SCREEN FOR HYPERTENSION AND PROVIDED HEALTH EDUCATION**



# **BARRIERS**

- **COMMUNICATION**
- **LACK OF LOCAL INFRASTRUCTURE**
- **NO REAL REFERRAL MECHANISM**
  - **MISSED OPPORTUNITY TO PARTNER WITH LOCAL HEALTHCARE PROVIDERS AND PHARMACIES**
- **TRANSPORTATION**
- **LOCATION / TIME FOLLOW UP CLINICS OFFERED**

# **LESSONS LEARNED – FUTURE IMPLICATIONS**

- **ONLY INPUT FROM THE FAITH BASED ORGANIZATION IN HAITI WAS SOUGHT**
- **LOCAL STAKEHOLDERS (PHARMACIES AND HEALTH CARE PROVIDERS) NOT INVOLVED**
- **DEVELOP SPECIFIC PLANS FIRST**
- **TRAIN LOCAL PARTNERS BEFORE INITIATING PROJECT**
- **GOAL ORIENTED TEAM BUILDING IMPORTANT**

# **SUGGESTIONS**

- **FULLY TRAIN COMMUNITY HEALTH PROMOTERS TO PROVIDE SERVICES**
- **ONLY DISPENSE MEDICATIONS AFTER RECEIVING COMMITMENT FROM THE PATIENTS**
- **FOLLOW UP CLINICS LOCATED AT THE LOCAL CHURCHES WHERE COMMUNITY HEALTH PROMOTER WORSHIP**
- **MONITOR BLOOD PRESSURES OF PATIENTS WEEKLY**
- **CONTACT “PATIENTS” IN ADVANCE TO REMIND OF CLINIC**
- **COORDINATE CLINIC TIMES FOR THE CONVENIENCE OF MOST PATIENTS**

# **OTHER SUGGESTIONS**

- **DEFINE PURPOSE OF THE PROJECT**
- **EDUCATE LOCAL PERSONNEL**
- **FIND LOCAL PARTNERS (HEALTHCARE PROVIDERS, PHARMACIES, PASTORS)**
- **TRAIN CONGREGATIONAL HEALTH PROMOTERS FOR THIS PROJECT**
- **FIND “MISSING” PATIENTS**
- **LOGISTICS**





# **QUESTIONS**

**CYNDI CORTES**

**CCORTES@SAMFORD.EDU**