innovation for life





HEALTH STATUS AND PUBLIC HEALTH NEEDS IN A TOGOLESE CHILD HEALTH CARE CENTRE MODELLED AFTER THE DUTCH SYSTEM

PAULA VAN DOMMELEN, CÉCILE SCHAT-SAVY, ARJAN HUIZING, SYMONE DETMAR, LEONHARD A. BAKKER, PAUL H. VERKERK FUNDING: STICHTING KINDERHULP TOGO, THE BILL AND MELINDA GATES FOUNDATION, TNO

TOGO

- A low-income country in Sub-Saharan Africa
- Under-five mortality rate: 63 per 1,000 live births in 2023 (IGME)
 - Related to the household (The World Bank)
 - o low maternal educational level
 - o low income
 - malnutrition and dietary deficiencies
 - no adequate sanitation facilities
 - poor quality of drinking water
 - financial constraints to pay a doctor
 - long distance to nearest health facility
 - Related to the health care system
 - o no affordable health insurance
 - o restricted government expenditure on health
 - o limited access to child health care services



OUR STRATEGY TO IMPROVE CHILD HEALTH IN TOGO

- Implement the Dutch child health care system in Togo
 - · high quality system based on a unique standardized preventive child health program
 - Dutch children are among the happiest and healthiest in the world (HBSC survey, UNICEF report)
- Provide early childhood preventative and curative services using the criteria of the WHO for preventive health policy:
 - prevention
 - · early identification of diseases
 - early treatment and care of diseases to prevent disability
- Charity foundation Stichting Kinderhulp has set up a child health care centre in Kpalimé (Health region Plateaux), Togo, with the above strategy



Primary objectives

- To describe the strategy of the child health care centre in Kpalimé, Togo
- To describe the Child HEalth Care in Kpalimé TOGO (CHECK2GO) cohort (first description of a cohort in Togo)

Secondary objective

- To make the data FAIR for further research
 - o compare the data with regional and national health statistics
 - o relationships between adverse early life events and development, health and well-being later in life
 - o develop a toolkit for countries for a comprehensive prevention policy in low-income countries



- > Primary objectives
 - To describe the strategy of the child health care centre in Kpalimé, Togo
 - To describe the CHECK2GO cohort
- Secondary objective
 - To make the data FAIR for further research
 - o compare the data with regional and national health statistics
 - o relationships between adverse early life events and development, health and well-being later in life
 - o develop a toolkit for countries for a comprehensive prevention policy in low-income countries



CHILD HEALTH CARE SYSTEM MAPPED TO TOGO

NETHERLANDS



- · unique system for promoting child and youth health
- free of charge
- invited for 15 regularly scheduled visits 0-18 years
- attendance rate of up to 95%
- basic and special preventive care to all children
- information, immunization, and screening, identifying care needs and providing preventive support
- basic care supported by 36 youth health care guidelines (NCJ)
- every EUR 1 spent provides EUR 11 back (Dam, 2012)

TOGO

- Similar approach but several differences:
 - parents/children could decide when and how often they wanted to visit the centre
 - small fee (includes regular visit, additional check, hospital) – to make it trustworthy
 - adapted to better align with differences in lifestyle, socioeconomic factors, (mal)nutrition, hygiene, blood relationships, diseases and pathologies between the Dutch and Togo's population
 - additional attention was directed towards
 - information on prevention
 - affordable methods of treatment
 - offering basic medicines and hearing aids, and glasses
 - arranging a financial contribution for follow-up treatments for children in the poorest families

- > Primary objectives
 - To describe the strategy of the child health care centre in Kpalimé, Togo
 - To describe the CHECK2GO cohort
- Secondary objective
 - To make the data FAIR for further research
 - o compare the data with regional and national health statistics
 - o relationships between adverse early life events and development, health and well-being later in life
 - o develop a toolkit for countries for a comprehensive prevention policy in low-income countries



CHECK2GO COHORT

Available data

- CHECK2GO cohort: the Child HEalth Care in Kpalimé, Togo
- Health care data of 8,809 children aged 0-24 years who visited the centre between October 2010 and July 2017
- Domains:
 - o completed vaccinations
 - growth and development
 - o lifestyle (e.g. washing hands with soap, regularly eat fruit, use clean drinking water, night sleep)
 - o physical examination (e.g. visual acuity screening, hearing screening)
 - o laboratory testing (e.g. blood count, blood film)









CHECK2GO COHORT

- Available data
 - · CHECK2GO cohort: the Child HEalth Care in Kpalimé, Togo
 - Health care data of 8,809 children aged 0-24 years who visited the centre between October 2010 and July 2017
 - Domains:
 - o completed vaccinations
 - 47% (0-4y) incomplete
 - o growth and development
 - The proportions of stunted (< -2 standard deviation) children was 10%
 - The proportion of children with developmental delay (<-2 standard deviation) was 10%
 - o lifestyle (e.g. washing hands with soap, regularly eat fruit, use clean drinking water, night sleep)
 - 38-48% did not wash their hands with soap after toilet or before eating, or did not use clean drinking water, 81% did not regularly eat fruit, 27% 0-4y slept <10 hours and 8% 5-13y <8 hours
 - o full body examination (e.g. visual acuity screening, hearing screening)
 - 6-7% had insufficient vision, high eye pressure or hearing loss
 - o laboratory testing (e.g. blood count, blood film)
 - Sickle cell disease was detected in 5% of children
 - 45% anaemia
 - 40% parasites

- Primary objectives
 - To describe the strategy of the child health care centre in Kpalimé, Togo
 - To describe the CHECK2GO cohort
- Secondary objective
 - To make the data FAIR for further research
 - o compare the data with regional and national health statistics
 - o relationships between adverse early life events and development, health and well-being later in life
 - o develop a toolkit for countries for a comprehensive prevention policy in low-income countries



FAIR DATA

- The programs, teaching materials, protocols, epidemiological data and other statistics are documented so that they are useful and accessible to others who want to conduct data research or establish preventive child health care in Sub-Saharan Africa
- Interested parties (including researchers, government, healthcare professionals) can contact us (camcsavy@gmail.com), so that the knowledge that has been built up within this project can be shared and used to improve the health of children in Sub-Saharan Africa

CONCLUSIONS

- A large group of children in need of prevention and early treatment were detected, informed and treated by the centre in Togo
- We expect that the health of children in Sub-Saharan Africa can be significantly improved with this low-cost strategy
- This strategy can serve as an example for raising awareness of health problems, intensifying public scrutiny, improving access to and availability of services and making structural changes in in Sub-Saharan Africa

THANK YOU FOR YOUR ATTENTION!

CONTACT US FOR MORE INFORMATION AND DATA: CÉCILE SCHAT-SAVY, DOCTOR IN PUBLIC HEALTH, CHARITY FOUNDATION STICHTING KINDERHULP: CAMCSAVY@GMAIL.COM





