Wasting and stunting in young children in developing countries

Submission date 21/08/2017	Recruitment status No longer recruiting	Prospectively registered	
		[] Protocol	
Registration date	Overall study status	Statistical analysis plan	
21/08/2017	Completed	[X] Results	
Last Edited 26/11/2019	Condition category Nutritional, Metabolic, Endocrine	Individual participant data	

Plain English summary of protocol

Background and study aims

Wasting (having a low weight-for-height) and stunting (having a low height-for-age) are common and are implicated in the deaths of almost two million children each year. Wasting and stunting tend to be addressed as separate issues despite evidence of common causes and the fact that many children suffer simultaneously from both conditions. The aim of this study is to examine the size of the overlap between wasted and stunted children to determine the degree of overlap and the association with underweight children.

Who can participate? Children aged 6-59 months

What does the study involve?

A database of surveys is created containing data for almost 1.8 million children. This is analysed to determine the overlap between sets of wasted, stunted, and underweight children; the association between being wasted and being stunted; the severity of wasting and stunting; and the prevalence of wasting and stunting by age and sex.

What are the possible benefits and risks of participating? There are no benefits or risks to the children who are measured. The benefit is to the international community concerned with addressing all forms of child undernutrition.

Where is the study run from? Emergency Nutrition Network (UK)

When is the study starting and how long is it expected to run for? January 1992 to December 2015

Who is funding the study? 1. US Agency for International Development (USA) 2. Irish Aid (Ireland) Who is the main contact? Ms Carmel Dolan

Contact information

Type(s) Scientific

Contact name Ms Carmel Dolan

Contact details 32 Leopold Street Oxford United Kingdom OX4 1TW

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

Study information

Scientific Title

Children who are both wasted and stunted are also underweight and have a high risk of death – policy implications

Study objectives

This study examined the magnitude of overlap between wasted and stunted children to determine the degree of overlap and the association with underweight children.

Ethics approval required

Old ethics approval format

Ethics approval(s)

This is an observational study so does not need ethical approval. All data was anonymous and was secondary and readily available for further analysis. There were no human or animal subjects.

Study design Observational cross-sectional study

Primary study design

Observational

Secondary study design

Cross sectional study

Study setting(s) Other

Study type(s) Other

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Nutrition

Interventions

A database of cross-sectional survey datasets containing data for almost 1.8 million children was compiled. This was analysed to determine the intersection between sets of wasted, stunted, and underweight children; the association between being wasted and being stunted; the severity of wasting and stunting in WaSt children; and the prevalence of WaSt by age and sex. An additional analysis of the WHO Growth Standards sought the maximum possible weight-for-age z-score for WaSt children.

Intervention Type

Other

Primary outcome measure

Overlap between wasted, stunted and underweight children as measured by <-2SD WHZ, HAZ, WAZ

Secondary outcome measures

Degree of concurrence i.e. <-2SDWHZ AND ,-2SDHAZ in children and by age (6-59 months) and by sex (male/female)

Overall study start date 01/01/1992

Completion date 01/12/2015

Eligibility

Key inclusion criteria 1. 6-59 month old children 2. Males and females

Participant type(s)

All

Age group Child

Lower age limit 6 Months

Upper age limit 59 Months

Sex Both

Target number of participants 1,796,991 children

Total final enrolment 1796991

Key exclusion criteria Children over 59 months of age

Date of first enrolment 01/01/1992

Date of final enrolment 01/12/2015

Locations

Countries of recruitment Afghanistan

Albania

Algeria

American Samoa

Angola

Bahrain

Bangladesh

Benin

Burkina Faso

Burundi

Cabo Verde

Cambodia

Cameroon

Central African Republic

Chad

Congo

Congo, Democratic Republic

Côte d'Ivoire

Djibouti

Ecuador

Equatorial Guinea

Eritrea

Ethiopia

Gabon

Gambia

Ghana

Guinea-Bissau

Haiti

India

Indonesia

Kenya

Lao People's Democratic Republic

Lesotho

Liberia

Madagascar

Malawi

Mali

Mauritania

Mozambique

Myanmar

Namibia

Nepal

Niger

Nigeria

Pakistan

Rwanda

Senegal

Sierra Leone

Somalia

South Sudan

Sudan

Tajikistan

Tanzania

Timor-Leste

Uganda

Yemen

Zambia

Zimbabwe

Study participating centre

-Chad -

Sponsor information

Organisation Emergency Nutrition Network

Sponsor details 32 Leopold Street Oxford United Kingdom OX4 1TW

Sponsor type Charity

Website http://www.ennonline.net/

Funder(s)

Funder type Government

Funder Name

United States Agency for International Development, 295 Grant Number: ENN AID-OFDA-G-15-00190

Alternative Name(s) U.S. Agency for International Development, Agency for International Development, USAID

Funding Body Type Government organisation

Funding Body Subtype National government

Location United States of America

Funder Name Irish Aid

Alternative Name(s)

Funding Body Type Government organisation

Funding Body Subtype

National government

Location Ireland

Results and Publications

Publication and dissemination plan

The study is being submitted to a high impact peer reviewed journal and once accepted the trialists will ensure open access and at a later stage disseminate through their organization's global network and via international meetings/conferences.

Intention to publish date

21/11/2017

Individual participant data (IPD) sharing plan

These are merged datasets which many international organisations feed into when the surveys are complete. The data is anonymous so there is no risk of invading confidentiality. These are quite old SMART surveys that might not be used again. The agencies also have the data and the source agency is acknowledged in the paper. The data is officially 'owned' by the donors who funded the surveys originally and they insist on open access data exactly for the purpose of further analysis. The lead author is a senior analyst who has access to the datasets and has used the data for previous well known peer reviewed publications.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>	results	16/07/2018	26/11/2019	Yes	No