cities changing diabetes

DIABETES VULNERABILITY ASSESSMENT

INTRODUCTION MANUAL

Worldwide 415 million people are living with diabetes.[1] Without concerted action this is estimated to rise to 642 million by 2040.[1] Today, more than half of the world's population live in urban areas,[2] including two-thirds of people with diabetes.[1] This makes cities an important focal point for studying and tackling diabetes. However, taking action requires a better understanding of what drives diabetes in urban areas.

DIABETES VULNERABILITY ASSESSMENT

The Diabetes Vulnerability Assessment is an in-depth qualitative data collection and analysis instrument developed to explore both characteristics of vulnerability to diabetes and the condition's underlying sociocultural drivers in a specific local setting. The assessment is especially suited for research sites where an evidence base around the social and cultural factors of type 2 diabetes is yet to be established.

The Diabetes Vulnerability Assessment is guided by three overall research questions:

- What are the **social risk factors** in urban diabetes?

- What are the **cultural determinants** of urban diabetes?

- Who is **most vulnerable** to suffer because of these risk factors and cultural determinants of diabetes? How can they become less vulnerable?

novo nordisk®

Steno Diabetes Center Copenhagen

UCL

CITIES ARE A FOCAL POINT FOR TACKLING DIABETES

415 MILLION PEOPLE HAVE DIABETES WORLDWIDE[1]
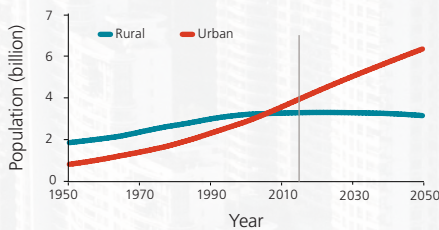
2/3 OF PEOPLE WITH DIABETES **LIVE IN CITIES**[1]

BY 2040, **642 MILLION PEOPLE** WILL HAVE DIABETES[1]

74% OF THEM WILL LIVE IN CITIES[1]

URBANISATION IS ONE OF THE **MOST SIGNIFICANT DEMOGRAPHIC SHIFTS** OF THE PAST CENTURY[2]

SHANGHAI, China

PERFORMING A DIABETES VULNERABILITY ASSESSMENT

At the core of the Diabetes Vulnerability Assessment is a semi-structured interview protocol designed to elicit detailed information about the various influences on a person's health, wellbeing, and experiences of living with diabetes. The interview protocol is intended for field-based data collection and addresses a range of topics relevant to health and wellbeing through a series of open-ended questions. The interview prompts cover three main domains of inquiry: a Formal Domain (assessing public assistance and programmes and use thereof); a Local Community Domain (assessing local situations, responses and forms of adaptation and resilience); and a Vulnerability Domain (assessing barriers to individual capability and opportunity). The Diabetes Vulnerability Assessment also includes a pre-questionnaire for capturing demographic data and integrates ethnographic observations and executive summaries into the analysis and interpretation of results.

Collected data are analysed following a qualitative data reduction approach based on the principles of Thematic Content Analysis.

Intended outcomes of the Diabetes Vulnerability Assessment are:

- Identification of key factors that impact diabetes vulnerability locally ('vulnerability indicators')

- Creation of a new qualitative evidence base around the local social factors and cultural determinants of diabetes

- Synthesised findings to inform local intervention design and policy

WHY CONDUCT A DIABETES VULNERABILITY ASSESSMENT

The application of the Diabetes Vulnerability Assessment will:

- Generate insights that effectively inform local intervention design and that are well-suited for local stakeholder engagement and policy shaping

- Allow researchers to establish a new local evidence base around the sociocultural drivers of diabetes

- Contribute to the Cities Changing Diabetes global research platform and the largest qualitative database on type 2 diabetes globally

ROADMAP TO PERFORMING A DIABETES VULNERABILITY ASSESSMENT

1 PHASE ONE
Plan the study

PREPARE FOR THE STUDY

DEFINE THE FOCUS OF THE LOCAL STUDY
Update the global research questions and fine-tune the overall focus

DOWNLOAD AND TEST THE SOFTWARE
Computer-assisted qualitative research software (*CAQDAS*) is used to facilitate data analysis

DATA MANAGEMENT
Address data management considerations

RECRUIT THE FIELDWORKERS AND STUDY PARTICIPANTS

RECRUIT AND TRAIN THE FIELDWORKERS
Fieldworkers need to be recruited and trained to conduct participant interviews

RECRUIT THE STUDY PARTICIPANTS
Study participants need to be recruited using *local case filters*

2 PHASE TWO
Data collection

DIABETES VULNERABILITY ASSESSMENT DATA COLLECTION TOOLS

THE DIABETES VULNERABILITY ASSESSMENT PRE-QUESTIONNAIRE
Captures basic demographic information

THE DIABETES VULNERABILITY ASSESSMENT INTERVIEW PROTOCOL
Provides an overall structure to a succession of 75 questions and prompts

INTERVIEW SUMMARY TEMPLATE
Provides a framework for summarising the interviews and ethnographic observations

3 PHASE THREE
Data analysis

Through coding, data relevant to the research questions are extracted in an efficient, transparent, and systematic fashion

THEMATIC CONTENT ANALYSIS
Thematic Content Analysis to draw conclusions from the coded data

SYNTHESIS INTO SOCIAL AND CULTURAL FACTORS
Data is further synthesised to obtain specific social and cultural factors that, based on the collected data, are plausibly linked to diabetes-vulnerability

4 PHASE FOUR
Reporting

PUBLISH
Consider publishing the results in a scientific peer-reviewed journal

PRODUCE A REPORT
On completion of the analysis produce an internal research report, which can be used to record and share the findings

Developing a set of key findings and insights is an essential part of the study, and synthesising the results from the thematic and factor analyses with available demographic participant data is a minimum requirement. This means that a narrative description of results (themes, factors, or both) should be presented together with relevant primary data as evidence.

CITIES
CHANGING DIABETES

Cities Changing Diabetes is a partnership programme to address the urban diabetes challenge. Initiated by Novo Nordisk in 2014, the programme is a response to the dramatic rise of urban diabetes. The programme has been developed in partnership with University College London and Steno Diabetes Center Copenhagen, as well as a range of local partners including the diabetes and public health community, city governments, academic institutions, city experts from a variety of fields and civil society organisations.

The Cities Changing Diabetes programme is a commitment to push for urgent action against diabetes on a global scale. The programme is mapping the extent of the diabetes challenge in cities and working to generate an understanding of the drivers behind this pandemic.

The aim of the programme is to map the challenge, share solutions and drive concrete actions to fight the diabetes challenge in cities around the world.

JOIN THE GLOBAL FIGHT AGAINST
URBAN DIABETES

CitiesChangingDiabetes.com
#UrbanDiabetes
@CitiesDiabetes

THREE RESEARCH METHODS

The Cities Changing Diabetes programme consists of three global research methods to map the challenge of diabetes in cities and understand its drivers. Introduction and How-To Guides have been developed for all three methods.

RULE OF HALVES
QUANTITATIVE METHOD

Mapping the extent of the challenge
The Rule of Halves analysis is a quantitative estimation of the diabetes burden in a specific population or community.

DIABETES VULNERABILITY ASSESSMENT
QUALITATIVE METHOD

Unveiling the social factors and cultural determinants
The Diabetes Vulnerability Assessment identifies the social factors and cultural determinants of diabetes among people living with type 2 diabetes.

URBAN DIABETES RISK ASSESSMENT
MIXED METHOD

Prioritising social factors and cultural determinants for intervention
The Urban Diabetes Risk Assessment is a comprehensive data collection and analysis instrument developed to explore priorities, attitudes, and shared points of view about diabetes, health and wellbeing among people living with diabetes.

ALL THREE RESEARCH MANUALS ARE AVAILABLE FOR DOWNLOAD AT
CitiesChangingDiabetes.com

REFERENCES

1. IDF. International Diabetes Federation. *IDF Diabetes Atlas. 7th edn.* 2015.
2. UNDESA. United Nations Department of Economic and Social Affairs. *World Urbanization Prospects, the 2014 Revision, Highlights.* 2014.

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