

WHO HEALTH EVIDENCE NETWORK SYNTHESIS REPORT 59

What quantitative and qualitative methods have been developed to measure community empowerment at a national level?

Glenn Laverack | Pierre Pratley



The Health Evidence Network

The Health Evidence Network (HEN) is an information service for public health decision-makers in the WHO European Region, in action since 2003 and initiated and coordinated by the WHO Regional Office for Europe under the umbrella of the WHO European Health Information Initiative (a multipartner network coordinating all health information activities in the WHO European Region).

HEN supports public health decision-makers to use the best available evidence in their own decision-making and aims to ensure links between evidence, health policies and improvements in public health. The HEN synthesis report series provides summaries of what is known about the policy issue, the gaps in the evidence and the areas of debate. Based on the synthesized evidence, HEN proposes policy considerations, not recommendations, for policy-makers to formulate their own recommendations and policies within their national context.

HEN and the Evidence for health and well-being in context project

The Evidence for health and well-being in context project was initiated at the WHO Regional Office for Europe in response to Members States' consideration of Health 2020, the European policy framework for health and well-being. Health 2020 includes a number of promising values-based health concepts that are difficult to measure and report on. In response to this challenge, the WHO Regional Office for Europe convened an expert group to investigate ways of enhancing Health 2020 monitoring and reporting. The first meeting of the Expert Group on Enhancing Health 2020 Monitoring and Reporting was convened by the WHO Regional Office for Europe on 1–2 September 2016. Among other things, the Expert Group recommended commissioning this HEN report outlining the qualitative and quantitative methods developed to measure community empowerment at a national level.

WHO Health Evidence Network synthesis report 59

What quantitative and qualitative methods have been developed to measure community empowerment at a national level?

Glenn Laverack | Pierre Pratley

Abstract

Community empowerment has been frequently studied at subnational levels but it is less clear how to measure it at a national level. Mixed methods approaches would be advantageous, using quantitative data from databases plus qualitative information to derive a range of variables and indicators. This report identifies assessment methods that have been used and evidence for integrating qualitative and quantitative data for national assessments. When resources are limited or there is no current practice of measurement of community empowerment, the simplest approach is to combine a selection of quantitative variables and indicators available in statistical databases. When resources can be allocated, a more systematic approach would supplement such accessible data with some form of rapid qualitative assessment. Ideally, a formal national monitoring and evaluation system would be instituted that collects all the relevant quantitative and qualitative data and combines these into a regularly updated assessment.

Keywords

COMMUNITY PARTICIPATION, POWER (PSYCHOLOGY), META-ANALYSIS, HEALTH POLICY

Suggested citation

Laverack G, Pratley P. What quantitative and qualitative methods have been developed to measure community empowerment at a national level? Copenhagen: WHO Regional Office for Europe; 2018 (Health Evidence Network (HEN) synthesis report 59).

Address requests about publications of the WHO Regional Office for Europe to:

Publications

WHO Regional Office for Europe

UN City, Marmorvej 51

DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

ISSN 2227-4316

ISBN 978 92 890 5360 0

© World Health Organization 2018

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

CONTENTS

▶ Abbreviations.....	iv
▶ Contributors.....	v
▶ Summary.....	vii
▶ 1. Introduction.....	1
▶ 1.1 Background.....	1
▶ 1.2 Methodology.....	5
▶ 2. Results.....	6
▶ 2.1 Data from household surveys.....	6
▶ 2.2 Data from measurement of women’s empowerment.....	7
▶ 2.3 Data from existing databases.....	9
▶ 2.4 Integrating qualitative and quantitative information: a mixed methods approach.....	10
▶ 2.5 The development of empowerment indexes, variables and indicators.....	13
▶ 2.6 Visualization tools.....	15
▶ 2.7 Measurement of governance initiatives.....	16
▶ 3. Discussion.....	19
▶ 3.1 Strengths and limitations of the review.....	19
▶ 3.2 The role of government in the measurement of community empowerment.....	19
▶ 3.3 Scaling up from community empowerment efforts.....	20
▶ 3.4 Policy considerations.....	20
▶ 4. Conclusions.....	23
▶ References.....	24
▶ Annex 1. Search strategy.....	31

ABBREVIATIONS

CSI	Civil Society Index (CIVICUS)
DHS	Demographic and Health Survey programme
GDI	Gender-related Development Index
GEM	Gender Empowerment Measure
HEN	Health Evidence Network
NGO	nongovernmental organization

CONTRIBUTORS

This report has been produced with the financial assistance of the Robert Wood Johnson Foundation. The views expressed herein can in no way be taken to reflect the official opinions of the Robert Wood Johnson Foundation.

Authors

Glenn Laverack
Honorary Professor, Health Promotion Research, University of Southern Denmark, Esbjerg, Denmark

Pierre Pratley
Specialist, Sustainable Development and Health Policies, Pan American Health Organization, WHO Regional Office for the Americas, Paramaribo, Suriname

Acknowledgements

The WHO Regional Office for Europe would like to thank Kseniya Kizilova for undertaking a search of Russian literature and the Expert Group on Enhancing Health 2020 Monitoring and Reporting for their general guidance and feedback.

Peer reviewers

Dennis Raphael
Professor of Health Policy and Management and Graduate Program Director, Health Policy and Equity, York University, Toronto, Canada

Mihály Kökény
Senior Fellow, Global Health Centre, Graduate Institute of International and Development Studies, Geneva, Switzerland

Editorial team, WHO Regional Office for Europe

Division of Information, Evidence, Research and Innovation

Nils Fietje

Research Officer, Evidence for Health and Well-being in Context

Kjartan Sveistrup Andsbjerg

Consultant, Evidence for Health and Well-being in Context

Health Evidence Network (HEN) editorial team

Claudia Stein, Director

Tanja Kuchenmüller, Editor in Chief

Ryoko Takahashi, Series Editor

Krista Kruja, Consultant

Jane Ward, Technical Editor

The HEN Secretariat is part of the Division of Information, Evidence, Research and Innovation at the WHO Regional Office for Europe. HEN synthesis reports are commissioned works that are subjected to international peer review, and the contents are the responsibility of the authors. They do not necessarily reflect the official policies of the Regional Office.

SUMMARY

The issue

Community empowerment in the health arena involves people collectively gaining greater control over the influences on their health, including access to health care and preventive services. Measurement of community empowerment at a national level can help to monitor the effectiveness of health systems and equality in society. However, empowerment is multilevel and multidimensional, and standard quantitative indicators are insufficient to measure the complexity of the concept.

The synthesis question

The purpose of this report is to summarize what quantitative and qualitative methods have been developed to measure community empowerment that can support monitoring at national or local level.

Types of evidence

This report used rapid review methodology to synthesize the academic and grey literature in English and Russian published from January 2000 to September 2017 with a focus on the WHO European Region but also considering worldwide literature and recommendations from key experts in the field. A total of 42 documents on measures of community empowerment were considered.

Results

Almost all of the relevant publications dealt with community empowerment at levels below national and the evidence was unclear on the most satisfactory ways to aggregate and scale up indicators from the household or community to a national level. Relevant data could be found in household surveys (both the Demographic and Health Surveys (DHS) programme and national surveys), measurement of women's empowerment and existing databases. Data were aggregated using various methods, including a mixed methods approach that integrates qualitative and quantitative information; the development of empowerment indexes, variables and indicators; and visual representation methods.

Women's empowerment has become one of the most operationalized measures of empowerment, encompassing both data that are unique and often exploratory in nature and data that are collected routinely and are readily available, for example in

the Gender Empowerment Measure (GEM) and the Gender-related Development Index (GDI).

Relevant information on indicators of specific areas of community empowerment can be found in national databases as well as in internationally comparable databases, such as those of Transparency International, the CIVICUS Civil Society Index (CSI), the World Bank governance databases and Freedom House. These sources enable information to be compared and contrasted and can assist with the development of measurements for community empowerment at a national level. Visual representation has been used to interpret and analyse community empowerment over specific periods of time. Several reports were identified in which visual representation was used to compare indicators of change in community-based interventions, including for community empowerment.

Policy considerations

Based on the effectiveness of the range of approaches that are discussed in the report, three policy options can be identified. The choice of which to use will be guided by what data are already available and the resources that can be allocated to assessing community empowerment.

When resources are limited or there is no current practice of measurement

- Combine a limited set of easily accessible quantitative indicators taken from government and/or statistical databases. This approach is based on information that is already systematically collected through DHS, national household surveys and international databases and so does not require allocation of specific resources for data collection. Such indicators include:
 - the percentage of communities (defined at a geographical or administrative level through census clusters) with access to a functioning paved road (or percentage of communities with access to sufficiently developed infrastructure);
 - the percentage of single-headed households;
 - the percentage of women in political office or senior management positions;
 - the percentage of communities in which all adult members have completed at least the minimum legal required level of education;

- the percentage of total government budget transferred to community-based organizations; and
- the average social network density, for example the number of formally registered NGOs per capita.

When resources can be allocated for a more comprehensive measurement strategy

- Use a mixed methods approach that combines the accessible quantitative variables and indicators with some form of rapid qualitative assessment. This more systematic approach requires resource allocation to collect the qualitative data to supplement the existing quantitative data. It would utilize:
 - quantitative data from accessible government statistics offices that are updated regularly (e.g. DHS and similar surveys);
 - quantitative data from internationally comparable databases such as those of Transparency International, the CSI, the GEM and GDI, and the World Bank governance database;
 - quantitative data from national or regional civil society organizations (e.g. access to social networks and the opportunities created by government for civic spaces);
 - qualitative data from a specific number of key stakeholders (e.g. a sampling strategy that identifies participants to allow for a range of perspectives or accesses a marginalized population); and
 - qualitative data collected by either a relevant government department or a contracted private sector agency qualified to undertake interviewing at individual, group and community levels.

When a national monitoring and evaluation system is feasible

- Use a comprehensive and systematic mixed methods approach that uses clearly defined methodology and responsibility for data collection and analysis. This would utilize a framework that outlines the measurement methodology, the people and departments responsible for data collection and analysis, the available databases and the specific variables and indicators that would be used. Indicators would be derived from both quantitative and qualitative data in regard to the social, governance, economic and civil participation dimensions of community empowerment, for example:
 - quantitative data for key variables and indicators from government statistics offices and through DHS or similar surveys;

- qualitative data from key stakeholders including policy-makers and community leaders, through interviewing using rapid, semi-structured techniques; and
- elements of internationally comparable databases such as those of Transparency International, CSI, the GEM and GDI and the World Bank governance database.



1. INTRODUCTION

1.1 Background

1.1.1 Defining community empowerment

Empowerment is a process by which people gain greater control over decisions and actions affecting their lives; community empowerment specifically involves people acting collectively to gain greater control over their community, including their health and the quality of life (1). The concept of empowerment is multilevel and multidimensional, with an emphasis that may be on the individual or the community. Many definitions of empowerment give the term a positive value and embody the notion that it should come from within a person, group or community and cannot be given to them. Individual empowerment can be difficult to measure because it takes on a subjective nature as an increase in feelings of value and a sense of mastery, in personal control and in a proactive approach to life (2).

In the context of this report, a community can be a space that people physically occupy, such as a village or neighbourhood, or a space with a social dimension in which people meet collectively, either physically or virtually, to address their interests and needs. Communities of interest, for example, provide a legitimate means for people to participate with others who share similar interests, such as in organizing public events or finding a solution to a specific concern (e.g. access to mental health care services) in their community (3).

Decentralization and the formation of local organizations play a key role in community empowerment, and strengthening the capacity of such local organizations helps to empower their members. Policies that support community empowerment help communities to develop skills, to have equal access to information and resources, to have opportunities to participate and to influence the factors affecting their health and well-being. The challenge is to transform social networks into inclusive community-based institutions, which can be indicated by their density, the extent of their organizational ability, the level of membership in voluntary groups, the diversity of membership and the linkages between different associations. However, in some countries of eastern Europe and central Asia, the extent to which these elements can be achieved can be hindered by poor community participation and governance (4,5).

The role of government, government-funded agencies and health professionals is to help to reduce the barriers to achieving empowerment by providing an

enabling and supportive environment. While responsibility is often placed at the individual or the collective level, it is through removal of structural obstacles such as unequal access to health care or employment that empowerment is enabled. This is particularly important for vulnerable groups in society with less economic or social protection from policy changes, such as refugees and migrants. Discrimination, on the basis of ethnicity, race, gender, religion or social status, can prevent people from taking advantage of opportunities for economic and social advancement. The Roma, for example, are present in many countries of the WHO European Region and often have issues of disenfranchisement. Evidence from western Sweden shows that participatory approaches can improve trust and enhance Roma empowerment, participation and sense of community and promote self-led social integration (6). Community empowerment is critical to help to remove social barriers but requires the support of government policy.

Local authorities collect a large quantity of community-level information, but ease of access can be variable. Through the Freedom of Information Act 2000, the United Kingdom Government ensures that citizens have a right to information held by public authorities, including local councils, the police, the National Health Service, schools, hospitals and universities. However, there are variations between authorities in the quality, accessibility and usefulness of the information available to citizens even though initiatives such as the data interchange hub give local authorities access to comparative national indicators. Information is also collected by NGOs at a local level; for example, mySociety in the United Kingdom has produced online services to provide public information that can be useful indicators for community empowerment (7).

1.1.2 The gender dimension

Research has commonly focused on empowerment of socially excluded populations. Women's empowerment (the gender dimension) is an area that has been specifically subjected to much scrutiny by multilateral and bilateral agencies, including at a national level. Women's empowerment is a unifying term commonly defined as a process in which women gain the ability to make strategic life choices (8). Women who share similar concerns can act collectively to empower themselves by gaining greater control, for example through authority in decision-making and personal mobility (9). In particular, the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) works to uphold standards to create an environment in which women and girls can exercise their human rights and live to their full potential.



The lessons learned from measurements of women's empowerment can contribute to our understanding of assessing community empowerment at a national level and for other populations and issues in public health.

1.1.3 Community empowerment in Health 2020

Investing in health through a life-course approach and empowering citizens is one of the four interdependent and mutually supportive priority areas of Health 2020, the European policy framework and strategy for the 21st century (10). Because the concept of empowerment addresses the social, cultural, political and economic determinants of health, it plays a central role within the values base of Health 2020. In order to monitor and evaluate the effectiveness of Health 2020, there is clearly a need for Member States to be able to measure and report on the degree to which they have been successful in implementing policies that support each priority area. Measurement of community empowerment at a national level presents specific challenges, including attributing causality or making a link between an empowerment variable and an outcome or impact. Changes in empowerment are not single-event outcomes: they are dynamic and often involve a long-term process of capacity-building and achievement of control over factors influencing the lives of individuals, groups and communities. Other challenges to measurement at a national level include scaling up of empowerment indicators from a household or community level, aggregation of variables across populations, in-country capacity for data collection and bureaucracy (11).

1.1.4 The policy issue: measuring community empowerment

Although the concept of community empowerment has been well studied, it is still unclear how best to measure it, particularly at a national level. Since social, cultural, political and economic conditions vary among countries, there is no single model for successful empowerment at a national level; however, certain elements can be identified that are almost always present in successful empowerment efforts. The World Bank identified four elements: access to information, inclusion/participation, accountability and local organizational capacity (11). Similarly, a number of indexes have been developed that assess specific aspects of empowerment multinationally, for example Transparency International's Corruption Perception Index (12) and the CSI (empowerment of members of society to associate to advance common interests) from CIVICUS (13).

Most published work has looked at subnational measurements of empowerment. The domains approach used nine empowerment domains to measure empowerment

at the community level within a programmatic context, such as a health programme: improve participation, develop local leadership, increase problem-assessment capacities, enhance the ability to question, build empowering organizational structures, improve resource mobilization, strengthen links to other organizations and people, create an equitable relationship with outside agents, and increase control over programme management (14). Empowerment outcomes have been measured in this way for issues such as improved cost-effectiveness, reductions in maternal morbidity and mortality (15) and the effective use of health services (16,17).

A 2006 Health Evidence Network (HEN) synthesis report considered empowerment at the individual level within a context that included social capital, influence on policy changes and greater equity (18). This report concluded that there are limits to locally based programmes for overcoming political and socioeconomic barriers and, therefore, measurement at a national level is important (18). It emphasized the need to refine measurement tools and to create universal instruments that incorporate qualitative methods. A more recent systematic review of the measurement of empowerment sought to evaluate the properties of quantitative scales and their applicability in the context of health promotion programmes at the community level and highlighted the important gaps that would occur if only quantitative scales were used (19).

Health 2020 reflects these issues of measurement methodology in considering that qualitative methods have a vital and complementary role to play alongside standard quantitative approaches. Such a mixed methods approach is well established in the literature (20) and can facilitate a deeper understanding of the social and political dynamics through which community empowerment can be achieved.

Qualitative information can be obtained from standard questionnaires, semi-structured interviews, in-depth and interactive dialogues, participatory appraisal tools such as mapping, and visual techniques to help people to express their opinions (21). The last is particularly useful in identifying participants to ensure a range of perspectives or to specifically access a marginalized population. Quantitative approaches include collecting data from the DHS programme (which has collected, analysed and disseminated accurate and representative data on population, health, HIV and nutrition through more than 300 surveys in over 90 countries over a 30-year period (22)) and other similar surveys. Statistical techniques of data analysis and econometric models can be used to aggregate the information into a composite measure or index. There are benefits from combining data on the variables of a



complex concept such as empowerment, including through the use of a summary score that synthesizes a large amount of information (23,24).

1.1.5 The objectives of this report

The Action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region (25), which was adopted by all 53 Member States at the 66th Regional Committee in September 2016, is particularly concerned with developing new and relevant forms of quantitative and qualitative evidence from multiple sectors. This HEN report is part of a series that outlines how the monitoring of key concepts from Health 2020 (10) could be enhanced at a national level. In this context, this HEN report summarizes the best available evidence to address the following synthesis question: What quantitative and qualitative methods have been developed to measure community empowerment at national and local levels?

1.2 Methodology

A rapid review was chosen as the most appropriate means of assessing what is known about the measurement of community empowerment that could be utilized at a national level (26).

Sources for the review published from 1 January 2000 to 31 August 2017 were identified from the peer-reviewed and grey literature, including websites of key international and intergovernmental organizations. The review focused on countries in the WHO European Region, including information in Russian, but also considered worldwide literature and recommendations from key experts in the field.

A total of 952 articles were identified and assessed based on their abstracts and then on the full text, giving 34 articles. A further eight were added through expert consultation to give a final group of 42 (4,8,9,11,18,19,23,24,27–60). This included 16 articles on the measurement of women's empowerment (8,9,24,26, 42–50,55,58,59).

Further details of the search strategy including the inclusion criteria and data extraction are provided in Annex 1.

2. RESULTS

Community empowerment is difficult to measure because it involves complex social interactions, and the literature review showed a lack of evidence regarding its measurement at a national level. Where evidence was available, it was likely to be context dependent, thus limiting generalizability to a broader measurement of national community empowerment.

The most common approaches for tracking changes in empowerment used household survey instruments and the aggregation of variables such as legal, economic and political measures. Such data can be aggregated across groups in order to infer conclusions about impact and change for larger populations. The findings of this report have been subdivided into the following key areas:

- data from household surveys;
- data from measurement of women's empowerment;
- data from existing databases;
- integrating qualitative and quantitative information: a mixed methods approach;
- the development of empowerment indexes, variables and indicators;
- visualization tools;
- scaling up from community measurements; and
- measurement of governance initiatives.

Case studies were identified to illustrate measurement of community empowerment at various levels.

2.1 Data from household surveys

Data generated using the DHS programme (57) have been widely used, particularly in low- and middle-income countries. In addition, many countries carry out their own household surveys. The use of country-level household surveys for the development of socioeconomic empowerment indexes included experiences from Nepal, Pakistan and the Syrian Arab Republic.

In Nepal, a multimodule questionnaire was used with randomly sampled households in 200 villages. The survey questionnaire was adapted from the Nepal Living Standards Survey and included detailed information on social



empowerment. A follow-up survey was carried out two years later and included the same questionnaire to collect comparable information at the household and community level (36).

In Pakistan, a multistage random sample survey in rural households was based on eight variables: shelter, education, assets and property, livestock, health of household members, the sex of household head, household accessories, and groups and networks. The data were collected by fieldworkers using a questionnaire and were then aggregated to represent the larger population (34).

In the Syrian Arab Republic, four measurable variables of empowerment were used: access to information, inclusion and participation, capability, and local organizational capacity. For each variable, a number of indicators were identified and an index was constructed to collect data through a household survey questionnaire. This was used face to face by fieldworkers because of the high level of illiteracy (35).


The next section also discusses the use of DHS data to assess empowerment at the collective level, specifically women's empowerment.

2.2 Data from measurement of women's empowerment

Measurement of women's empowerment, at both the individual and collective level, has been a particular focus in the health literature since the early 2000s and the results are widely published. The data on women's empowerment in the literature can be divided into two groups: (i) data that are unique to the study and often exploratory in nature, and (ii) data that are readily available in databases. An example of the first group is a study in Chad which examined the associations between motivational autonomy at an individual and a collective level and found that at the community level it was associated with the likelihood of exclusive breastfeeding (42). While explorative studies may point towards promising indicators of women's empowerment, the data are not readily available, are difficult to collect and, consequently, are of limited use for measurement at a national level. The GEM database is an example of the second group: data that are collected routinely and are readily accessible to governments (see section 2.3) (58,59).

Women's empowerment studies have emphasized the difficulties in identifying indicators that can be used to quantify empowerment (8). A review of 45

studies using quantitative and/or qualitative data summarized the indicators used for empowerment (60). These included the economic dimension, such as available assets or household income and control over these; the quality of infrastructure; political participation; and the presence of health care services (60). Empowerment in the social dimension includes societal norms and in the political dimension includes female representation on local governing authorities (49). The review of the literature identified five empirical studies that examined women's empowerment at the collective level using variables constructed from DHS data: one used data from a number of countries (44) while the other four were within a specific country (45–48). The first study used data from 12 countries measuring women's empowerment as community averages (approximated as cluster-level averages) to capture women's ability to make independent decisions (44). The study found that in most countries women living in empowered communities made independent decisions and this was related to improved child health outcomes, such as vaccination status. A study in Haiti used a multilevel statistical analysis based on individual and community level variables to examine links between infrastructure development and women's empowerment (45). Infrastructural development was measured using an index based on community variables (availability of primary school, junior secondary school, senior secondary school, daily market, weekly market, shop, public transportation, hospital, dispensary and pharmacy). Although no statistically significant link was found between the community level index and measured women's disempowerment (exposure to sexual violence), this readily calculable index merits further exploration in the context of measuring community empowerment. In Bangladesh, women's empowerment at the community level was assessed by a community mean autonomy score, women's participation in a credit group and the percentage of women with any level of education in a community in order to assess whether women's status is protective against, or a precipitating factor in, domestic violence (46). In areas with a lower aggregate autonomy scores for women (i.e. culturally conservative areas), credit group membership and individual-level women's autonomy were both associated with significantly elevated risks of violence. A poor level of women's education was also associated with reports of domestic violence (46). DHS data in Tanzania was used to identify the proportion of literate women in a community as an empowerment variable associated with reduced fertility outcomes (47). DHS data in Ethiopia were aggregated to reflect and analyse links between an index based on several indicators of women's disempowerment (exposure to sexual violence) and community factors such as urban/rural location, religion, level of education, earnings and control over money in order to examine the



relationship between decision-making power and health functioning at a community level (48).

2.3 Data from existing databases

Data from national databases can provide indications of specific aspects of empowerment. Decentralization can be measured through the percentage of central budget transferred to local authorities and the density of social networks (27), data that are available in most government records.

Evidence from a literature search (11) suggested that some indicators of community empowerment are available in internationally comparable databases, such as those of Transparency International (12); the CSI, developed by CIVICUS (an alliance of civil society organizations with members in over 100 countries) (13); the World Bank governance databases (61); Freedom House (62); and the GEM and the GDI (58,59). The GDI captures the same set of indicators as the Human Development Index – life expectancy, educational attainment and income – but adjusts the results for gender inequality.

The reform of public administration, for example, can be measured as government effectiveness in service delivery (9) and through measures such as Transparency International's Corruption Perception Index and the percentage of illicit government payments. The reform of the legal system can be measured by the rule of law indicator scale, available in the World Bank governance databases. The literature review identified several important elements of civil liberties as being indicators for empowerment, such as political rights, the independence of the media, the equality of immigrants and minorities and the decentralization of tasks from the central to the local level (e.g. the World Bank's Making transition work for everyone (4)). Freedom House records accountability indicators and civil society strength as indicators of democracy (62). The removal of social barriers is measured in the World Bank governance databases, for example as the percentage of women in political office and income inequality (61).

The GEM captures gender inequality in key areas of economic and political participation and decision-making. The United Nations Development Programme's GEM database (63) routinely collects data covering several components of women's empowerment, including women's representation in parliament, official and management positions, the number of female technical professionals, the year in


which women acquired the right to vote and be elected and the ratio of estimated female-to-male earned income (58,59).

An international study examined differences in male and female smoking prevalence rates within countries worldwide to assess whether there was a linkage between women's empowerment, as indicated by national GEM scores, and increased smoking in women (43). National GEM scores in 109 countries had a positive correlation with increased female to male smoking ratio. This demonstrated the usefulness of such international databases for governments to assess collective empowerment at a national level.

The CIVICUS CSI is a participatory needs assessment and action-planning tool with the aim of creating a global knowledge base for initiatives that strengthen civil society (13,51). The CSI assesses the entire spectrum of civil society experience across five dimensions: the organizational structure of civil society, civic engagement, perception of impact, practice of values and the enabling environment. The CSI focuses on the space for civil society, the right to express dissent and the activities of social movements and social international networks. The CSI is initiated and implemented by, and for, civil society organizations at the country level. The CSI uses a measure of civic space in each country by assigning a rating as follows: open (the state both enables and safeguards the enjoyment of civic space for all people), narrowed (violations of rights take place), obstructed (civic space is heavily contested by power holders), repressed (civic space is heavily constrained) and closed (complete closure, in law and in practice, of civic space). This allows the data to be compared and contrasted at both national and international levels. The CSI assessments were piloted in 2000–2001 in 13 countries (52) and in 2011 had been carried out in over 70 countries.

2.4 Integrating qualitative and quantitative information: a mixed methods approach

A systematic review of the measurement of empowerment evaluated the measurement properties of quantitative empowerment scales and their applicability in health promotion programmes at the community level and highlighted the important gaps that would occur if only quantitative scales were used (19). However, few empirical studies have used qualitative methods to capture an issue such as empowerment at a national level, although some do discuss the potential of complementing quantitative data with qualitative data. Case study 1 is an example of the use of qualitative methods to supplement quantitative data.



Case study 1. Qualitative approaches to measuring women's collective empowerment

One study in Vietnam used qualitative methods to develop contextually relevant indicators to capture women's empowerment (50). Based on in-depth interviews with stakeholders, policy-makers and experts, the study recommended measures of empowerment in the areas of socioeconomic and reproductive health. A key domain within these areas was community participation; for example, poor women's participation in community activities can limit individual freedom because while women are expected to join local organizations not all women do so. Women's empowerment through their freedom of association in community-based organizations was able to be captured through open-ended qualitative questions and was used to supplement quantitative data about the level of attendance obtained from government data at a national level.

Case study 2 is a further example of the use of a mixed methods approach, with qualitative data and quantitative findings used to facilitate a more comprehensive understanding of community empowerment.

Case study 2. Using mixed methods in measuring empowerment in Jamaica

In Jamaica, a mixed methods approach was used in measuring empowerment by compiling case study evidence from five matched pairs of communities in Kingston (54). In each pair, one community had received funds from the Jamaica Social Investment Fund while the other had not. The impact of the Fund on the capacity for collective action was consistent across both the qualitative and quantitative data. The qualitative data revealed a broad-based satisfaction with the outcome but that the process was not very democratic, with decision-making processes dominated by a small group of community leaders. The data suggested that outcomes were good because community leaders had the best interests of the community at heart rather than because community empowerment had increased. Here, the qualitative findings were essential to broaden understanding of how the funds were being used as support of the data from the larger quantitative investigation.

Qualitative and quantitative methods can be integrated in different ways but the approach best suited to developing national-level assessments involves information being collected separately before being combining in the analysis (Case study 3).

Case study 3. Using a mixed methods approach in Ethiopia


Evidence from Ethiopia on the impact of the Women's Development Initiatives Project used data on indirect and direct indicators of empowerment gathered from 1000 households (55). The survey instrument used questions with direct and limited responses as well as a range of visual images such as pictures to help to qualitatively assess the degree of happiness women experienced. The study found that simple qualitative techniques that generate systematically recordable data can be helpful when collecting information from respondents who may have difficulty in expressing their feelings through a quantitative set of questions.

The Russian Federation Local Initiatives Support Programme was initiated to introduce a participatory approach to the development and rehabilitation of local-level infrastructure in poor communities (Case study 4) (39). Success was evaluated using quantitative measures, such as the rehabilitation of roads, water supply systems and cultural centres, and qualitative measures such as satisfaction levels in the local population.

Case study 4. Empowering communities: the Local Initiatives Support Programme in the Russian Federation

Poverty, unemployment, low-quality social services and poor infrastructure continue to be challenges in rural areas in the Russian Federation. The Russian Federation Local Initiatives Support Programme was initiated to address community challenges by introducing a participatory approach to the development and rehabilitation of local-level infrastructure in poor communities (39). The programme was implemented in six regions: Stavropol and Khabarovsk Krai; Kirov, Tver and Nizhegorodskaya oblasts; and the Republic of Bashkortostan. It was successful because it was able to engage the local population in decision-making, build community empowerment and strengthen the link between communities and local authorities. The programme measured its success based on tangible outputs including the rehabilitation of roads, water supply systems and cultural centres. It also measured the satisfaction level of the local population through the use of oblast sociological surveys and found that satisfaction was higher in participating areas than in those not participating.

Finally, empowerment evaluation uses a mixed methods and participatory approach to assess the weaknesses and strengths of a specific programme, to set



goals, to develop strategies and to determine the evidence for any changes (37). Empowerment evaluation has been mainly used in higher education programmes for individual empowerment in North America.

2.5 The development of empowerment indexes, variables and indicators

Combining data on the variables of a complex concept such as empowerment to create a summary score (commonly an index) can be beneficial; however, this report did not find clear evidence on the most satisfactory way to create such composite measures from disaggregated data.

Quantitative indicators of collective empowerment have been derived in large national studies using DHS data that approximate communities through sampling clusters. Several indexes were identified that have been developed for assessing aspects of empowerment, for example the World Bank's Empowerment Index and the Social Inclusion Index, which were later combined into the Composite Empowerment and Inclusion Index (23). The Empowerment Index was developed to measure individual empowerment and used a range of variables and indicators that sought to measure an individual's ability to make choices. The indicators covered five dimensions: (i) knowledge and awareness of rights and procedures, (ii) participation in local development services, (iii) confidence and comfort level in accessing services and exercising rights, (iv) social networks (economic and political), and (v) efforts to influence local government. The Social Inclusion Index was developed to consider the empowerment of an individual or group to address the injustice of institutions, for example by accessing police protection, public services or better economic opportunities. Its indicators measured the interaction with institutions over four dimensions: (i) self-perceived status of own caste or ethnic group, (ii) restricted access and public intimidation, (iii) effectiveness of local political influence, and (iv) effectiveness in obtaining services and opportunities. The Composite Empowerment and Inclusion Index combined these two indexes to test aggregate associations between empowerment and inclusion and to project interventions and outcomes (23).

A longitudinal mixed methods survey in Nepal examined domains of state and society and concentrated on the intermediary and local levels to explore social change in rural Nepal with a focus on gender, caste and ethnic dimensions. Data were gathered from 1000 households in a sample of 60 villages to identify the main dimensions for the Empowerment Index and the Social Inclusion Index. These were created and analysed separately and then combined into the Composite

Empowerment and Inclusion Index with gender-specific indicators for women's empowerment, specifically to examine the influence of caste and ethnicity (24).

The evidence suggests that individual and collective levels of empowerment are closely associated. A cross-sectional analytical study in Brazil, for example, assessed empowerment by asking 1150 individuals questions from the Integrated Questionnaire for the Measurement of Social Capital and the WHO Quality of Life-BREF. The conclusion was that the two approaches to empowerment, the individual and the collective, interact in a process through which people gain more control over their lives (30).

Another study sought to develop a universal classification of variables and indicators for individual and collective empowerment that could be adapted in different cultural contexts. The study included a review of the relevant literature, a participatory validation with community workers and researchers and a survey questionnaire. The proposed classification included a wide range of community empowerment variables: responsibility, efficacy, critical capacity, autonomy, acknowledgement, team working, inclusion and community integration, community identity, community knowledge, community organization/capacity, learning, and evaluation capacity. For each variable, the classification provided a number of indicators, although it did not provide a methodology to implement the approach (31).

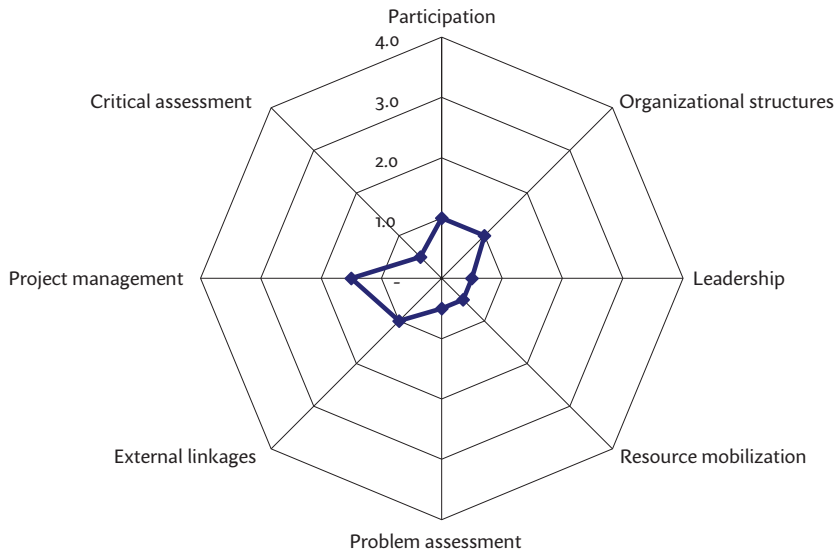
A Eurobarometer survey in 2010 assessed consumer empowerment by collecting data from 56 470 respondents in 29 countries (the 27 Member States of the European Union plus Iceland and Norway) on consumers' (i) basic numerical and financial skills, (ii) level of information on rights and prices, and (iii) complaint and reporting behaviour, including experience with misleading or fraudulent offers (64). Some of the collected data were then synthesized into the Consumer Empowerment Index, which described three main dimensions: consumer skills, awareness of consumer legislation and consumer engagement (32).

Evidence from Thailand on indicators for individual and collective empowerment at a national level used aggregated data collected at the community level. The study constructed empowerment indexes with 39 indicators covering four dimensions: financial, human, natural and social. The cross-sectional data were initially collected by interviewing local people and leaders using a rapid assessment process to produce the indicators. Subsequently, a survey was conducted in 428 communities in four districts in order to test the performance of the indicators to measure individual and collective empowerment (33).

2.6 Visualization tools

An essential aspect of the Health 2020 approach is accessibility to measurement information. The literature search identified several instances where a visual representation of indicators of community-based interventions such as empowerment was used for interpretation and analysis over a specific time frame and in a way that could be understood by all stakeholders. For example, in Mexico, a wheel of empowerment framework was used to demonstrate how the level of empowerment/disempowerment could be measured in five dimensions: economic, psychological, social, political and environmental (52). Indicators to measure the level of empowerment for each dimension were developed in a three-stage measurement process commencing with semi-structured interviews with key stakeholders, followed by focus groups with community members (52). The visual representation of community empowerment has also been implemented in a number of countries, including in Fiji and Kyrgyzstan, using a spider's web format that incorporates nine domains or indicators (Fig. 1) (65).

Fig. 1. The spider-web configuration for community empowerment.



Quantitatively mapping changes over time for qualitative information raises the issue of the reliability of comparable data. Reliability will depend on how the qualitative self-assessments are recorded; the method used should enable them to be used in the future as a comparable point of reference for other qualitative self-assessments (66).

2.7 Measurement of governance initiatives

The state is a key stakeholder in achieving community empowerment outcomes at a national level. The function of the state is related to sharing its power, its responsiveness to communities and the transparency of its actions. Countries with better governance, public institutions that are accountable and responsive to a broad electorate, stronger civil societies and equitable legal frameworks are generally more successful in enacting pro-poor reforms and thus empowering their citizens (4).

The measurement of empowerment at a national level has used variables within the political, economic, legal and human rights sectors, including good governance and institutional accountability (27,51). Good governance includes the accountability of politicians, enhanced civil liberties, lower corruption, increased responsiveness to public health problems, reciprocal relationships with the public, greater access to information and more control over resources (28). Civil liberties and community participation, which facilitate transparency, can also be used in measurement, for example increased attendance at health care services as an indicator of health equity (29).

An analysis to measure community empowerment in Estonia used nine organizational domains: participation, leadership, resource mobilization, problem assessment, links with others, organizational structures, asking why, the role of outside agents, and programme management (57). Data collection used a participatory approach that included representatives of county government, local municipalities, schools and the health care system, who worked together to identify key issues and a strategy to address each domain. It was concluded that engaging communities in the measurement of empowerment was just as important as involving government representatives.

An analysis of three health-related community empowerment programmes (funded by the United States Agency for International Development) that operated first as pilot programmes and then were scaled up to a wider level found that those using simple measures for monitoring the initial stages gained confidence to continue



(56). The analysis concluded that it was essential to prove the effectiveness of an intervention before scaling it up, and this was best achieved through a straightforward evaluation and feedback of programme impact to stakeholders. It was important to work with existing partner organizations, communities, the private sector and district, regional, and national government departments to collect the necessary data and to develop supportive training materials and monitoring tools. It was also important to recognize success and to publicize the evaluation results using the mass and social media (56).

Several national initiatives for community empowerment were identified, which used various outcome measures to assess success. The Scottish national action plan for community empowerment sets out a range of practical actions to enable people to empower themselves or “to do things for themselves” (38). The plan was developed based on a widespread consultation process, including assessments in local government, the third sector (voluntary and community organizations), individual interviews and specific questions in the Scottish Household Survey. The plan noted that it is not straightforward to measure whether community empowerment is making a difference, partly because it can take many different forms. Impact assessment may have to be decided on a case by case basis. The action plan proposes three main ways to assess the outcomes of community empowerment: the use of single outcome agreements (between a community planning partnership and the government to set the priority outcomes and the pathway to achieve these), including indicators and measures; use of the indicators developed for the United Kingdom (see below); and investment in a programme for planning and conducting community engagement plus monitoring and recording the process and evaluating the outcomes. The plan demonstrates how local priorities contribute to national priorities. A number of public sector organizations are partners in this community planning, such as the local authority, health board, fire and rescue service and police service, as well as voluntary, community and private sector organizations (38).

A standardized analytical framework for undertaking community empowerment evaluation has been developed by the United Kingdom’s Department for Communities and Local Government (40). The framework seeks to provide guidance to researchers and practitioners who would like to assess the success of empowerment interventions and to promote consistency and maximize comparability between evaluations of interventions. The evaluation framework is based on a logic model, which links outcomes with programme activities/processes and the theoretical assumptions/principles of the programme. The model encompasses elements of process and impact evaluation using a mixed methods approach that includes self-assessment

questionnaires, stakeholder focus group discussions and surveys. Initial assessments indicated that while people want to have a greater say in assessments of community empowerment they must also be convinced that their involvement will make a difference.

The Communities First regeneration programme, commissioned by the Welsh Assembly Government in the United Kingdom, aimed to increase opportunities for community empowerment and influence over service providers. The evaluation of the programme used nine case studies and a series of over 50 focus group and individual interviews with key stakeholders and community members. This information was then combined with community-led review events in each case study area to allow community members to reflect on their experiences of participation. The evaluation showed that community members had been able to achieve an influence over other partners in decision-making concerning the provision of services in all but one of the nine case studies (41).

An effective relationship between government, lower levels of administration and the community is essential in promoting community empowerment and for the collection of data on this empowerment (Case study 5).

Case study 5. Inclusive decision-making and local governance in the former Yugoslav Republic of Macedonia

By promoting collaboration between municipalities and local communities in planning and management, the Community Development Project in the former Yugoslav Republic of Macedonia has increased community empowerment (53). Prior to the Project, community committees had no clear channel to constructively propose specific actions to their municipal councils, resulting in frustration with local authorities. To create a venue for deliberation between municipalities and citizens, the Project supported the formation of community implementation committees at the municipal level. These committees have responsibility for local development and have been given the decision-making authority over financing for micro-projects to address social needs and problems. The model of inclusive problem identification and deliberation has proved an effective means of building partnerships. The collective decision-making process enabled stakeholders to hear each other's concerns. Local government representatives gained a better understanding of community priorities while the communities gained insight into resource limitations and priority setting as difficult but essential aspects of public management. Inclusive local governance has become a key institutional foundation for effective local empowerment in the former Yugoslav Republic of Macedonia.



3. DISCUSSION

3.1 Strengths and limitations of the review

The review considered the worldwide literature on measuring community empowerment at a national level even though the focus was on the WHO European Region. The search was conducted in English and Russian, the languages widely spoken in the WHO European Region, in order to capture the available and relevant evidence in the Region. Literature from the health, gender and development sectors was considered as well as the measurement of community empowerment at a community and subnational level if that had the potential to be scaled up to national levels. Since some grey literature can be difficult to access (e.g. from NGOs), some country-level evidence may have been excluded from the review despite the effort to capture this information through individual website searches.

3.2 The role of government in the measurement of community empowerment

Measurement of community empowerment at a national level depends on a number of factors, including the role of government, integrating qualitative and quantitative approaches and scaling measurements from a local to a national level. Measuring changes in community empowerment requires specific skills, particularly for qualitative assessment, and an ability to collect quantitative data at various administrative levels within government. There are also implications for cost, time, human capacity and the availability of data.

The measurement of community empowerment at a national level also presents specific challenges, including attributing causality or making a link between an empowerment variable and an outcome or impact. Other challenges to measurement at a national level include scaling up of empowerment indicators from a household or community level, aggregation of variables across populations, in-country capacity for data collection and bureaucracy (11).

In countries where data collection is a priority at a national level, the evidence shows that there is better access to information from government records, for example on decentralization and the functioning of civil society (4). The World Bank's worldwide governance research indicators dataset (61) provides a broad measure of government effectiveness that can be used to supplement existing records.

Strong local organizations can promote community empowerment by advocating for people's interests, and this can be measured through the overall strength of civil society, for example using the CSI (13).

Currently, while several national action plans have been developed with linked outcome measurements (38–41), there is no formal framework to assess national community empowerment in a European Member State.

3.3 Scaling up from community empowerment efforts

Most of the literature analysed in this report described subnational community empowerment projects and their assessment. Two issues arise from this: (i) how to expand from indicators and indexes derived at this lower level to national-level indicators, and (ii) how to scale up a successful community empowerment effort to a wider area. The evidence was unclear on the most satisfactory way to expand from measurements of empowerment at lower levels (e.g. household or community) to a national level, yet such scaling up between the individual, household and national levels in the European context could be a useful way to construct community empowerment variables.

Several reports looked at methods to successfully scale up a small community empowerment initiative to a wider community (33,38,41,56). One analysis indicated that scaling up the measurement of community empowerment requires technical and organizational skills in human resource and financial management, good leadership, strategic planning and effective evaluation techniques (56). When these capacities are not available or are weak, governments would find it advantageous to develop skills training and capacity-building both within and outside the government sector.

3.4 Policy considerations

The review has analysed sources of data that provide useful information on community empowerment including household surveys and international databases, each providing national data on particular aspects of empowerment. Most reports of community empowerment projects were related to empowerment at subnational levels and used a variety of means of assessment, including quantitative and qualitative methods. The examples of governance initiatives for community empowerment used outcome measurements specific to the projects.



Indicators can be both indirect and direct. Indirect indicators involve the availability of community assets and the function of government institutions to create civic spaces to enable communities to mobilize themselves. Direct indicators involve the opportunity for communities to make collective choices about the decisions that influence their lives and health and to transform these into desired outcomes.

Based on the effectiveness of the approaches discussed in this report, several policy considerations can be identified. The choice of which to use will be guided by what data are already available and the resources that can be allocated to assessing community empowerment.

When resources are limited or there is no current practice of measurement

- Combine a limited set of easily accessible quantitative indicators taken from government and/or statistical databases. This approach is based on information that is already systematically collected through DHS, national household surveys and international databases and so does not require allocation of specific resources for data collection. Such indicators include:
 - the percentage of communities (defined at a geographical or administrative level through census clusters) with access to a functioning paved road (or percentage of communities with access to sufficiently developed infrastructure);
 - the percentage of single-headed households;
 - the percentage of women in political office or senior management positions;
 - the percentage of communities in which all adult members have completed at least the minimum legal required level of education;
 - the percentage of total government budget transferred to community-based organizations; and
 - the average social network density, for example the number of formally registered NGOs per capita.

When resources can be allocated for a more comprehensive measurement strategy

- Use a mixed methods approach that combines the accessible quantitative variables and indicators with some form of rapid qualitative assessment. This more systematic approach requires resource allocation to collect the qualitative data to supplement the existing quantitative data. It would utilize:

- quantitative data from accessible government statistics offices that are updated regularly (e.g. DHS and similar surveys);
- quantitative data from internationally comparable databases such as those of Transparency International, the CSI, the GEM and GDI and the World Bank governance database;
- quantitative data from national or regional civil society organizations (e.g. access to social networks and the opportunities created by government for civic spaces);
- qualitative data from a specific number of key stakeholders (e.g. a sampling strategy that identifies participants to allow for a range of perspectives or accesses a marginalized population); and
- qualitative data collected by either a relevant government department or a contracted private sector agency qualified to undertake interviewing at individual, group and community levels.

When a national monitoring and evaluation system is feasible

- Use a comprehensive and systematic mixed methods approach that uses clearly defined methodology and responsibility for data collection and analysis. This would utilize a framework that outlines the measurement methodology, the people and departments responsible for data collection and analysis, the available databases and the specific variables and indicators that would be used. Indicators would be derived from both quantitative and qualitative data in regard to the social, governance, economic and civil participation dimensions of community empowerment, for example:
 - quantitative data for key variables and indicators from government statistics offices and through DHS or similar surveys;
 - qualitative data from key stakeholders including policy-makers and community leaders, through interviewing using rapid, semi-structured techniques; and
 - elements of internationally comparable databases such as those of Transparency International, CSI, the GEM and GDI and the World Bank governance database.



4. CONCLUSIONS

This report summarizes the assessment of community empowerment at various levels, mostly subnational. Such assessments are based on evidence from surveys, studies that examined women's empowerment (at both the individual and collective levels) and national and international databases. Measurement of community empowerment has often relied on data from DHS surveys, particularly in countries of low to middle income, plus other household surveys and the aggregation of different variables and indicators of empowerment into a composite measure or index. This aggregation does have benefits, but the evidence is unclear on the most satisfactory ways to aggregate and scale up indicators from the household or community level to a national level. National and international comparable databases such as the CIVICUS CSI provide information on indicators on specific areas of community empowerment and allow information to be compared and contrasted. This can assist in the development of suitable national measurements for community empowerment.

The evidence indicated that standard quantitative approaches are insufficient to measure the complexity of community empowerment at a national level and effective measurement would be best achieved using a mixed methods approach, accessing databases, using a range of variables and indicators and incorporating qualitative information.

The ideal approach to measure national community empowerment indicated by the report is the development of a comprehensive national measurement system using mixed methods and key variables and indicators. This would require both government commitment and the necessary resources. However, integrating qualitative and quantitative data to measure community empowerment requires technical and organizational skills and resources that may be unavailable or weak in some Member States.


Two simpler approaches are identified. The first would use a selection of readily available and easily accessible quantitative variables and indicators taken from existing statistical databases. This is suitable for Member States that do not currently measure community empowerment at a national level and it requires no additional data collection. The second approach supplements these accessible quantitative variables and indicators with some form of rapid qualitative assessment. This is suitable for Member States that may want to consider developing a more systematic approach to measuring community empowerment at a national level but are not wishing to create a formal framework.

REFERENCES


1. The health promotion glossary: 1998 version with updates [website]. Geneva: World Health Organization; 2018 (<http://www.who.int/healthpromotion/about/HPG/en/>, accessed 29 April 2018).
2. Zimmerman M. Empowerment theory: psychological, organizational and community levels of analysis. In: Rappaport JSE, editor. Handbook of community psychology. New York: Kluwer Academic; 2000:43–63.
3. Barnes M. User movements, community development and health promotion. In: Adams L, Amos M, Munro J, editors. Promoting health: politics and practice. London: Sage; 2002:79–83.
4. Making transition work for everyone: poverty and inequality in Europe and central Asia. Washington (DC): World Bank; 2000 (Background Papers 20920; <http://documents.worldbank.org/curated/en/262011468022484624/pdf/multi-page.pdf>, accessed 27 May 2018).
5. Freedom House in Eurasia. In: Freedom House [website]. Washington (DC): Freedom House; 2018 (<https://freedomhouse.org/regions/eurasia>, accessed 29 April 2018).
6. Crondahl K, Karlsson L. Roma empowerment and social inclusion through work-integrated learning. Sage Open. 2015;Jan–Mar:1–10.
7. Local Government Association. Communities in control: real people, real power. London: Office of Public Sector Information; 2008.
8. Kabeer N. Resources, agency, achievements: reflections on the measurement of women’s empowerment. Dev Change. 2002;30(3):435–64.
9. Mason K. Measuring empowerment: a social demographer’s view. Washington (DC): World Bank; 2003 (<https://openknowledge.worldbank.org/bitstream/handle/10986/7441/344100PAPER0Me101Officialouseonly.pdf?sequence=1&isAllowed=y>, accessed 27 May 2018).
10. Health 2020: a European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe; 2013 (http://www.euro.who.int/__data/assets/pdf_file/0011/199532/Health2020-Long.pdf?ua=1, accessed 29 April 2018).
11. Narayan D, editor. Measuring empowerment: cross disciplinary perspectives. Washington (DC): World Bank; 2005.
12. Transparency International [website]. Berlin: Transparency International; 2018 (<https://www.transparency.org/>, accessed 29 April 2018).

13. The CIVICUS Civil Society Index [website]. CIVICUS; 2018 (<https://monitor.civicus.org/>, accessed 27 May 2018).
14. Laverack G. Using a “domains” approach to build community empowerment. *Community Dev J.* 2006;41(1):4–12.
15. Rosato M, Laverack G, Grabman L, Tripathy P, Nair N, Mwansambo C et al. Community participation: lessons for maternal, newborn, and child health. *Lancet.* 2008;372:962–71.
16. Dixon L, Stewart B, Burland J, Delahanty J, Lucksted A, Hoffman M. Pilot study of the effectiveness of the family-to-family education program. *Psychiatr Serv.* 2001;52:965–7.
17. Melnyk BM, Alpert-Gillis L, Feinstein NF, Crean HF, Johnson J, Fairbanks E et al. Creating opportunities for parent empowerment: program effects on the mental health/coping outcomes of critically ill young children and their mothers. *Pediatrics.* 2004; 113:e597–607.
18. Wallerstein N. What is the evidence on effectiveness of empowerment to improve health? Copenhagen: WHO Regional Office for Europe; 2006 (Health Evidence Network report; www.euro.who.int/__data/assets/pdf_file/0010/74656/E88o86.pdf, accessed 27 May 2018).
19. Cyril S, Smith BJ, Renzaho A. Systematic review of empowerment measures in health promotion. *Health Promot Int.* 2016;41:809–26.
20. Rao V, Woolcock M. Integrating qualitative and quantitative approaches in program evaluation. In: Bourguignon F, Pereira da Silva L, editors. *The impact of economic policies on poverty and income distribution: evaluation techniques and tools.* New York: Oxford University Press; 2003:165–90.
21. Greenhalgh T. Cultural contexts of health: the use of narrative research in the health sector. Copenhagen: WHO Regional Office for Europe; 2016 (Health Evidence Network (HEN) synthesis report 49).
22. The DHS Program: demographic and health surveys [website]. Rockville (MD): DHS Program; 2018 (<https://dhsprogram.com/>, accessed 29 April 2018).
23. Alsop R, Bertelsen M, Holland J, editors. *Empowerment in practice: from analysis to implementation.* Washington (DC): World Bank; 2006 (Directions in Development 35032; <https://openknowledge.worldbank.org/bitstream/handle/10986/6980/350320Empowermentpractice01OFFICIALLoUSE1.pdf?sequence=1&isAllowed=y>, accessed 27 May 2018).

24. Bennett B, Gajurel K. Negotiating social change: gender, caste, and ethnic dimensions of empowerment and social inclusion in rural Nepal. In: Alsop R, Bertelsen M, Holland J, editors. Empowerment in practice: from analysis to implementation. Washington (DC): World Bank; 2006:193–217 (Directions in Development 35032; <https://openknowledge.worldbank.org/bitstream/handle/10986/6980/350320Empowerment1ctice01OFFICIALoUSE1.pdf?sequence=1&isAllowed=y>, accessed 27 May 2018).
25. WHO Regional Committee for Europe resolution EUR/RC66/12 on an action plan to strengthen the use of evidence, information and research for policy-making in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0006/314727/66wd12e_EIPActionPlan_160528.pdf?ua=1, accessed 27 May 2018).
26. Eklund Karlsson L, Takahashi R. A resource for developing an evidence synthesis report for policy-making. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evidence Network (HEN) synthesis report 50).
27. Narayan D. Empowerment and poverty reduction: a sourcebook. Washington (DC): World Bank; 2002.
28. Pratley P. Associations between quantitative measures of women's empowerment and access to care and health status for mothers and their children: a systematic review of evidence from the developing world. *Soc Sci Med.* 2016;169:119–31.
29. Rifkin S. A framework linking community empowerment and health equity: it is a matter of CHOICE. *J Health Popul Nutr.* 2003;21(3):168–80.
30. Soares MF, Ferreira RC, Pazzini CA, Travassos DV, Paiva SM, e Ferreira EF. Individual and collective empowerment and associated factors among Brazilian adults: a cross-sectional study. *BMC Public Health.* 2015;15:775.
31. Planas A, Soler P, Ciraso A, Ribot A. Empowerment in the community: the design of an open indicators system from participatory evaluation processes. *PSRI.* 2014;24:49–77.
32. Nardo M, Loi M, Rosati R, Manca A. The consumer empowerment index: a measure of skills, awareness and engagement of European consumers. Brussels: European Union; 2011 (JRC Scientific and Technical Reports EUR 24791 EN – 2011; [http://publications.jrc.ec.europa.eu/repository/bitstream/JRC64349/lbna24791enc\(print\).pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC64349/lbna24791enc(print).pdf), accessed 27 May 2018).

- 
33. Santipolvut S, Bejranonda S, Udomwitid S. The development of community empowerment indicators and its application in Thailand. In: 2011 Shanghai International Conference on Social Science, Shanghai, China, 17–20 August 2011. doi: 10.13140/2.1.2656.4806.
 34. Abrar-ul-haq M, Jali Gazi M, Islam N. Measuring the socio-economic empowerment of rural households in Pakistan. *J Gov Dev.* 2016;12:107–22.
 35. Mehchy Z, Kabbani N. Empowerment and poverty in rural Syria: a case study of twenty-four villages. In: Bérenger V, Bresson F, editors. *Poverty and social exclusion around the Mediterranean Sea.* New York: Springer; 2012:271–97.
 36. Parajuli D, Acharya G, Chaudhury N, Thapa B. Impact of social fund on the welfare of rural households: evidence from the Nepal Poverty Alleviation Fund. Washington (DC): World Bank South East Asia; 2012 (Policy Research Working Paper 6042).
 37. Fetterman D, Deitz J, Gesundheit N. Empowerment evaluation: a collaborative approach to evaluating and transforming a medical school curriculum. *Acad Med.* 2010;85:813–20.
 38. Scottish community empowerment action plan: celebrating success: inspiring change. Edinburgh: Scottish Government; 2009 (<http://www.gov.scot/Resource/Doc/264771/0079288.pdf>, accessed 5 July 2018).
 39. Shulga I, Sukhova A, Khachatryan G. Empowering communities: the Local Initiatives Support Program in Russia. ECA Knowledge Brief. 2014;71 (No. 89227; <https://openknowledge.worldbank.org/bitstream/handle/10986/18932/892270BR100BoxoaloADDoVCoKNOWoNOTES.pdf?sequence=1&isAllowed=y>, accessed 27 May 2018).
 40. Dickinson S, Prabhakar M. An analytical framework for community empowerment evaluations. London: Department for Communities and Local Government; 2009 (<http://www.sqw.co.uk/files/4313/8712/7616/48.pdf>, accessed 5 July 2018).
 41. Adamson D, Bromiley R. *Community empowerment in practice: lessons from Communities First.* York: Joseph Rowntree Foundation; 2008.
 42. Vaz A, Pratley P, Alkire S. Measuring women’s autonomy in Chad and its associations with breastfeeding practices using the relative autonomy index. Oxford: Oxford Poverty & Human Development Initiative; 2015 (Research Paper 44A; <http://www.ophi.org.uk/wp-content/uploads/OPHIRPo44a.pdf>, accessed 27 May 2018).

43. Hitchman SC, Fong GT. Gender empowerment and female-to-male smoking prevalence ratios. *Bull World Health Organ.* 2011;89(3):195–202.
44. Desai S, Johnson K. Women's decision making and child health: familial and social hierarchies. In: Kishor S, editor. *A focus on gender.* Calverton (MD): Maryland Population Research Center; 2005:55–68 (<https://pdfs.semanticscholar.org/32d4/04fc97e78eb23b8c598c66bf96c52c35e5dd.pdf>, accessed 27 May 2018).
45. Gage AJ, Hutchinson PL. Power, control, and intimate partner sexual violence in Haiti. *Arch Sex Behav.* 2006;35(1):11–24.
46. Koenig MA, Ahmed S, Hossain MB, Mozumder AKA. Women's status and domestic violence in rural Bangladesh: individual- and community-level effects. *Demography.* 2003;40(2):269–88.
47. Kravdal Ø. Main and interaction effects of women's education and status on fertility: the case of Tanzania. *Eur J Popul.* 2001;17(2):107–35.
48. Mabsout R. Capability and health functioning in Ethiopian households. *Soc Indic Res.* 2011;101(3):359–89.
49. Khanna M, Kochhar N, Palaniswamy N. A retrospective impact evaluation of the Tamil Nadu Empowerment and Poverty Alleviation (Pudhu Vaazhvu) project. *J Dev Stud.* 2015;51(9): 1210–23.
50. Santillan D, Schuler SR, Anh HT, Minh TH, Trang QT, Duc NM. Developing indicators to assess women's empowerment in Vietnam. *Dev Pract.* 2004;14(4):534–49.
51. Malena C. Measuring empowerment at the national level: the case of the CIVICUS Civil Society Index. In: *Workshop on measuring empowerment: cross-disciplinary perspectives.* Washington (DC): World Bank; 2003:1–5 (<http://siteresources.worldbank.org/INTEMPowerment/Resources/486312-1095970750368/529763-1095970803335/malena1.pdf>, accessed 27 May 2018).
52. Mendoza-Ramos A, Prideaux B. Assessing ecotourism in an indigenous community: using, testing and proving the wheel of empowerment framework as a measurement tool. *J Sustainable Tourism.* 2018;26:173–91.
53. Mascarell C. The Macedonia Community Development Project: empowerment through targeting and institution building. Washington (DC): World Bank; 2007 (Discussion Paper 0710; <http://documents.worldbank.org/curated/en/2744481468054631378/pdf/398520SP1710.pdf>, accessed 27 May 2018).

- 
54. Rao V, Ibanez M. The social impact of social funds in Jamaica: a “participatory econometric” analysis of targeting, collective action, and participation in community-driven development. *J Dev Stud.* 2005;41(5): 788–838.
 55. Legovini A. Measuring women’s empowerment in Ethiopia: the Women’s Development Initiatives Project. In: Alsop R, Bertelsen M, Holland J, editors. *Empowerment in practice: from analysis to implementation.* Washington (DC): World Bank; 2006:125–51 (*Directions in Development* 35032; <https://openknowledge.worldbank.org/bitstream/handle/10986/6980/350320Empowerm1ctice01OFFICIALoUSE1.pdf?sequence=1&isAllowed=y>, accessed 27 May 2018).
 56. Snetro-Plewman G, Tapia M, Uccellani V, Brasington A, McNulty M. Taking community empowerment to scale: lessons from three successful experiences. Baltimore (MD): Health Communication Partnership, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs; 2007 (*Health Communication Insights*; <http://www.stoptb.org/assets/documents/countries/acsm/Taking%20community%20empowerment%20to%20scale.pdf>, accessed 29 April 2018).
 57. Kasmel A, Tanggaard Andersen P. Measurement of community empowerment in three community programs in Rapla (Estonia). *Int J Environ Res Public Health.* 2011;8:799–817.
 58. Sundstrom A, Paxton P, Wang Y-T, Lindberg SI. Women’s political empowerment: a new global index 1900–2012. *World Dev.* 2017;94(C):321–35.
 59. Klasen S, Schuler D. Reforming the gender-related development index (GDI) and the gender empowerment measure (GEM): some specific proposals. Göttingen: Ibero-America Institute for Economic Research; 2009 (*Discussion Papers* 186).
 60. Malhotra A, Schuler SR, Boender C. Measuring women’s empowerment as a variable in international development. Washington (DC): World Bank; 2002 (<http://siteresources.worldbank.org/INTEMPowerment/Resources/486312-1095970750368/529763-1095970803335/malhotra.pdf>, accessed 30 June 2018).
 61. Governance [website]. Washington (DC): World Bank; 2018 (<http://www.worldbank.org/en/topic/governance>, accessed 29 April 2018).
 62. Freedom House [website]. Washington (DC): Freedom House; 2018 (<https://freedomhouse.org/our-work>, accessed 29 April 2018).

63. Human development report 1995: gender and human development. New York: United Nations Development Programme; 1995 (http://hdr.undp.org/sites/default/files/reports/256/hdr_1995_en_complete_nostats.pdf, accessed 29 April 2018).
64. Consumer empowerment. Brussels: Directorate-General for Health and Consumers; 2010 (Special Eurobarometer 342; http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_342_sum_en.pdf, accessed 1 June 2018).
65. Laverack G. Health promotion practice: building empowered communities: Ch. 8. Empowerment in action: a community-based approach. London: Open University Press; 2007:115–28.
66. Laverack G. Evaluating community capacity: visual representation and interpretation. *Community Dev J.* 2006;41(3):266–76.



ANNEX 1. SEARCH STRATEGY

Methodological approach

A rapid review was chosen because this method aims to be rigorous and to provide an overview of the available evidence within a specific time frame. It uses an explicit methodology but has to make concessions to the breadth and depth of the process by limiting particular aspects of the review process. It produces evidence rapidly by diverging from standard systematic review methodologies, for example by reducing the number of databases searched or by using less comprehensive approaches for data extraction and synthesis.

Electronic databases that provide an advanced search facility and included articles in public health and the social sciences were used, including the Cochrane reviews, Popline, ProQuest, Pubmed/Medline, ScienceDirect, Scopus and Web of Science. In addition, electronic databases that provide a basic word search facility were used, including Google Scholar and ResearchGate. The grey literature included reports, discussion papers, guidelines, conference presentations and government policy documents. Official publications of international and intergovernmental organizations were considered reliable sources because they are generally based on detailed evidence reviews and/or expert panel methods, with clear referencing of the underlying evidence. General sources of grey literature were included in the review such as BASE (a search engine particularly for academic web resources operated by the Bielefeld University Library) and WorldCat.

The operational nature of community empowerment means that grey literature was an important source of evidence but this can be difficult to access and, therefore, some country-level evidence may have been excluded from the review although every effort was made to capture this information through individual website searches.

The search strategy focused on terms used in the title, keywords and abstract specifically for community empowerment measurement at a national level, as discussed for the published data. Key reviews on the measurement of empowerment were examined to identify broad policy themes and this was followed by a search of the official publications and websites of international and intergovernmental organizations, including Member States of the WHO European Region, key organizations in the field such as United Nations agencies and the World Bank, and third sector entities such as the International Federation of Red Cross and Red Crescent Societies and CARE (Christian Action Research and

Education). Key experts in the field were also contacted and asked for references of published and unpublished work and for any ongoing projects. The relevant documents were downloaded and hand-searched to identify references to other sources or to inform a more specific search for further documents.

The period from 1 January 2000 to 31 August 2017 was chosen for the literature search because measurement of community empowerment at a national level became more prominent from the start of the 2000s. Searches were performed in October–December 2017. Additional documents identified through expert contributors, peer reviewers and snowballing techniques were added during January–March 2018.

Identification of case studies

Case studies were identified that illustrated the interaction between quantitative and qualitative methods to measure community empowerment at a national level.

Inclusion criteria

Although the review focused on countries in the WHO European Region, including documents in Russian, European data were limited and so relevant worldwide published and unpublished literature was also considered. Studies measuring at least one indicator of community empowerment were eligible for inclusion. This included any studies with measures of community empowerment and particularly those using a mix of qualitative and quantitative data in which at least one outcome variable concerned community empowerment and national policy.

Search terms

The term empowerment was initially included as well as community empowerment but was withdrawn because it was found to be too broad. However, the term collective empowerment is interchangeably used with community empowerment in the literature and so both were used with the combination of the following keywords: (community or collective empowerment) AND (measurement); (community or collective empowerment) AND (indicators); (community or collective empowerment) AND (evaluation); (community or collective empowerment) AND (Policy); (community or collective empowerment) AND (national guidelines).

A smaller, parallel rapid review of literature was conducted on the measurement of community empowerment published in Russian. The keyword search was

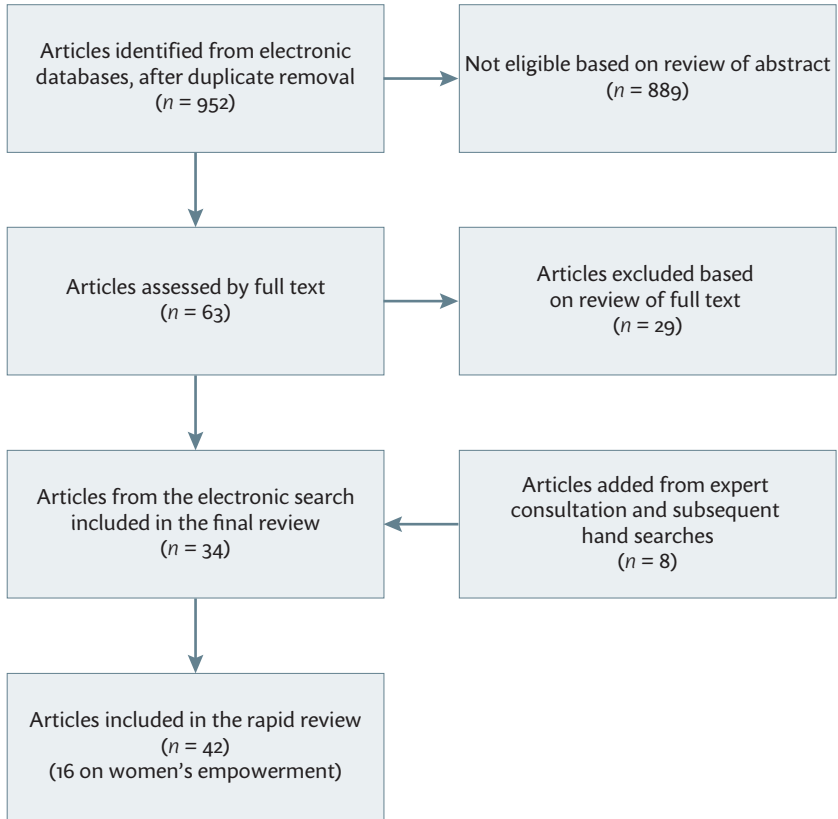


problematic because the concept of community empowerment was not used within the context of public health and health care, particularly its measurement at a national level. This situation may have been made more difficult by the lack of a term for empowerment in the Russian language. The concept of empowerment was translated by using a number of different words, each of which has a separate meaning but contributed to the overall understanding of the concept of empowerment. In turn, the approach of using multiple keywords to search for the concept generated a large number of results, of which many had only a marginal relevance to the measurement of empowerment. For example, the Russian language review found that many articles were related to law, including patient rights.

Data extraction

The literature searches identified a total of 952 records after removal of duplicates. After a review of abstracts, 63 were eligible for secondary review. A review of the full text excluded a further 29 records, although a further eight were added through expert consultation. The final total of 42 records included 16 measuring women's empowerment (Fig. A1.1). The measurement of women's empowerment is a widely published and operationalized area of work. Conclusions and policy considerations were extracted and connections between them were analysed.

Fig. A1.1. Selection of studies.



World Health Organization

Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel.: +45 45 33 70 00

Fax: +45 45 33 70 01

Email: eurocontact@who.int

Website: www.euro.who.int

ISBN 9789289053600



9 789289 053600 >