

# Survey regarding health impact of energy poverty in Albania

















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The aim of this document is to collect and analyses information regarding health and energy poverty in Albania, specifically:

- o Impact of (summer) energy poverty on physical, mental and social heath
- Existing or appropriate legal framework
- o Good practice
- $\circ$   $\;$  How to integrate energy poverty and social protection

**Keywords:** energy poverty, physical and mental health, indicators and referring mechanism, gender, Albanian policy and legislation,

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## 1 SUMMARY

The survey and analysis were conducted in the frame of the EmpowerMed project. EmpowerMED aims to contribute to energy poverty alleviation and health improvement of people affected by energy poverty in the coastal areas of Mediterranean countries, with a particular focus on women and also on the health impact of energy poverty.

Activities performed by project were:

- Survey among decision making and key actors regarding health impacts of energy poverty,
- Analysis of the survey,
- Health training for decision makers.

Key findings of the survey regarding health impact of energy poverty are: Most of the respondents are familiar with energy poverty concept, and energy poverty on winter / summer; respondents can determine energy poverty; respondents are familiar with health impact of energy poverty, physical, mental and social impact of energy poverty on winter / summer; respondents mention some indicators for objective and subjective measure of energy poverty impact on health; there are neither indicators to measure energy poverty impact on health in Albania, nor according to gender ; respondents recommend to undertake legal framework improvement in national and local level, based on international best practices for improvement of energy poverty and impact on health.

Regarding indicators for measuring energy poverty expert has referred to international guidelines and standards, which are described in publication "Energy poverty, National indicators, insight for more effective measuring" prepared by Energy poverty Advisory hub, October 2022 with support of European Commission. Most of the indicators are direct related with access, price of energy and economic level of families. Among them is one direct indicator related to health output: Excess winter mortality/deaths.

Regarding first aid against energy poverty, focus was put on vulnerability factors regarding health, and setting up monitoring indicators which can capture in time vulnerable people and refer them to health system. Healthcare level in Albania, and how vulnerable people or patient will move within health system according to referring regulation, was on focus of this session.

Based on the main survey findings, some of key policy recommendations are as follow:

- Set up a monitoring system based on health indicators in order to tackle energy poverty impact. Indicators can be developed in order to measure health conditions caused by energy poverty, like: excess mortality during winter/summer, incidence of cardiovascular diseases, respiratory diseases, mental diseases, etc.;
- Training of medical staff, part of the public health sectors how to measure and analysis of energy poverty impact on health;
- Training of healthcare staff regarding health implications of energy poverty on winter/summer, how to deal with them and where to refer;
- Creating a model of vulnerable population regarding energy poverty would help them to identify and tell to health staff what caused health condition, and how they can avoid them.
- Cross institutional collaboration between health sector, local authorities and central energy institutions, based on objective indicators, in order to identify vulnerable

households and people, refer them to social and health institutions, and deal with their health conditions.

• Creating an education curriculum regarding energy poverty impact on health to faculty of medicine as part of medical doctor new generation education.

## 2 SURVEY RESULTS AND DATA

Survey about knowledge of energy poverty concept and impact on health is the first of this kind in Albania.

### 2.1 Objective

Survey tends to measure level of knowledge of energy poverty concept by health system experts (public health, medical doctors and specialist), possible health impact on citizens, and mostly on vulnerable groups and mostly to women.

Objective of the survey were decision making and key actors regarding health impacts of energy poverty.

The service includes the following topics:

- Knowledge of decision making and key actors regarding impact of (summer) energy poverty on physical, mental and social heath
- Existing or appropriate legal framework
- Good practice
- How to integrate energy poverty and social protection
- Include summer energy poverty and gender in the survey

### 2.2 Methodology

This survey is qualitative, performed through focus group technique (no sample was selected among target group). Instead of bringing together in one room 16 professionals from all over the country, we delivered to them a structured questionnaire. This is the reason why the sample is composed by 16 respondents. Choosing to perform survey in this way, "focus group in distance" has its limits: because it cannot be an active discussion between respondents; if there is any misunderstanding of the question, you cannot explain it to them; we can generalize the answers regarding institution approach towards energy poverty, but cannot generalize regarding health staff.

Questionnaire was prepared in 3 main pillars, composed by 35 questions. First questions (1-4) are related to demographic of respondent. Second pillar (questions 5-8) focuses on respondent perspective about energy poverty and third pillar (questions 9-35) tends to collect information about energy poverty and health impact according to respondents.

### 2.3 Results

#### Demographic data on respondents

Survey participants that have filled all questionnaire were 16 altogether, and work in different health institutions: 11 of them work in public health institutions in the field, one

in WHO Albania office, and one health staff working in primary healthcare facility, tertiary hospital healthcare, medicine faculty in Tirana, and health inspectorate.

Most of the survey participants are public health specialists – 9 out 16, 6 are medical doctors of different specialties (pediatritian, family doctor, laboratory doctor), and 1 is sanitary inspector (graph nr.1).





Most of the respondents are of the age-group 50-64 years old (graph nr.2). Most of the participants on the survey ore female, 11 out of 16 (graph nr.3).

Graph nr.2: Respondents according to age





Graph nr.3: Respondents according to



#### Knowledge about energy poverty concept

Most of the respondents, 88% of them, declare that are familiar with energy poverty concept. Slightly more than half of respondents, 9 out of 16, refere to be familiar with summer energy poverty concept (graph nr.4).



Graph nr.4: Familiarity with terminology energy poverty among respondents

#### Definition of energy poverty

Respondents define energy poverty as: lack of access to safety energy, insufficient amount of energy, unable to use enough energy because of high bills, high prices of energy versus family income, lack of energy, absence and insufficience of energy in order to fulfill vital needs, is not produced enough energy in order to fulfill population needs, unable to guarantee optimal conditions for warming and cooling of residential area in optimal temperature, energy poverty means low living conditions where a family can not afford to pay energy bill in such level that effect physical health, mental and social of the human being.

Questions about health impact of energy poverty, most of them 56% affirm, whereas 44 % of them disaffirm or maybe. 94% of the respondents refer that have information energy poverty can have health side effects (graph nr.5).





#### Summer energy poverty

Respondents refer that summer energy poverty can cause physical health impact, as follow: worsening of existing chronic diseases, cardio-vascular accidents, alimentary intoxication, heat stroke, dehidration of several degree, mood disorders, asthma, respiratory and cardiac insuficiency, mental health, fatigue, stress, physical fatigue, apathy, eating disorders, sleep disorders.

Repondents refer summer energy poverty cuase mental health , as follow: lack of concentration. Reduced effectiveness, worsening of existing menatl health disorders, lowering of the judgment level, behaviour and humor disorders, health consequences of the high temperatures, worsening of chronic diseases, lowering of work performance, fatigue and lack of concentration, stress, depression, anxiety, irritability.

Respondents refer that summer energy poverty can cause socail health impact, as follow: communication apathy within family, influence in lowering woking perfomance and in family as well, mental health disease, unable to perform daily tasks based on social status because of living conditions or poverty in living environment have direct impact in social health, lower of desire to perform diffrenet tasks, aggressiveness, isolation, solitude.

#### Winter energy poverty

According to given responds, winter energy poverty can cause physical health impact, as follow: respiratory tract infections, worsening of chronic diseases, disorders of mental health, effect negatively to gravity of diseases that have high incidence during winter time, lower of immunity, increase of risk of seasonal flu, sceletal system disease, physical fatigue, sneezing, runny noise, flu, arthritis, high tendency to suffer respiratiry infections, cold, weakness, cardiovascular diseases, pulmonary diseases, rheumatic diseases, hypothermia.

Respondents refer that winter energy poverty may have impact in mental health, as follow: anxiety, slepp, depressed, lack of concentration and low productivity, stress, increase incidence of mental health disorders.

Respondents refers that winter energy poverty might have impact in social health, as follow: tense social relationship, lack of movement or collaboration, community tranquilty disorders, stress, poverty, isolation and social interactions, low grades at school from children, unemployment, head of family who struggle to meet energy family needs except health and mental issues, he is stressed and unable to fulfill daily duties and to be productive, lower of dessire to commit in different acitivities, lower performance, social isolation.

#### Energy poverty indicators

Respondents refer as energy poverty indicators related to health social factors , as follow: percentage of cold days without heating; percentage of hot days without cooling; family expenses level for energy; percentage of family getting poor beacuse of high energy bills; indicators related to living conditions; ability to pay combustiles; heating and cooling equipments; indicator regarding types of energy used; low income; high energy cost; poor living conditions; unable to afford minimal living conditions.

Most of respondents, 94% of them, refere that poor health increase likelihood of energy poverty and vice versa. Exapmles given by them, are as follow: increase of incidence of

mental health disorders; poor health can effect low employment possibility, low income, increased difficulties to afford living cost, as consequence might effect in energy poverty. Vice versa, energy poverty, low heating possibility at dwelling, lack of electricity energy, migh influence physical and mental health.

#### Does your working institution measure health impact of energy poverty?

Most of the respondents, 94% of them, refer that their working institution does not measure health impact of energy poverty.

Respondents refer that can be measured objectively health impact of energy poverty, as follow: number of additional health events (illnes and mortality) in a given period, in a given population, in absence of access to energy (measured as number of days without access to proper energy or/and in porportion with number of families pushed in poverty because of energy expenses); measuring population demand for healthcare; increase of chronic diseases; hypothermia; diseases of upper repiratory tract at children; lower respiratoy tract diseases at children; respiratory infection at adults; chardiac diseases; CNS diseases; mental health; increase incidence of several diseases according to season, living area and social status.

Respondents refers that can be measured subjectively health impact of energy poverty, as follow: moral turpitude, psychological; lack of comfort in daily living; extrapolation of international studies in albanian context about health impact if energy poverty; evaluation of mental and physical health and their conection with energy poverty; analysis of persons paying visit to emergency centre or health centres during winter or summer time would analysis conection of disease incidence on persons living in poor energy conditions; mental health can be one of the direct measure.

Respondents refer that data needed to show more empirical evidence between energy poverty and poor health, are as follow: data on energy access and consumption at family level; data on health condition of family members; lack of heating and cooloing systems installed in dwelling or working area; disease statistics; economic statistics; acute or chronic disease in families with poor energy access; energy poverty have direct corelation with high mortality; living conditions; family incomes; employment status; heating and cooling equipments; illness indicator related with living area; socio-economic conditions.

Based on the responses given by respondents, 94% of them refer that their working health institutions do not measure poverty at community level.

#### Used instruments:

*Most of the respondents*, 63% of them refer that there are energy poverty indicators, as follow: indicator for energy efficiency related to the dwelling; unable to pay energy; low income that cannot afford energy expenses; increase of illness during winter time for example: increase of cardiovascular disease, arthritis, respiratory disease, flu, hypothermia, especially in rural areas; increase of mental health issue incidence; increase of mortality in remote rural areas that face energy poverty.

Most of respondents, 63% of them, refer that there are indicators for energy poverty health impact. They refer as indicators for measuring health impact of energy poverty, as follow: good health of respiratory tract; illness indicator; energy price; physical situation of living dwelling.

Most of the respondents in the study, 75% of them, refer there are not indicator related to gender. Those respondents who refer there are indicators, mention disaggregation according to gender.

#### Legal frameworks to address the impact of energy poverty on health

Respondents refer legal framework that address the impact of energy poverty on health, related to: living standard, social protection, consumer protection regarding energy, public health legislation, European Counsil has published lastly on May 2022 a handbook in order to understand and address energy poverty, which should become part of daily working module in environment health sector.

# Frameworks and programme on national level should be implemented to include energy poverty, health and social protection

Respondents refer programmes and laws on national level should be implemented to include energy poverty, health and social protection, as follow: Evaluation and legal regulation of basic living level in order that everybody to have the right to live a healthy and dignified life; public health law; law to protect health and wellbeing of population; program to support families in need in order to assure minimum level of energy for lighting, cooking and heating; programs for energy efficiency in newly build homes and energy certification; programs for alternative energy; subsidy for categories in need; subsidy for new equipment's with high energy efficiency; consumer protection in order to reduce energy poverty (third energy package of UE adopted in Albania).

# Frameworks and programme on local/community level should be implemented to include energy poverty, health and social protection

Respondents refer as frameworks and program on local/community level should be implemented to include energy poverty, health and social protection, as follow: Program of social protection; program on transparency and accountability; indicators to become part of working program of local institutions; European standard law to protect citizens rights; local level analysis regarding population, where every municipality should have database of families in their catchment area, which are capable to provide basic level of energy and which not, widow who are responsible for their family, family with unable physical persons who cannot provide basic needs for energy to themselves and their families; budget should take into account to subsidy scheme for families in need in order to not suffer energy poverty during the winter and summer ; program supporting families in need; increase of social protection.

# Good practice in Albania and beyond to improve health and reduce energy poverty?

Respondents mentions some good practice to improve health and reduce energy poverty, as follow: define minimum living threshold; program of social protection; financial supporting schemes for vulnerable groups; electric energy access to all rural areas; support to improve living conditions with higher energy efficiency in order to reduce energy poverty; reduction of the electric energy price adopting to salary level and social status of the population.

Respondents are eager to know more about this new field of public health, indicators that evaluate correlation between energy poverty and mental and physical health and to be informed for the continuity of the project as well.

## 3 INTERPRETATION AND ANALYSIS OF THE RESULT

Analysis of the results does not surprise, regarding institutional monitoring of energy poverty and its health impact. Institute of Public Health (IPH) is technical branch of Ministry of Health and Social Protection, which do provide data to it, in order to do evidence policy making.

IPH do collect data based on monitoring systems and reporting formulars prepared in advance, which are filled by field public health experts. Field public health experts who participated in the survey, do refer the absence of neither indicators nor monitoring system of energy poverty health impact.

IPH does have department of risk assessment and treatment, and sector of Environment epidemiology and air quality control. They do measure air quality through different equipment's, but they do not measure other environment risks, where energy poverty and its impact, can cause to population health.

On the other hand, respondents do not find any central or local policy, to address energy poverty problems and health impact. There are not central or local policy to support household with arrears on utility bills, mostly households under social welfare protection, subsidize heating / cooling equipment's, dwelling thermal insulation.

There is lack of hole system regarding energy poverty, starting with tackle of households suffering energy poverty, dwelling thermal insulation status, health complications of energy poverty, financial supporting schemes for household in arrears of energy bills, and energy efficiency subsidize schemes.

In the absence of any monitoring or supporting system, based on the European experience and standards, it would be good to propose a model of energy poverty monitoring and addressing its consequences for Albania. This model should be discussed and agreed with central and local institutions, in order to pilot it in project catchment area of Vlora.

## 4 POLICY RECOMMENDATIONS

According to planning actions to tackle energy poverty – a circular methodology, presented handbook "a guide to understanding and addressing energy poverty "prepared by Energy poverty advisory hub, there are proposed three steps:

- 1- Diagnosis to understand determinants at local level,
- 2- Planning actions to interfere and address energy poverty impact,
- 3- Implementation of interventions.

### 4.1 Key policy recommendations

Taking in consideration findings of the survey, international literature, and input by participants at training organized by the project, key policy recommendations are as follow:

- Set up a monitoring system based on health indicators in order to tackle energy poverty impact. Those indicators can be developed in order to measure health conditions caused by energy poverty, like: excess mortality during winter/summer, incidence of cardio-vascular diseases, respiratory diseases, mental diseases, etc; Such indicators can be discussed with Institute of Public Health, as technical institution responsible to monitor epidemiology of health conditions in Albania, through monitoring systems and monthly, quarterly and yearly reporting.
- Training of medical staff, part of the public health sectors how to measure energy poverty impact on health, by presenting international experience and successful models in Europe;
- Training of healthcare staff regarding implications of energy poverty on winter/summer, how to deal with them and where to refer. It can be developed in collaboration with Faculty of Medicine, Public health department as part of continues education program;
- Energy poverty is known as risk factor regarding health, but risk factors are break down as determinants, direct and indirect contributors. Usually, public health interventions are focused at indirect contributors, related with education of the population regarding health impact of energy poverty. Thus, creating a model of vulnerable population regarding energy poverty would help them to identify and tell to health staff what caused health condition, and how they can avoid them.
- Cross institutional collaboration between health sector, local authorities and central energy institutions, based on objective indicators, in order to identify vulnerable households and people, refer them to social and health institutions, and deal with their health conditions.
- Creating an education curriculum regarding energy poverty impact on health to faculty of medicine as part of medical doctor new generation education. This can be done through collaboration with department of public health in faculty of medicine in Tirana.

### 4.2 Recommendations for next analysis/survey

I suggest that by the end of the project, to organize a round table with policy makers or decision makers, in order to discuss further steps for institutionalization of the model proposed, and its replication in country level.

