CHSS
University of Kent

Centre for Health Services Studies

Public health programmes and policies in Ukraine: development, design and implementation

Authors

Erica Gadsby[§], Stephen Peckham[§], Anna Kvit*, Kateryna Ruskykh*

[§] Centre for Health Services Studies
University of Kent

*** Kyiv Economics Institute**
Kyiv School of Economics

May 2017

Further copies can be obtained from:

Paula Loader, Librarian
Centre for Health Services Studies
George Allen Wing
University of Kent
Canterbury
Kent CT2 7NF

Tel. 01227 823940

http://www.kent.ac.uk/chss

@CHSS_Kent

Title

Public health programmes and policies in Ukraine: development, design and implementation

May 2017

Centre for Health Service Studies
University of Kent:

Erica Gadsby, Research Fellow

Stephen Peckham, Director and Professor of Health Policy

Kyiv Economics Institute
Kyiv School of Economics:

Anna Kvit, Research Associate

Kateryna Ruskykh, Research Associate

Funded by:

Medical Research Council, Wellcome Trust, ESRC, UKAid
Project name: Feasibility Study "Effectiveness of public health system in combating severe population health crisis in Ukraine"

Place of work: Ukraine

Centre for Health Services Studies

CHSS is one of three research units of the University of Kent's School of Social Policy, Sociology and Social Research. Carrying out high quality health services research, with local, national and international professional partners, our goal is to improve the links between research, policy and practice.

The Centre draws together a wide range of research and disciplinary expertise, including health & social policy, public health & epidemiology, geriatric medicine, primary care, physiotherapy, statistical & information analysis and public engagement & involvement. CHSS supports research in the NHS in Kent and Surrey and has a programme of national and international health services research. While CHSS undertakes research in a wide range of health and health care topics, its main research programmes comprise-.

- Public health and public policy
- Integrated care
- Primary and community care
- Health psychology
- Health economics
- Palliative care

Researchers in the Centre attract funding of over £1.5 million per year from a diverse range of funders including the Department of Health, the European Commission, NHS Health Trusts, the ESRC and the MRC.

For further details about the work of the Centre or for more copies of the report please contact:

Kate Ludlow
Administrator
Centre for Health Services Studies
George Allen Wing
University of Kent
Canterbury
Kent CT2 7NF

Tel: 01227 824057

E-mail: k.ludlow@kent.ac.uk

www.kent.ac.uk/chss

Contents

Introduction

This working paper describes our analysis of the evaluability (in principle) of public health programmes/policies in Ukraine. To do this, we analysed programme and policy documents, and our telephone survey and in-depth interviews, to explore the logic models of programmes/policies and to describe their (intended and actual) implementation. We sought to identify and explain programme aims, objectives, outcomes/targets and mechanisms by which outcomes are expected to be achieved. The following sections include some general conclusions resulting from our analysis of a range of programmes/policies, and give explicit examples of specific programmes/policies where relevant.

Chapter 1: Public health programme/policy design

Despite the development of the programme Health 2020[1], an overarching plan for delivering population health improvement and for reducing health inequalities has never been fully thought through and implemented in Ukraine. Our research suggests that there is little in the way of a public health workforce, and health protection and public health intelligence functions are limited and fragmented, as exemplified in this quote from an interviewee:

> *"Public health is a very popular word nowadays. Recently, I have studied abroad at the program on public health. I cannot understand what they want from me. Public health – it is basically all what everyone of us is doing every day. It is to wash your hands, to know how to use toilet, to make injection to prevent a disease, to do x-rays or fluorography in time…*
>
> *We do not have institution that specialises solely on public health in our country. They all can talk a lot, especially recently created Department on Public Health under the Ministry of Health... We do not have specific people. People who would specialise on one program. We have 5 positions in the Motherhood and childhood department, but 4 of them are vacant. People with medical education refuse to work in the department of health care because they cannot do that amount of work for the salary they are paid. At the same time, there is many research institutes that research public health sector as you do" (regional healthcare department, head).*

Most emphasis within population health improvement programmes in Ukraine is placed on more curative health care interventions, rather than on preventive activity within a more comprehensive public health approach. This is not unusual – indeed, Bishai et al (2014) note that in both high-income and low- and middle-income settings, more is spent on curing rather than averting disease: "For example, although the burden of disease associated with chronic, non-communicable diseases is significant, in the Organization for Economic Co-operation and Development countries average expenditure on public health and prevention for non-communicable diseases was only 3% of the total health expenditure in 2005, while average expenditure on curative care was 57%" (Bishai et al 2014:9).

The key national programmes we examined in this research are focused on the major health challenges facing the population of Ukraine, and relate to non-communicable diseases (especially cardiovascular

[1] Then draft law on the approval of the National Program "Health 2020: Ukrainian Dimension" was withdrawn from the parliament in the beginning of 2014 (VRU 2013).

diseases, diabetes and cancer), communicable diseases (especially tuberculosis, HIV and vaccine-preventable diseases), and reproductive health.

We examined programme documents in order to elicit and elaborate programme theories and draft logic models for each programme. We found this to be a difficult process, greatly hindered by a lack of clarity within the documents in the description of the programme objectives and design. We often found it difficult to elaborate the clear relationships between the specification of the problem, the programme goals, the activities, the outputs, and the expected long-term outcomes.

Our examination of programme documents found that the basic programme logic is described in the beginning of each programme in a narrative way under the sections: purpose of the programme, ways and means of solving problems, tasks and programme activities, expected results and effectiveness of the programme, size and sources of financing. These narratives provide general information, key objectives, indicators and interventions of the programme. However, for each of the programmes reviewed, there was often little or no specification of expected outputs/outcomes.

Programmes and policies in relation to evidence

In explaining the rationale for programmes and policies, the documents generally referred to national mortality and morbidity data, sometimes putting this into international perspective (e.g. mortality from cardiovascular disease in Ukraine is over 60% compared to 40-50% on average in the EU and USA; average life expectancy in Ukraine is 10.39 years less than that in the EU as a whole (CMU, 2006b)), and looking at trends over time. Sometimes additional risk factor data was referred to (e.g. obesity rates in relation to CVD mortality). Occasionally, there were brief analyses of the problem, but these were at a general level – for instance, pointing out the lack of a holistic response to the issue – and tended not to reference any research or other evidence. For example, the national programme on immunization and protection from infectious diseases in 2009-2015 (VRU 2009a) identified reasons for infection disease spread in the world, referring to WHO findings and extrapolating them to Ukraine, rather than adjusting them to the local context. The national programme on combating oncologic disease (VRU 2009a) claimed the main reason for poor oncologic disease outcomes in Ukraine was late diagnosis and poor environmental conditions (presumably related to the after-effects of the Chernobyl disaster). They provided statistics on the number of people who die within a year after being diagnosed with cancer, but did not give any references to the studies or impact of environmental conditions (such as cleanliness of air and water) on the population's health. In the national programme on mother and infant health for 2006-2015, the main reasons for problems in the area of reproductive health in Ukraine were named without any statistics and references to the relevant scientific research. Among the reasons identified were: insufficient legislative base, spread of infectious diseases, insufficient equipment of healthcare institutions, high abortion rates, low fertility of Ukrainian families, high mortality among male population of working age (affecting the male-female ratio), unsatisfactory health indicators of pregnant women, unsatisfactory health indicators of teenagers (related to smoking, alcohol consumption, sexual violence and pornography), low awareness of healthy lifestyles, irresponsible sexual behaviour, poor family planning, insufficient prevention and treatment of reproductive system diseases.

Sometimes programme documents mentioned international guidance or resolutions (e.g. from the UN) as justification for increasing attention/spending on an issue. The programme documents do not make it clear whether or to what extent programme designs are informed by evidence or research. This interviewee

suggested that evidence-based medicine is not a widely applied approach yet in Ukraine, partly due to lack of access to the evidence:

> *"Our European experts told me that when they visited Ukraine for the first time in 2003 and started talking about evidence-based medicine, the main neonatologist said 'which evidence-based medicine? In the country I am evidence-based medicine'. Now this situation has changed of course but the factor of not knowing English language is very crucial - many doctors read either Ukrainian or Russian articles... Information in these sources is often different from foreign ones. – why? – high quality medical research is very expensive, and in the situation with neonatology, doctors in Ukraine lack basis for analysis. Regional hospitals have let's say approx 2-3 premature babies a year, which is not enough for a proper analysis" (international organization, consultant).*

Moreover, an expert we interviewed from the 3rd sector told us that decision makers only tend to regard national statistics as valid and reliable information, and that research conducted by non-governmental bodies is not generally taken into consideration when designing policies and programmes. This interviewee explained:

> *"You are talking not about registry but about estimated number. And here we can see the differences in approach and ideology. International organizations and government take into account the calculations and data research. Studies say that we have 250 000 drug users. But the state agency says: 'we do not trust your research, we do not know who conducted it. You may keep your research for yourself. We have a register of drug users.' And we know that their drug register is a blasphemy, half people listed there are 'dead souls'. [Independent research] shows that the national Drug Register is unreliable source of information."(MD, NGO, expert)*

Another interviewee also pointed to the government agencies' mistrust of research not conducted at central, state level, and explained how his organisation went to some lengths to get cooperation with the Ministry of Health so that decision makers might recognise the findings of their research:

> *"… we conducted our own research in 2010, but in a way so that would be recognized by the Ministry of Health. At MoH we took a letter from the minister, deputy minister, well, depending on what you want of course ... to promote ... and signed a memorandum for cooperation and for using the results of this research" (National healthcare organization and NGO, executive)*

Information (documents and interviews) related to several public health programmes referred to the WHO standards as being an important justification for many programme activities. The national programme for the prevention and treatment of cardiovascular and cerebrovascular diseases (2006-2010) for instance, mentions the adoption of new standards, and harmonization of the local public health regulatory system and standards with the WHO ones. Nevertheless, these goals are rather declarative and are not specified to any precise and/or measurable expected outcome. In addition, whilst international organizations conduct some research in Ukraine, most of their knowledge and recommendations are based on experiences of other countries.

Our examination of programme documents found that most of the expected outcomes of the public health programmes in Ukraine are not supported by scientific evidence or arguments. Our interviews with experts confirmed this observation, as this extract from an interview with an international organisation advisor and civil society representative shows:

Interviewer: "How do they calculate expected outcomes e.g. decrease mortality or morbidity rate by 25%, 45% or 0.1%?"

Expert: "They take these numbers out of thin air. I asked the same questions and have not received any answer. Why 20%? Well... because 30% - is too much, 10% - is not serious enough, but 20% - seem to be good enough and then we will see how it works out".

This issue is compounded at the local level, where there is insufficient information to localise these national targets. National targets therefore are usually adopted in different regions regardless of the current status in that region.

Programme objectives, outcomes and outputs

Some of the high-level public health objectives are based on global goals such as the UN Millennium Development Goals or other recognized global goals – for example, to decrease child mortality by two thirds by 2015, or to reduce by three quarters the maternal mortality ratio by 2015. This is particularly the case for programmes funded and/or designed by international organisations, such as the 15-year Mother and Child Health Programme[2] funded by Switzerland. Most of the measurable objectives in the national programme for the prevention of HIV-infection, treatment, care and support for people living with HIV/AIDS 2009-2013 (VRU 2014) also come from Ukraine's international commitments i.e. Millenium Development Goal #6, UGASS Declaration of Commitment, or reproduce targets of the Global Fund grants given to Ukraine to scale up prevention services, treatment and care under ROUND 6.

Lower-level, short-term or medium-term objectives are less clear. For example, according to the Decree 877 by the Cabinet of Ministers of Ukraine, National Programme on Diabetes 2009-2013 (CMU 2009) aims to decrease cases of gangrene from 0.7% to 0.5%, and maintain 100% of awareness of diabetes risks within 5 years, without providing any specific justification of the set goals. Some goals do not have measurable indicators or give any indication of what the baseline level is e.g. provide primary and secondary prophylactic of ventricular fibrillation in the National program Reproductive health of the nation 2006-2015 (CMU 2006a). In others cases, the programme document focuses on the measurable indicator itself without proper specification of the planned activity, e.g. "number of approved documents (legal documents on organization of measures to prevent infectious diseases in general: 13 in 2009 – 1 in 2012" in the National program on immunization and protection from infectious diseases in 2009-2015 (VRU 2009b)).

Programme activities

The specific tasks and activities (along with expected outputs and outcomes) are provided in a separate table within the documentation for each public health programme named "tasks and activities". The information provided in the tables, however, remains general and unclear, and usually fails to establish clear, logical, measurable and evidence-based information on the expected outputs and outcomes of each activity declared in the programme. It was difficult therefore, when building a logic model, to see the links between

[2] Accessed online at http://motherandchild.org.ua on December 28, 2016

the programme activities and the anticipated objectives (since both were often described with little clarity or detail).

At a basic level, the key elements underpinning Ukraine's overarching approach to reducing morbidity and mortality rates centre on:

- the supply of hospitals and health care centres with modern equipment and medicines
- informing the population about health-related risks
- increasing the qualifications of medical personnel
- the drawing up of relevant legal frameworks.

In the 1990s, medical equipment had one of the central places in the overall programme theory – the implied logic was that if equipment and medical suppliers are improved, mortality rates will decrease, and people's quality of life will increase. The capacity to appropriately use and even maintain the equipment etc., was largely assumed.

According to one expert interviewee, later, the focus started shifting towards the skill and qualifications of medical personnel – the implied logic being that personnel with capacity to appropriately use modern medical equipment is another integral aspect of the programme success. Improving and maintaining the supply of medicines (including prophylactics) has long been one of the key goals of the public health programmes in Ukraine. In addition, all public health programmes include improvements of the legislative base among their activities, as a way of ensuring other changes can occur. Such legislative changes include: adoption of new laws, introduction of new medical professions into the national register of professions, harmonization of regulations with the WHO standards etc.

Finally, each public health programme tends to have a considerable component related to primary and secondary prevention (largely through information provision), with the theory being that if awareness of risks is increased, lifestyle related behaviours will improve, then morbidity and mortality rates will drop.

One example of a programme where a wide range of activities are included is National program on Diabetes (2009-2013). In this programme, there is a holistic approach to preventing diabetes in Ukraine. The activities described in this programme can be summarised as: improvement of the legislation; strengthening education for diabetes specialists; awareness raising campaigns among different population groups about the risks of diabetes and its treatment; cooperation with various media channels for communication campaign; and provision of necessary medical equipment and medical supplies to health care institutions.

Examining the programmes' elements, we noticed that so-called 'hard' activities usually receive funding from the central government. For example, the purchasing and redistribution of medical equipment and supplies is funded by the State. Some of our interviewees said that many public health programmes are designed exactly in order to receive state funding for improving procurement of the healthcare institutions: hospitals, hospital departments, health centres, research centres, etc. 'Soft' activities – awareness raising, information campaigns, changes to the legislation – are added rather nominally to make the programme look more comprehensive and holistic. However, funding and implementation of such activities is imposed on local government, which is free to adjust the activities of national programmes to the local needs. Therefore, the 'soft' activities are often reduced to something that is tokenistic, and their accomplishment is not guaranteed – as explained in the next section.

Programme inputs/resources

Typically for Ukrainian public health programmes, financing is envisaged only for the purchase and provision of medical products, medical supplies and pharmaceutical drugs, and for equipping medical institutes, hospital departments, etc. Almost no funds are allocated at a national level to 'soft' activities - such as intangible things like education, legislation, communication - within programmes. These activities are supposed to be financed from local budgets. However, according to some of our interviewees, this does not always happen.

> *"Difficulties… I told you, the major difficulty is that financial resources are not provided. Health care programs stipulate many good measures, but these measures are supposed to be financed from the regional budget. But regional council has its priorities. Health care is not the major priority. Health takes the major share of the budget of the region. Of course. And many people do not like it. But what is spent on health care is spent on wages for health care workers. Employees' salaries take about 70% of the local health care budget" (regional healthcare department, head).*

For some activities, such as the introduction of new medical professions, it is not clear from the programme documents what resources are required to enable this to happen.

Programme data – monitoring and evaluation

For each of the programmes reviewed, we found little evidence on the identification of indicators that might be used to measure outputs and outcomes. In an expert interview, one participant commented that the identification of key indicators is in general a weak point amongst public health programme/policy designers in Ukraine:

> *"[Government officials involved in the programme development] have very formal attitude towards indicators. If they are present in the programme – good! And if they [indicators] are at least somehow related to the content of envisaged activities – it is already great" (National healthcare organization and NGO, executive).*

We also found little evidence of monitoring and evaluation mechanisms for the public health programmes we reviewed. For the cardiovascular prevention and treatment programme example, the monitoring mechanism is explained in one sentence, which states that the Ministry of Health must annually report about the achievements in programme implementation to the Cabinet of Ministers by the 1st of March. Essentially, the monitoring process in all programmes is reduced to annual reporting, which is akin to programme auditing, and focuses on financial reporting and reporting of activities, rather than on changes in outcomes. Mechanisms for evaluating short- and medium-term outcomes, as well as long-term impact are largely absent, although annual reviews for each programme do tend to present some summary statistics for indicators which are relevant for the health condition.

The description and assessment of public health programmes is rather more activity-oriented than outcome-oriented in Ukraine. Programme financing, implementation and reporting focus mostly on activities that can easily be measured (purchased/provided medicine, equipment etc.) and linked to expected outcomes. Analysis of less tangible interventions (e.g. information campaigns, education, changes to the legislation) usually also focuses on the outputs (e.g. number of amendments suggested, leaflets given out, etc.) but not on the outcomes of these activities. Some of the experts we interviewed also suggested that there is a

positive relation between the precision of expected outputs measurement and financing of the programme's activities: activities that are financed by the state budget usually have relevant and measurable indicators, whereas indicators for 'soft' activities often are not directly related to the activities themselves e.g. improvement of medical personnel in healthcare institutions is measured in decrease of mortality in the National program on Diabetes (2009-2013). According to the National program on Prevention of Tuberculosis 2012-2016 (VRU 2012), prevention of the spread of multi-drug-resistant tuberculosis is supposed to be achieved via increased access to vulnerable and hard to access population groups and is measured in the number of regions, where non-governmental organizations cooperate with anti-tuberculosis institutions.

Our in-depth interviews revealed that the understanding of "efficiency" or "success" of public health practices and their measurement differs considerably among public health representatives. Anecdotal information on 'successful' practices was discussed by interviewees at the local level, but this tended to be based on practitioners' own experiences and their own definitions of what constitutes 'success'. There is a mechanism by which this local knowledge can inform national programme designers, but it is unclear whether this is a practice that is widely engaged in, or whether the information that is fed up is actually used in programme design. However, the available system of positive practices analysis lacks consistency and complexity in Ukraine. Patient and public feedback and statistics on mortality and morbidity collected at the local and national level require detailed, regular and complex examination. Final programme reports contain a simple compilation of local annual reports on conducted activities and money spent, and annual statistical public health reports provide only descriptive statistics on basic public health indicators. It appears, therefore, that scientific evidence on the effectiveness and impact of public health interventions in Ukraine is largely missing. International organisations such as WHO bring in evidence of what are deemed to be cost-effective public health practices, but this tends not to be context-specific. Deloitte provides some external monitoring and evaluation and prepares recommendations for future activities. Additionally, the *Institute of Analysis and Advocacy* conducted an audit on 'Monitoring of public procurement in the health sector of Poltava city and Poltava region'. One exceptional example of a programme that has had a proper independent evaluation is the mother and child health programme - "Together for Health"[3], - part-funded by USAID (Nizalova and Vyshnya 2010).

The general lack of useful outcome/impact evaluations that can be used for the development of further programmes was confirmed in expert interviews.

Identifying programme logic

Based on the information available, including programme documents and interviews with individuals, the research team attempted to specify the 'if … then …' logic underpinning the considered programmes. We uncovered many assumptions within these logic statements, for which there is little supporting evidence. Taking the national programme for diabetes as an example, the following logic is identifiable from our data: improved human resources in healthcare institutions (specifically improving human resource supply and qualifications related to diabetes prevention, diagnosis and management) will lead to a decrease in the diabetes-related mortality rate. This anticipated outcome is expected to be achieved through improvements in teaching of the healthcare professionals, the delivery of training to medical professionals working with

[3] Accessed online at http://www.tfh.jsi.com/index.htm on December 28, 2016

patients with diabetes, and consideration of propositions for the introduction/establishment of new medical specialties/specialist departments (see Figure 0-1 below).

However, the assumptions that underpin this logic are not examined or supported by evidence within the programme documentation. It is assumed that the lack of human resource capacity is a major impediment to improving morbidity and mortality outcomes for diabetic patients. And it is assumed that this lack of capacity is due to inadequacies in the training/teaching of healthcare professionals. Whilst improvements in the training and education of healthcare workers might help to address mortality related to diabetes, this is an intervention that will take a long time to bear fruit, with students studying endocrinology not entering the labour market for another 5 years, assuming that they will not drop out from the profession. The activities described in the programme, therefore, are highly unlikely to bring about the planned reduction in mortality rates within a year's time, as stipulated in the programme. The activities lack proper description, with no identified intermediate outputs with which to monitor the programme. For instance, it is unclear how, and in what ways, the teaching system will be improved, and how to measure this output.

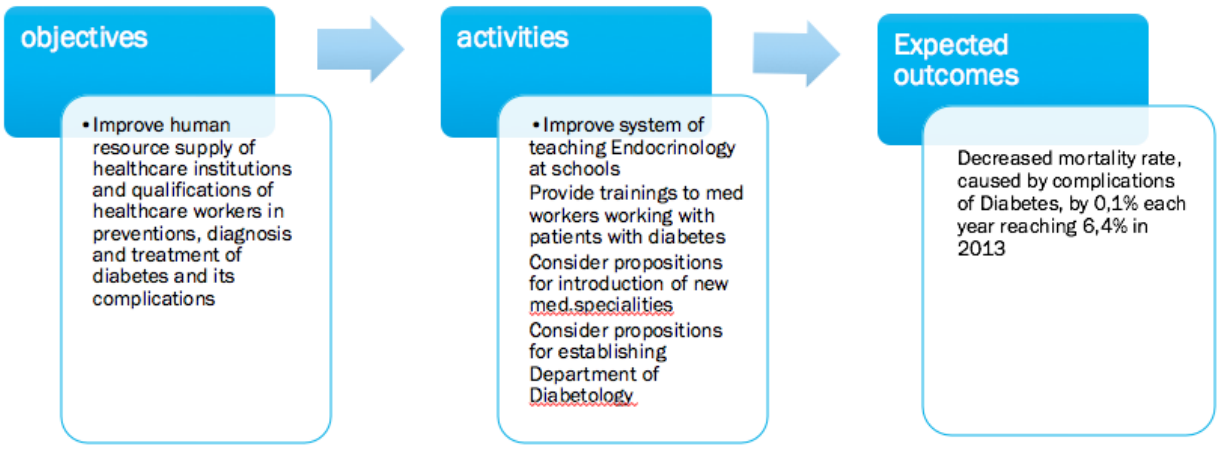

Figure 0-1 - an extracted logic chain from the national diabetes programme

The examination of policy and programme documents highlights that the government's approach to improving population health tends to target a specific disease, and within that, a specific health system issue (e.g. diabetes; workforce capacity). This does not, then, appear to be linked to a wider strategy for diabetes prevention and management, that considers other important aspects of the health system, or indeed of achieving population health improvement (such as surveillance, intelligence, health promotion, population-level awareness raising/behaviour change initiatives, etc.).

Funding of the project activities gives a hint into the state's priorities within the programmes: purchase and redistribution of medical equipment and medicines among public health institutes are the only two types of activities usually funded from the state budget. Other activities, especially "soft" ones, are funded from the local budgets (leading to much local/regional variability), and are usually underfinanced. It is easier to trace the implementation of financed interventions within evaluations than it is to trace the implementation of interventions which are not budgeted at the national level. In addition, without a specific budget allocation, there is often no responsible person or organisation assigned for that activity. Furthermore, activities that require no increase (or reallocation) in resources are reasonably rare, so where the funding is not allocated, there is a higher chance of implementation failure.

Many programmes' measures are focused towards the process rather than the result, which complicates the evaluation of their effectiveness. For example, terms used within programme descriptions include: 'to improve', 'to consider', 'to establish effective mechanism'. In such cases, the meaning and extent of improvement and effectiveness is not specified, and the 'consideration' of a proposition does not necessarily imply adoption of the proposition.

For an example of the logic model building process, let us consider the national programme for the prevention and treatment of cardiovascular and cerebrovascular diseases (2006-2010) (see logic model below). From the text of the programme, we see that the expected outputs are not specified (no number of deliverables, proportion of reach, etc.). Outcomes are not explicitly linked to specific activities and outputs. The evidence and assumptions lying behind the theory that specified activities will result in anticipated outcomes are not explained, leaving their logic open to challenge. As a result, it is extremely challenging to develop logic models for the programmes.

Logic Model of the National program "Prevention and treatment of CVD and cerebrovascular diseases (2006-2010)"

Goal: To prevent and reduce incidence and severity of cardiovascular and cerebrovascular disease

Inputs	Outputs	Outcomes - Impact		
	Activities	Short	Intermediate	Long
People Ministry of Health, State TV and Radio Company regional administrations Resources 796316800 UAH (= app. 30 million USD - 29853119,05 USD in November 2006) Location Kyiv and 24 region of Ukraine	**CVD prevention** - Information campaign on CVD prevention on TV and radio, in specialised magazines and in schools - Harmonise calculation of morbidity and mortality with WHO norms - Introduce statistical monitoring of people with heart complicated diseases that require surgery - Develop legal regulations on accreditation - Conduct training of highly qualified specialists and develop system for their training - Conduct training of highly qualified specialists and develop system for their training		Public awareness about risk factors for CVD and methods of correction is substantially increased	Average life expectancy increased Deaths from stroke reduced by 5% Deaths from CHD reduced by 5% by 2007 and 12% in 2010 Mortality during heart transplant surgery reduced to 3%; ischemic heart disease reduced to 0,7%; arrhythmias reduced to 0,3%
	Specialised medical care - Develop & implement measures for diagnosis & treatment of acute MI & monitoring of people with heart arrhythmia - Provide cardio centres, hospital departments, PH centres, labs, national scientific centres & academic depts with proper medicine and med suppliers - Implement effective methods for distance control of people with heart arrhythmia			
	Rehab and labour adaptation - Introduce standards & clinical protocols or therapeutic treatment of people with invasive cardiology & cardiac surgery - Create system for rehab of children after correction of heart diseases			

Chapter 2: Programme/policy operation and implementation

Our data suggested that the actual implementation of the public health programmes does not always correspond to the way the programmes were initially planned. Given the absence of proper process and impact evaluations for the majority of the considered programmes, results of interviews with public health representatives and experts were used to cover this section of the report.

National public health programmes serve as a framework for activity of government agencies, mostly at the local level, and non-governmental organizations. They provide a list of expected results but fail to indicate clear mechanisms and instructions for prioritization and implementation of the programmes' activities at the national and especially at the local level. World Bank researchers suggest that the centralized health care system inherited from the Soviet Union has not been properly reformed yet, and local structures of the system often remain inert (World Bank, 2009), regardless of the responsibility imposed on them by the public health programmes. Local medical personnel and management staff get information, guidance and clarification on the implementation of the programmes from the regional Departments of Health, which in turn receive instructions directly from the Ministry of Health.

There are few opportunities for communication between beneficiaries and local implementers of public health initiatives and decision makers at higher (e.g. regional and national) levels. No population surveys are conducted to help assess effectiveness of health care services and their delivery. There is an official mechanism of public hearings, and texts of all programmes are made accessible to the public, in order to collect feedback from civil society representatives before the Parliamentary voting. However, recommendations provided by public council under the ministry of health care and any citizen in general have recommendatory character (Public Council under the MoH, 2011). Responsiveness of government to the public opinion and recommendations is rather questionable, according to the public health representatives we interviewed for this study.

A wide range of non-governmental agencies are involved in public health work in Ukraine, including international organizations (WHO, UNICEF, USAID, Renaissance Foundation, International Labour Organization, Global Fund to fight AIDS etc.), local and national civil society organisations and private sector organisations. Non-governmental organizations (NGOs) therefore play a significant role in public health programme implementation, especially in the implementation of the programmes on tuberculosis and HIV/AIDS. Non-state actors have been involved in helping to develop and promote public health protocols, introducing new research methods and medical standards, and covering the information campaign component of public health programmes. This interviewee explains:

> *"Non-governmental organizations sometimes do more than state ones. For example, they've developed standard protocols on reproductive health and health of children and mothers in maternity care rooms, postpartum care etc., which did not exist in Ukraine at that time. That is, they formed fundamental documents for this sector. Secondly, what that the state does very bad is information campaigns. NGOs do information campaigns, develop reference books, commercials, promotional materials, brochures, leaflets, communicate with target groups. Thus, they provide support to those areas where the state clearly is not effective" (international organization advisor and civil society representative)*

Many HIV/AIDS initiatives are funded by the International HIV / AIDS Alliance in Ukraine. They conduct research, fund reconstruction, repair and renovation of ambulatory outpatient departments in hospitals and 'Offices of trust[4], acquire modern laboratory equipment, and perform maintenance of the HIV/AIDS Centres' facilities in the regions of Ukraine.

Many of our interviewees described the work of international and national non-governmental organizations in the public health sector. For instance, in Khmelnytska oblast, UNICEF is working in the field of vaccination. Also, we were told about a local Ukraine-American programme on prevention of birth defects, which was carried out through the American Association "Prevention of Birth Defects." Some local NGOs join activities of the health care programmes, but their contribution is not significant. For example, the local NGO "Dona" takes care of those women who have had breast cancer and are at the stage of rehabilitation. There are a number of organizations working in the area of HIV / AIDS ('People living with HIV/AIDS probably being the biggest one) and tuberculosis. In the areas of the childhood, maternity, vaccination, diabetes, and cardiovascular diseases, NGOs are less active.

In Zhytomyr oblast, a number of regional groups have joined together to implement activities within public health programmes where the main target group is 'youth'. Partnerships of government and non-government organizations provide better quality services as well as social support for those who live with HIV/AIDS (food kits, gifts to children for the holidays, clothes, toys, financial aid, etc.). In Poltava oblast too, there are a number of local NGOs and international organizations that tend to join the programme activities in the different areas. In Cherkasy region, the *"All-Ukrainian Network of People Living with HIV*" is working actively in the provision of different services for HIV/AIDS patients. In addition, some international donors, such as *Clinton Foundation, and International Labour Organization*, are in cooperation with local AIDS Centre to implement a project on testing 2,000 local employees and students of the university and colleges as well as educational campaigns on HIV / AIDS topics.

Pharmaceutical companies are also supportive in provision of information materials on disease prevention and treatment. However, our interviews suggested that their interests are primarily related to sales promotion; therefore, the knowledge they disseminate might be rather biased and not always in line with the public health programmes' goals.

Funding is believed to be one of the most crucial factors for the successful implementation of public health programmes. Lack of financing was mentioned by many interviewees as the main obstacle to the delivery of the programmes' activities. Health care institutions always lack funding, which is considered to be one of the reasons behind their ineffectiveness in improving population health. Besides the overall underfinancing of public health programmes, there is a tendency towards worse financing of 'soft' activities, compared to 'hard' ones. Information and education campaigns, changes to the legislation, restructuring of the medical education etc. are usually not financed from the state budget. Awareness raising activates are expected to be funded by local budgets, but their accomplishment is not obligatory. Therefore, it could be assumed that non-centrally funded soft

[4] Cabinet "Trust" is a specialized structural unit of the Center for AIDS prevention and/or of health care institution of the secondary level of care created to provide specialized medical care to people living with HIV and testing on HIV detection (MoH 2008).

activities (which are most of the activities) largely depend on the availability of local funds and local government's willingness to implement them.

Many of our respondents identified the programme on reproductive health as one of the most successfully implemented ones. This programme had clear objectives and guidelines for their achievement. Among the activities were: provision of medical supplies and equipment, family planning, activities with young people and involvement of different government and non-government partners (for instance, Social Services Centre for the Children, Family and Youth, NGOs) into the programme implementation. It is the first programme that received funding for elaboration and printing educational materials, purchase and distribution of contraceptives among certain population categories. This programme was considered to be unusual as it contained an educational component.

In addition to the problem of lack of allocated budgets to certain activities within the programmes, there is also an issue with funding delays. The delays are often caused by the ongoing changes of policy on tenders and suppliers as well as complicated and time-consuming bureaucratic procedures. For instance, sometimes tenders were conducted in July and August, while for the previous 6-7 months, hospitals and polyclinics had to operate with the resources from the previous year. Delays in funding and provision of medicines or other supportive materials can seriously affect the implementation of public health interventions.

There is a relation between financing of the programme activities and their implementation: financed activities are more likely to be implemented as intended, whereas non-financed activities – for example, changes to the legislation, administrative changes to the service delivery mechanisms - are under greater risk of non-implementation or they might be accomplished nominally. For example, the programme on diabetes stipulates "consideration of changes to the legislation". Even if such activity is implemented, it is still questionable if it will have any results. Another example: involvement of national TV and radio channels into elaboration and broadcasting monthly programmes on prevention and early diagnosis of cancer – we heard from our participants that no funds are allocated, and no monthly awareness raising programmes are broadcasted.

Information campaigns and other 'soft' activities, which are designed to reduce 'risky' behaviours (such as smoking, excessive alcohol consumption, poor quality diet, sedentary lifestyle) at a population level, are often un-funded within public health programmes. These activities are often poorly described, with few or no clear measurable outputs or indicators. It is therefore impossible to monitor the extent to which they are carried out, or what impact they might have had. Because of the lack of clear and measurable expected outcomes and the need for the financing of such preventive measures to come from local budgets, implementation of these activities varies greatly among regions.

Interviews with key informants in the regions showed that awareness campaigns via the media are not properly organized. The national public health programmes do not provide funds for this activity, nor do they envisage measurable expected outcomes, or specify the products or target audience. Local government has to ask the TV and Radio companies for free services, which is not always acceptable for both parties. This significantly affects the quality of the public health information campaigns. Often the key messages of such campaigns are weak and their reach is poor. For

example, local governments in some cities, like in Kryvyi Rih, understand this state of affairs and offer free of charge offices and billboards for the NGOs that will provide social advertisement on health promotion/ disease prevention topics. The local radio and TV channels also provide free of charge time for this kind of social campaigns. However, it should be recognized that such cases are not common among Ukrainian cities. Furthermore, local radio and TV channels are not popular among one of the main target group of campaigns – youth. Thus, medical experts we spoke to believe that the information campaigns should be done on the central and popular (in case of Ukraine - private) radio and TV-channels in order to be effective.

Education and awareness promotion campaigns among children and youth in schools and universities are also poorly implemented. The lack of attention to health education activities conducted within the public health programmes was identified by interviewees as a significant drawback of the public health programmes and their implementation. Such activities are conducted only a few times a year in schools or other educational institutions, and are dedicated to the world AIDS day, day of tuberculosis awareness, etc. However, according to interviewees, medical personnel stress that it is not their role to prevent or diminish the level of disease spreading. Their task is to diagnose and recommend treatment. Therefore, they claim it is important to develop and implement whole population and targeted information campaigns to prevent socially dangerous infectious diseases. This conclusion is drawn from the results of the conducted interviews, however we cannot be sure how widely this belief is held.

This reveals another issue – the actual role of a doctor in implementing the public health function in Ukraine. Understanding of the doctors' mission by doctors in Ukraine and within the concept of public health is different. Local doctors are focused rather more on disease treatment than on health protection, which affects implementation of public health programmes because they are not likely to take the initiative, or localize and implement preventive activities stipulated by the national public health programmes.

The focus of doctors solely on treatment and not prevention is related not only to the individual position of health care sector workers, but also to the lack of qualified personnel. Many of our interviewees felt that even if medical workers would like to be involved into health promotion activities, many doctors simply do not have time for that. In towns and villages in particular, it was felt that the workforce was limited in numbers. Related to this issue is the lack of doctors with specialist training in certain areas. For example, family doctors sometimes are not familiar with the peculiarities of HIV/AIDS patients. Therefore, specialized institutions, such as AIDS centres had to conduct trainings for family doctors on the HIV/AIDS topics, which was not envisaged by the respective public health programme.

However, AIDS centres lack capacity as well. For example, in Kryvyi Rih city of Dnipropetrovsk oblast (with morbidity 9122 per 643,600[5]), there are only 2 infectious disease specialists in the AIDS centre which usually admits up to 70 patients per day. Initially it was expected that patients of HIV/AIDS risk groups will contact with their family doctors in order to follow their outpatient treatment. However, this model did not work with the HIV/AIDS patients because they a) do not trust family doctors and

[5] Central Department of Statistics in Dnipropetrovsk region. 2016. Population Base. Accessed online at http://www.dneprstat.gov.ua/statinfo%202015/ds/2015/ds1_m12.pdf on December 28, 2016

are afraid they will break the confidentiality; and b) they do not trust their professional qualification and consider family doctors as less qualified. Representatives of HIV/AIDS risk group prefer turning to the AIDS centres to receive qualified treatment. This was unforeseen in the programme's implementation plan.

The lack of qualified medical personnel undermines the communication campaigns undertaken by other partners. For example, the lack of qualified personnel was mentioned as a big problem for Health Centres. Doctors are often invited to meetings with target groups or for radio/TV programmes, but it is difficult to find specialists who could provide information in a simple way understandable to people with different educational backgrounds. Furthermore, previously there used to be employees working on information campaigns and information sharing in the majority of hospitals and polyclinics. Our telephone interviews told us that more recently, these positions had been reduced and only nurse supervisors conducted informational activities, but in their free time.

A further crucial factor for successful implementation of public health programmes is the human factor. We were told that commitment of the central decision making person to the programme is more likely to result in its implementation as planned, regardless of the shortcomings in the programmes' design. Committed doctors continue to use methods and indicators after the programme is over, as it was in the case of the national programme for diabetes. The local programme "VolynCard" 2011-2017 (Volyn regional council, 2011) is another good example showing the importance of the human factor. "VolynCard" is known as a very advanced regional cardiological programme in Ukraine. The programme covered activities "from prevention to intervention". Implementation of "VolynCard" was greatly supported by the head of government administration in terms of advocacy and funding. This interviewee explained:

> *"Government support is needed. Our program was supported by the major. Then the government has changed and support decreased, and it became obvious that we depended on that support… out program started to decline" (MD, practicing doctor of higher category, head of the regional program and healthcare center)*

After his death, programme funding from the local budget decreased 2-3 times, which affected its implementation – full implementation was not possible any longer and the program was reduced to only 1 city in the region.

> *"Unfortunately, if initially funds were provided for Manevutskyi and Lubomytskyi regions for examination, but now we had to reduce the activities of our program only to Lutsk" (MD, practicing doctor of higher category, head of the regional programme and healthcare center)*

The lack of an integrated approach and interaction between different public health services and structures also negatively affects programme implementation. For example, absence of the psychological assistance to patients that have been informed about their positive HIV status may have negative consequences for patients and people who surround them. People diagnosed with cancer, diabetes, tuberculosis and other diseases would also benefit greatly from services of professional psychologists. However, medical institutions lack capacity to provide such services. In addition, family doctors complain about the lack of support from related organizations, such as sanitary and epidemiological services. These agencies used to have control functions, forcing employers to adhere to healthcare regulations. They also provided disinfection services to

enterprises and private households aimed to prevent the spread of infectious, socially dangerous diseases. Nowadays these services are no longer provided, which according to family doctors cause wider spread of infectious diseases and late treatment of patients.

Improvement of the available legislation, amendments to the laws, introduction of new professions and practices is an integral part of each public health programme. However, not much is known about the extent to which these activities were implemented. Key informants that we interviewed for this study emphasized that Laws of Ukraine do not meet today's requirements, and further changes are needed to the regulatory framework. Lack of supportive legislation was named as one of the main difficulties of the implementation of the programme on combating the spread of infectious socially dangerous diseases in the Dnipropetrovsk region in 2008-2012 years. For instance, confidentiality of the patients' diagnosis is one of the debated topics. Family doctors and experts at specialized health care centres believe that the "confidentiality" norm must be deleted from the law. According to the available legislation, doctors are criminally responsible for disclosure of information about HIV / AIDS positive people. To avoid criminal liability, they do not inform other professionals about HIV / AIDS status of their patients. This increases health risks of both HIV / AIDS positive and negative people, affects timely provision of specialized medical aid and contributes to stigmatization of HIV / AIDS positive people, according to some interviewed doctors.

The available legislation also does not take into account force majeure. As a result, national programmes limit activities to local medical personnel and administration staff. The division of responsibilities for program implementation between local and national government lacks flexibility and does not consider cases of force majeure when any party fails to accomplish program activities. In case national government fails to implement any part of the public health program it is responsible for, local government cannot overtake responsibility for its implementation either as it will be subject to criminal liability. For instance, in the framework of the National program on tuberculosis, the national government took responsibility for providing BCG vaccine, but did not supply it. In such circumstances local government could not purchase vaccine from local budgets either even though they had the funds available. Allocation of local funds into activities not stipulated by the programme would be a subject to criminal liability in Ukraine.

Conclusions

Within programme plans and documents, there is little discussion of the evidence that might support the programme theory, assumptions and indicators. This points to severe limitations in the population health surveillance data, the monitoring and evaluation infrastructure, and the culture and capacity for health policy and systems research.

The research team were able to identify a considerable amount of information to help them determine the logic behind expected outcomes (particularly in terms of numeric targets/indicators) either in the public health programme documents and evaluation materials, or in expert in-depth and telephone interviews. The aims/objectives, activities and expected outcomes of the programmes were usually described to some extent, even if the logic behind them wasn't explicitly explained. Often, perhaps due to the lack of explicit explanation or reference to evidence, the logic appeared to be unclear or unsound, with outcomes that did not necessarily follow results chain logic. On the basis of the information available, the achievability of some of the objectives was

questionable, given the activities and resources available, and given the complexity of some of the issues being dealt with. The lack of understanding of what resources are required to enable some activities to happen might indicate a lack of collaboration at programme design stage with a wide range of stakeholders.

The quality of expected outputs

There is very little formal evidence documenting how programmes should be or have been implemented. Our interviews raised a variety of issues that can and do hamper the implementation of public health programmes, including logistical difficulties, lack of financing, lack of clear interpretation of plans and intentions, change in staff, or inappropriate mix/training levels of staff, and so on. There is not enough known about the local implementation context to determine whether there is sufficient capacity at the local level to implement national policies in the ways they were intended. However, our research data suggests that this capacity varies considerably from region to region, and is more often lacking than not. Because of public health's population focus and location in the community, implementation and effectiveness are likely to be highly context dependent. However, there appears to be little consideration of contextual issues in either policy development, programme planning, or evaluation. Our research pointed to a number of limitations related to the data available for tracking of process and outcomes. This is explored in detail in our separate report on Data: Availability, Quality, Scope and Relevance for Programme/Policy Evaluation.

References

Bishai, D., Paina, L., Li, Q., Peters, D.H., Hyder, A.A. 2014. Advancing the application of systems thinking in health: why cure crowds out prevention. *Health Research Policy and Systems*, 12(28):8-19

Cabinet of Ministers of Ukraine (CMU). 2006a. National program on Prevention and treatment of cardiovascular and cerebrovascular diseases 2006-2010. (In Ukrainian). Decree 761. Accessed online at http://zakon5.rada.gov.ua/laws/show/761-2006-%D0%BF on December 28, 2016

Cabinet of Ministers of Ukraine (CMU). 2006b. National program Reproductive health of the nation 2006-2015. (In Ukrainian). Decree 1849. Accessed online at http://zakon2.rada.gov.ua/laws/show/1849-2006-%D0%BF on December 28, 2016

Cabinet of Ministers of Ukraine (CMU). 2009. National Programme on diabetes 2009-2013. (In Ukrainian). Decree 877. Accessed online at http://zakon2.rada.gov.ua/laws/show/877-2009-%D0%BF on December 28, 2016

Ministry of Health of Ukraine (MoH). 2008. On functioning of cabinets "Trust". Order # 220/12911. Accessed online at http://zakon3.rada.gov.ua/laws/show/z0220-08 on December 28, 2016

Nizalova, O, Vyshnya, M. 2010. Evaluation of the impact of the mother and infant health project in Ukraine. *Health Econ.* 19(Suppl):107–125.

Public Council under the Ministry of Health of Ukraine (MoH). 2011. Statement on the Public Council under the Ministry of Health of Ukraine. (In Ukrainian). Protocol 1 as of November 28, 2011. Accessed online at http://moz.gov.ua/ua/portal/public_council_pol.html on December 28, 2016

United Nations (UN) Millennium Development Goals. United Nations. Web. Accessed online at http://www.un.org/millenniumgoals/ on December 28, 2016

Verkhovna Rada of Ukraine (VRU). 2009a. National programme on combating oncologic disease until 2016. (In Ukrainian). Law 1794-VI. Accessed online at http://zakon3.rada.gov.ua/laws/show/1794-17 on December 28, 2016

Verkhovna Rada of Ukraine (VRU). 2009b. National program on immunization and protection from infectious diseases in 2009-2015. (In Ukrainian). Law 1658-VI. Accessed online at http://zakon3.rada.gov.ua/laws/show/1658-17 on December 28, 2016

Verkhovna Rada of Ukraine (VRU). 2012. National Targeted Social Program for Counteracting Tuberculosis Disease in 2012-2016. (In Ukrainian). Law 5451-VI. Accessed online at http://zakon3.rada.gov.ua/laws/show/5451-17 on December 28, 2016

Verkhovna Rada of Ukraine (VRU). 2013. On the approval of the National Program "Health 2020: Ukrainian Dimension". Draft law 3748. (In Ukrainian) Accessed online at http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_2?id=&pf3516=3748&skl=8 on December 28, 2016

Verkhovna Rada of Ukraine (VRU). 2014. National Targeted Social Program for Counteracting HIV/AIDS in 2014-2018. (In Ukrainian). Law 1708-VII. Accessed online at http://zakon2.rada.gov.ua/laws/show/1708-18 on December 28, 2016

Volyn regional council. 2011. Regional program on prevention and treatment of cardiovascular diseases in the Volyn region “VolynCard” in 2011 – 2013. The decision of the regional council 3/10 of 03.03.2011. Accessed online at http://www.volyncard.in.ua/rehionalna-prohrama/ on December 28, 2016

World Bank. 2009. *Tragedy Which Could Be Avoided: Overcoming the population health crisis in Ukraine. European experience*. (in Ukrainian). Kyiv: BEPCO.