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HEALTH OF LOCAL COMMUNITIES: DIAGNOSING, IDENTIFYING GAPS AND NEEDS

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Purpose: to identify features of diagnosing the health of local communities, to examine the current state and changes in the approaches to identifying gaps and needs for action planning.

Materials and Methods. The study makes use of the current data on approaches to identifying gaps and needs health diagnostics of local communities in Ukraine and the world.

Results. There are five types of models for health diagnosis and needs assessment: epidemiological diagnosis, public health diagnosis, social diagnosis, asset diagnosis, and rapid diagnosis. Each model has its own vision, as well as advantages and disadvantages. In practice, the selected model can be supplemented with elements of other models in accordance with the resources and purpose of the assessment. Determining the population to be assessed is an important early stage in assessing community health. It can be determined geographically, by a specific area, place of work, residence, or study. The state health department can target the entire population, while a small local non-profit agency is likely to focus only on potential customers. The use of very specific parameters to determine the population makes the assessment more focused and detailed, allows very specific adaptation of health measures.

Conclusions. When assessing community health, the boundaries of the target audience may change during data collection and analysis. Analysis and interpretation of epidemiological data may reveal that only working mothers are at high risk for health problems that the organization can address. This refinement of the target audience can occur because of a community health assessment.

KEY WORDS: **community health; diagnosing health; identifying gaps; identifying needs.**

A *community* is a set of people characterized by a certain territorial or other proximity that allows interaction, and this interaction determines the common values or culture [1]. The defining characteristic of a community is people who have the potential to interact. Without the possibility to interact, common values and norms are impossible. In today's world of electronic communications, interaction can be virtual, as well as apply a more traditional individual approach. If many people interact with each other and share values and culture, the community can exist even in electronic form. Of course, virtual communities that exist through electronic means go beyond traditional anthropological ideas about the community.

The purpose of diagnosing health and assessing the needs of local communities is to obtain information for decision-making on priority issues and action planning. In essence, diagnosing the health of local communities is used to collect data on the needs and strengths of a particular group, community or population [7].

Methods. The study makes use of the current data on approaches to identifying gaps and needs in Ukraine and the world.

Results and discussion. When assessing needs, four types thereof should be taken into account: expressed, normative, conscious and relative needs [2]. Expressed need is a problem that is manifested through behavior, demand for services, and is measured as the number of people who apply for services, types of services, utilization rates. A nor-

mative need is a deficit, shortage, or surplus identified by experts and health professionals based on a scientific understanding of what should be. A conscious need is a lack based on the feelings and perceptions of the population, that is, the look through the eyes of the person experiencing it. Relative need is a shortage or deficit identified by comparison between advantaged and disadvantaged groups.

There are five types of models for health diagnosis and needs assessment: epidemiological diagnosis, public health diagnosis, social diagnosis, asset diagnosis, and rapid diagnosis (Table 1). Each model has its own vision, as well as advantages and disadvantages. In practice, the selected model can be supplemented with elements of other models in accordance with the resources and purpose of the assessment [3].

The **epidemiological model** focuses on the quantification of health problems, the use of national databases, and the application of epidemiological methods and statistics. This model seeks to answer epidemiological questions, such as "What is the scale of the problem?", "What disease trends are obvious?", "What patterns are manifested in the distribution of the problem?", "Can the problem be prevented?" Thus, epidemiological models often include an emphasis on identifying hazards, risks, and predictors of health problems.

The epidemiological model uses tools such as disease and death registries and national surveys. The advantage of epidemiological models is that

Table 1. Approaches to diagnosing local community health

	Epidemiological model	Public Health model	Social model	Asset model	Rapid diagnosis
Who is diagnosed	Population	State, community or region	Population, selected groups	Communities, neighborhoods	Communities, neighborhoods
Data sources	Registers, national surveys, national databases	State and local institutions, population health statistics	Individual surveys, national surveys	Registers of institutions, focus groups, maps	Observations, available data, surveys
Examples	National health surveys, health expenditure surveys	Community health planning, community environmental assessment	Census, social statistics	Asset-based community development	Rapid diagnosis and response
What is diagnosed	One can assess the normative, expressed and relative needs	One can assess normative and relative needs	One can assess the normative needs, perceived needs are determined directly	Conscious needs, conscious benefits	Normative and conscious needs
Advantages	The results are statistically sound, they can be summarized	The results are administratively substantiated; focusing on the components	Statistically sound; provides information on the factors of health problems	Identifies available resources	Quickly executes and provides basic information
Disadvantages	Lack of information about perceived needs; may not record or describe local variations	Relies on other data sources; does not identify perceived needs directly	Does not directly determine the severity of health problems	Does not determine the severity of health problems	Does not determine the severity of health problems; may not notice problems or causes

they provide data to determine the severity, importance, and prevalence of a health problem. However, these models do not provide much data, which may also be key to prioritizing health problems [5].

The **public health model** focuses on quantifying health problems in order to prioritize them because resources are limited. This model seeks to answer the following questions: "What is the severity of the problem?", "What factors contribute to its occurrence?", "What resources are available to solve the problem?"

The public health approach usually relies on available epidemiological data, using specific tools or models. The public health approach and the epidemiological approach have much in common. Although these models are quite comprehensive, they have a limited ability to consider sociocultural aspects of health [4].

The **social model** focuses on quantitative characteristics that provide the socio-cultural, economic, and political context of the impact on human health. This approach addresses questions that address the socio-environmental determinants of health, such as: "What is the relationship between health problems and social characteristics?", "What social trends are manifested in health care behavior?", "What is the relationship between the problem and the use of social and medical resources?", "How have social and health policies affected the scale,

distribution or trends of the problem?". The main feature of the social approach is the focus on collecting data on social characteristics, such as income, other specific social and economic characteristics.

In the field of health care, planning based solely on social indicators is considered incomplete. Without health indicators, the assessment of community needs is incomplete. However, assessments that include socio-environmental data do provide important information that can help identify predictors or conditions that lead to health problems [6].

The **asset model** focuses on existing strengths, assets, social capital, capabilities, and resources, rather than on the needs, shortages, shortcomings and differences between the healthy and the sick. It is designed to answer the following questions: "What social and medical resources does a community with health problems have?", "What do community members consider to be the strengths and resources of their community?", "To what extent are resources mobilized or can be mobilized for solving health problems?"

Taking into account the social context for assessing health problems stems from an earlier view of health, in which the environment was seen as one of the four forces that promote health or lead to disease: the environment, genetics, the health care system and lifestyle, and opinions that both risk factors and risk minimization factors should be taken into

account. The asset model also includes the concept of community competence, i.e. the process by which a community can identify problems and take action to address them. Greater community competence is associated with both improving community health and greater social capital. The community asset valuation model aims to identify and then develop opportunities for the community to address health issues. However, collecting data on assets can be a difficult task, as there is no generally accepted set of asset indicators, and information on assets is rarely available at the time of valuation, making data collection necessary. Therefore, asset models are used less frequently and are poorly integrated into more widely used needs assessment models.

Rapid diagnosis uses many methods – such as focus groups, available data, surveys, and mapping – to rapidly develop the community and implement the necessary medical interventions, as speed is sometimes needed or desired in the assessment. The rapid assessment aims to answer the key question: “What are the most pressing needs with available resources?” As follows from this question, the focus is on rapid response rather than on providing depth or breadth of assessment.

The **community health** assessment is used to determine the extent of certain health problems in a particular community, district, or other designated locality considering community strengths and resources, and to prioritize health issues. The community health assessment covers all aspects of community life, examines resources and assets in the field of health and services, as well as health issues and other community weaknesses. This assessment aims to answer the question: “What are the main health problems and what resources are available to solve them?” In this sense, community health assessment encompasses and integrates all the previously described assessment models.

The **workforce assessment** is not usually considered part of the community health assessment. However, at the infrastructural level of the public health pyramid, labor assessments are particularly relevant. The workforce assessment seeks to answer the question: “What human resources of what skill level are there to meet health care needs?” This assessment examines the current competencies of the workforce, trends and change factors related to its quantity and quality, and builds scenarios to understand the potential size of the gaps between projected needs and projected available labor.

Scientists' assessments of the workforce in all medical professions have revealed a dire health situation. There is a shortage of nurses, occupational health, environmental, medical and public health professionals in the near future [8]. These projections require a local assessment before any public health measures are developed to identify the current and future workforce that will be used to support the envisaged measures. After all, it doesn't make sense to develop great measures on paper if it is impossible to hire health professionals with the skills

needed to successfully implement activities in the real world.

There is no one-size-fits-all way to assess a community's health. However, all approaches to assessing community health have some major *milestones*. The first stage is to *involve community members* in the development and evaluation. The next step is to *determine the community or population for evaluation*, and then decide *what data to collect* about the nature of the health problem: the scale of the problem, the predictors of the health problem, and the demographic and behavioral characteristics. The next step is to *collect this data* using a variety of sources and approaches. Once the data has been collected, the evaluation and planning team should *analyze the data* using statistical procedures to obtain statistical reports on community health issues. The last stage is aimed at *developing a generalized statement* of need or problem based on these data and statistics obtained from their analysis.

Ideally, planners will take the time to develop a community engagement strategy to assess the health of the community. The participation of community members strengthens both their ability to assist in the evaluation and their ownership of the data collected and the results of the evaluation. This involvement applies to all stages of health program planning and evaluation. From a practical point of view, the involvement of those who may be affected by the assessment has immediate and direct implications for how the community health assessment will take place; the involvement of community members may even influence the issues raised in the needs assessment.

There is no best way to engage community members, but many strategies are needed that evolve as community health is assessed. In addition to strategies to directly reduce barriers to community participation, other strategies may include obtaining lists of key names, providing nutrition as an incentive, conducting non-formal learning, identifying specific tasks for community members, and scheduling dates and times for regular meetings.

Sometimes community involvement may be unwise when there are strict time or fiscal constraints on health assessments, when high commitment can affect the quality of community interactions, or when leadership skills are lacking to initiate and support community participation. *Determining the population to be assessed* is an important early stage in assessing community health. It can be determined geographically, by a specific area, place of work, residence, or study. The state health department can target the entire population, while a small local non-profit agency is likely to focus only on potential customers. The use of very specific parameters to determine the population makes the assessment more focused and detailed, allows very specific adaptation of health measures.

The term *target audience* refers to a part of the population at risk, i.e. people who have a certain social, physical or other status, which increases the likelihood of adverse health effects.

Conclusions

When assessing community health, the boundaries of the target audience may change during data collection and analysis. For example, when a community health assessment begins, an entire neighborhood or area is considered a target audience. Analysis and interpretation of epidemiological data may reveal that only working mothers are

at high risk for health problems that the organization can address. This refinement of the target audience can occur because of a community health assessment.

Prospects for further research are to study the target groups for the implementation of health technologies at the community level.

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ЗДОРОВ'Я МІСЦЕВИХ ГРОМАД: ДІАГНОСТИКА, ВИЗНАЧЕННЯ ПРОГАЛИН ТА ПОТРЕБ

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Мета: визначити особливості діагностики здоров'я місцевих громад, вивчити сучасний стан та зміни підходів до виявлення прогалин і потреб для планування заходів.

Матеріали і методи. У дослідженні використано поточні дані щодо підходів до виявлення прогалин та потреб діагностики здоров'я місцевих громад в Україні та світі.

Результати. Існує п'ять типів моделей діагностики здоров'я та оцінки потреб: епідеміологічна діагностика, діагностика громадського здоров'я, соціальна діагностика, діагностика активів та швидка діагностика. Кожна модель має своє бачення, а також переваги та недоліки. На практиці вибрану модель можна доповнити елементами інших моделей відповідно до ресурсів та мети оцінки. Визначення населення, яке підлягає оцінці, є важливим раннім етапом оцінки стану здоров'я громади. Його можна визначити географічно, за певною місцевістю, місцем роботи, проживання чи навчання. Державний департамент охорони здоров'я може орієнтуватися на все населення, тоді як невелике місцеве некомерційне агентство, ймовірно, зосередиться лише на потенційних клієнтах. Використання дуже специфічних параметрів для визначення сукупності робить оцінку більш цілеспрямованою і детальною, дозволяючи дуже конкретно адаптувати заходи охорони здоров'я.

Висновки. Під час оцінки стану здоров'я громади межі цільової аудиторії можуть змінюватися при зборі та аналізі даних. Аналіз та інтерпретація епідеміологічних даних можуть виявити, що тільки матері, які працюють, мають високий ризик проблем зі здоров'ям, які організація може вирішити. Таке уточнення цільової аудиторії може відбуватися через оцінку стану здоров'я громади.

КЛЮЧОВІ СЛОВА: здоров'я громади; діагностика здоров'я; виявлення прогалин; визначення потреб.

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