### Title

»HEALTH NEEDS« CONCEPT – SOME PERSPECTIVES AND DIMENSIONS FROM THE PUBLIC HEALTH POINT OF VIEW

### Module: 2.2

ECTS (suggested): 0.2

### Authors

Lijana Zaletel-Kragelj, MD, PhD, Assistant Professor  
Ivan Eržen, MD, PhD, Assistant Professor  
Marjan Premik, DMD, PhD, Assistant Professor  
Chair of Public Health, Faculty of Medicine, University of Ljubljana, Slovenia

### Address for correspondence

Lijana Zaletel-Kragelj  
Chair of Public Health, Faculty of Medicine, University of Ljubljana, Slovenia  
Zaloška 4, Ljubljana, Slovenia  
E-mail: lijana.kragelj@mf.uni-lj.si

### Keywords

Health need, health care need, demand, health care demand, a population perspective, a health-care provider perspective, economic perspective

### Learning objectives

After completing this module students should: be familiar with concept of “health needs” from public health perspective.

### Abstract

The concept of “health needs” is one of key concepts in public health. From the public health standpoint, the most important perspective on this concept is the perspective of a population, or an individual respectively. But along this perspective there exist several other perspectives, which can be to the certain extent similar, but also could be also very different. All this enters an enormous confusion in its understanding, and consecutively this concept seems rather elusive. This confusion originates from the fact that the concept of “health needs” is very difficult to define exactly, like it is also very difficult to define exactly the concept of “health itself”, since both concepts are extremely complex entities.

The module is trying to enlighten some problems concerning the “health needs” concept.

### Teaching methods

An introductory lecture gives the students first insight in “health needs” concept. The theoretical knowledge is illustrated by a case study.

After introductory lectures students first carefully read the recommended readings. Afterwards they discuss the characteristics of “health needs” concept with other students.

In continuation, they need to find the examples from their own experience.

### Specific recommendations for teachers

- work under teacher supervision/individual students’ work proportion: 30%/70%;  
- facilities: a computer room;  
- equipment: computers (1 computer on 2-3 students), LCD projection equipment, internet connection, access to the bibliographic data-bases;  
- training materials: recommended readings or other related readings;  
- target audience: master degree students according to Bologna scheme.

### Assessment of students

Multiple choice questions test and group work (virtual scenario, describing a health need of an individual or of a population group).
THEORETICAL BACKGROUND

Introduction
This module could be rather difficult to understand since it is dealing with philosophical aspects of public health rather than with practical. Nevertheless for public health students, it is extremely important to be familiar with the concept of “health needs”, since it is one of key concepts in public health.

Here, at the very beginning of this module, we should emphasize, that there exist several different perspectives on this concept. From the public health standpoint, the most important perspective on this concept is that of a population, or an individual respectively. This perspective will be the central under consideration.

Different perspectives on “health needs” concept
In introduction, we have already emphasized that there exist several different perspectives on the “health needs” concept, what enters an enormous confusion in its understanding. Figure 1 presents majority of the most important perspectives (Figure 1).

As a consequence, this concept seems rather elusive. This confusion originates from the fact that the concept of “health needs” is very difficult to define exactly, like it is also very difficult to define exactly the concept of “health itself”, since both concepts are extremely complex entities (1).

Trying to enlighten “health needs” concept from the public health point of view, we meet several terms which are continuously used interchangeably. We will try to define/explain those terms which are most frequently brought into use, and place them in different perspectives on this concept, as well as their dimensions.
Definitions and explanations of terms

Central terms
In explanation of “health needs” concept two central terms are “health need”, and “health care need”, but we need to start just from the term “need”.

Need
The simplest term, “need”, is used widely, but it can have a variety of meanings. In Oxford Advanced Learner's Dictionary of Current English (2) we could find four meanings of this term:

1. a situation when something is necessary or must be done,
2. a strong feeling that somebody want somebody/something or must have something,
3. the things that somebody requires in order to live in a comfortable way or achieve what he/she wants,
4. the state of not having enough food, money or support.

All these meanings share the same idea - a need refers to a lack of something.

Health need and health care need
In public health, the term “need” is used in a context of “health needs” concept. The problem is that under this term several meanings could be met. These meanings are on one hand closely related, while on the other they must be clearly distinguished.

1. “Health need” in its basic sense of “health need”.
   The term could be explained in different ways. Since term “a need” refers to a lack of something the most easily understood explanation in the context of concept of “health needs” could be that “health need” refers to a lack of health.
   Another simple explanation is that “health need” is a desire of people to remain healthy.

2. “Health need” in a professional (medical) sense of “health need”.
   Health need may be defined also as scientifically (biologically, epidemiologically, etc.) determined deficiencies in health that call for preventive, curative and eventually (where appropriate) control or eradication measures (3).

3. “Health need” in a sense of “health care need”.
   The “lack of health” (from the population or an individual perspective) could be perceived as strong enough to be expressed in terms of “health care need”. This means that “health care need” could be perceived as “health need” which is strong enough for an individual to seek a help in a health care service.

4. “Health need” in an economical sense of “health care need”.
   In health economics “health need” is defined as the minimum amount of resources required to exhaust an individual’s or a specified population’s capacity to benefit from an intervention (4, 5).

Some other important considerations
Some other important considerations about “health needs” concept are:
- health need like health is not an absolute concept,
- there are gradations of health need, therefore health needs of a population or of an individual have to be prioritised,
• health need is a subjective rather than an objective, scientific concept,
• perceptions of need vary depending on the observer,
• health need is not a scientific judgement and it is not the domain of the medical profession only.

Frequently, the term “need” in the context of “health needs” concept is confronted and/or interchanged by a term “demand”.

**Other important terms**

**Demand**

In Oxford Advanced Learner's Dictionary of Current English (2) we could find three meanings of the term »demand«:

1. A very firm request for something; something that somebody needs,
2. Things that somebody/something makes you do, especially things that are difficult, make you tired, worried, etc.,
3. The desire or need of customers for goods or services which somebody wants to buy, or use.

**Health demand and health care demand**

We could notice that from a semantic point of view the last meaning of the term “demand” is very close to the term “health care need”. In fact, these two terms could be understood from three perspectives at least.

1. “Health care demand” in the sense of “health care need”.

   The term “health demand” is used as a synonym in this context as well.

   In this sense the term “health care demand” or “health demand” respectively, could be explained as an attempt by an individual in need to seek health care services help.

2. “Health care demand” in the sense of “demand” in economic sense.

   For economists the word “demand” is reserved for the desire for a good or service (such as health care) in addition to the ability to pay for it.

   According to Last (4), demand for health care services is willingness and/or ability to seek, use, and, in some settings, pay for services. Sometimes further subdivided into “expressed demand” (equated with “use of health care service”) and “potential demand”, or “need”. This division was proposed by WHO experts group in 1971.

3. “Health demand” in the sense of “demand” in population/individual sense.

   “Health demands” are usually measured in terms of the actual utilisation of health services. But, consideration must be given to the fact that all felt needs by a population (most usually in curative medicine) cannot be translated into expressed need or demand for various reasons (like absence of accessible health services, lack of information, lack of confidence, low income, etc.).

**Other related terms**

**Health care**

According to A Dictionary of Epidemiology (4), health care is defined as service provided to individuals or communities by agents of the health services or professions to promote,
maintain, monitor, or restore health. Health care is not limited to medical care, which implies therapeutic action by or under the supervision of a physician. The term is sometimes extended to include self-care.

**Health care provider**
According to a Glossary of Health Care and Health Care Management Terms (6, 7), health care provider is an individual or institution that provides medical services (e.g., a physician, hospital, laboratory). This term should not be confused with an insurance company which "provides" insurance (7).

**Health care supply**
In this place also a term “health care supply” need to be mentioned. The three terms, being “health care need”, “health care demand”, and “health care supply” should be clearly distinguished. According to Stevens, health care need is what people might benefit from a health care system, health care demand is what people wish to use in a health care system, and health care supply is what is actually provided (8).

Some expert’s/expert groups’ perceptions of health need concept and classifications
In literature we can find perceptions of “health need” concept of different experts or groups of experts, and their classifications, among them WHO Expert Committee on Health Statistics’ perception, and Bradshaw’s, and Kalimo’s perception.

**Classification of WHO Expert Committee on Health Statistics**
A classification of “health need” was proposed by the WHO Expert Committee on Health Statistics in 1971 (9):

- **perceived need** - perceived need is the need for health services experienced by the individual and which he/she is prepared to acknowledge. Under certain conditions it may exceed the professionally defined need;
- **professionally defined need** - professionally defined need is the need for health services recognised by a health professional from the point of view of the benefit obtainable from advice, preventive measures, management or specific therapy. Under certain conditions it may exceed the perceived need;
- **scientifically confirmed need** - scientifically confirmed need is the need confirmed by objective measures of biological, anthropometric or psychological factors, expert opinion or the passage of time. It is generally considered to correspond to those conditions that can be classified in accordance with the International Classification of Diseases.

A classification of “health demand” was proposed by the WHO Expert Committee on health statistics in 1971 as well:

- **potential demand** - potential demand is the demand for health services corresponding to whichever is the greater of the perceived and professionally defined needs for each particular conditions or for all the conditions affecting a given population;
- **expressed demand** - expressed demand is the demand actually made on the health services available to a population. It may be greater than the actual utilisation because of the existence of waiting lists, limited resources or differences between patient’s perception of their needs and professional’s definition of those needs.
Bradshaw’s classification
At about same time, Bradshaw in sociological sphere presented his classification of needs (10). This classification could be often met in public health as well. He distinguished among four types of needs, being normative, perceived, expressed and comparative:

- normative need - normative needs are those that agree with norms, as defined by health professionals;
- perceived need - perceived needs are those perceived by individuals, depending on health services available;
- expressed need – perceived needs become expressed needs, once articulated;
- comparative need - generalization of evaluated needs in a population results in comparative needs.

Kalimo’s classification
In 1976 Kalimo, Finnish expert for health care systems, proposed his perspective on “health needs” concept, in fact for health care service need. He operationally defined health needs as the difference between observed and ideal levels of health (11).

According to Kalimo, ill health in the individual can conceptually be understood as a disturbance in one or more subsystems, being psychobiological, perceptive, and social activity. As a consequence he distinguished among three types of “health needs” (11):

- medically defined need - when a disturbance is present in the psychobiological subsystem on the basis of clinical evidence;
- perceived need - when a disturbance is present in the perceptive subsystem on the basis of perceived or subjective evidence;
- socially determined need - when a disturbance is present in social activity on the basis of behavioural or social evidence.

“Health needs” concept and public health
Public health view on the “health needs” concept is (or should be) comprehensive. Such a view originate from the fact that public health itself is a knowledge and profession that encompasses knowledge of several other professions and sectors (and it is as such multiprofessional and multisectoral), and integrate them to credit of people that seek for health. Thus, a public health professional needs to be familiar with different perspectives on this concept to be able one side to confront, and on the other to integrate population/individual, health care providers, health care payers, industry/economy, and politicians perspectives.

Two of the most important perspectives in a context of health are the perspective of lay people/population, and the perspective of health care providers and perspective of health care payers (Figure 2). The first are thinking about “health needs”, and the others about “health care needs” (Figure 2).
Mostly, both groups are thinking that they are talking about the same issue, but this is in fact far away from the truth. As it will be discussed later, the “health need” is a multidimensional concept and “health care need” is only one way to be expressed. That means that the health need could only partially be fulfilled through health care systems, especially those typical for western countries. In these countries health care is understood to be mostly provided by medical care. The fact is that great deal of health is gained and lost outside of medical care, and the underlying determinants of good health are to be found in the environments of everyday life, people’s social, cultural, and economic circumstances and the interaction of lifestyles and behaviour with those circumstances. A great deal of “health need” thus cannot be fulfilled through a health care system.

Also inside the group of health care providers and payers there are differences in understanding of the health needs concept. For example, medical need is mostly defined as medically modifiable morbidity burden while demand for medical services is defined as the request of the citizen, this time in the role of patient (a »consumer«) for medical care services (12). This definition is primarily related to payer’s perspective. In some cases, that what is “a need” for one, it is “a demand” for the other. Detailed discussion on this issue is beyond the scope of this module, and should be worked out in a separate one.

At this point we could simply stop this philosophical debate, but in fact, it could be continued, and additionally made even more complex with including the ethical perspective on the issue. This very important perspective is often neglected from the pure industry/economy stand point where most frequently only the rules of capitalism are those that count. But this issue is also beyond the scope of this module, like beyond the scope are all more economical considerations of health needs, including supply of health care.

From public health point of view the most important perspective is certainly the perspective of population and the member of a population - the individual. Thus this perspective will be discussed in more details.

“Health needs” from the population/individual perspective
There exist several dimensions of health need from perspective of population/individual, at least being physical, mental, social, and environmental (in the sense of natural, physical and biological, environment) (Figure 3).
The disruption can occur in one or more subsystems at the same time.

Whatever health need dimension is, it could be perceived or not (Figure 4). When and how the need is perceived depends on different factors:

- mainly it depends on the amount and intensity of disruption. Every disease has its natural course, and most of them have preclinical phase before it is fully expressed with symptoms. If there are no symptoms, or symptoms are of low intensity, or are not frequent, the disruption is not disturbing for an individual. As a consequence it is not perceived as a health need;
- to the certain extent the perception of health need also depends on cultural and normative environment of an individual;
- today, health need perception could be also driven by remedies industry (e.g. pharmaceutical industry) using marketing methods to enhance consumption of their products;
- contemporary information technology (e.g. internet), as well, could raise the perception of health needs that otherwise would not be perceived.

If health need is perceived, it could be expressed or not (Figure 4). If it is expressed, this could be in different terms, among others in terms of need for professional health care (medical care).

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**Figure 3.** Some dimensions of health need of a population/an individual.

**Figure 4.** Perception and expression of health needs from the perspective of a population/an individual.
With expression of health needs in terms of health care need, it is similar situation as in perception. Only in this case, the cultural and normative environment has bigger influence. Also social, economic, and natural environment influence expression of health needs. For example, if an individual has only moderate perception of health need, expression in terms of health care need will probably not occur, if the health care provider is far distant, or too expensive.

Meeting “health needs” of a population/an individual through health care system

If we consider only the physical and mental dimension of a health need which is usually searched for, and also (at least partially) fulfilled in the frame of health care system, we could confront the expressed perceived physical or mental health need to a health care need, recognized by health care professionals (Figure 5).

In fact, mostly the physical dimension is considered inside health care systems, while the mental dimension is mostly not in the first plan.

![Diagram of health needs and care needs]

**Figure 5.** Expressed health needs confronted with recognized and not recognized health care needs.

When the health care needs meet the health need of a population/an individual we are talking about met need, otherwise the needs are unmet (Figure 6).

The unmet health need is even greater if we consider that great deal of health need is not generated physically or mentally, but also has other dimensions as well (e.g. social and environmental).

In some problems, it also happens that the need is recognized by health professionals, but it is not perceived by population/an individual (Figure 6). This is the case for example in screenings for diseases with unfavourable outcomes like cancer.
Health needs assessment in public health practice

At this place we need to introduce also a concept of “health needs assessment”. This is (or should be) an important task for public health. The detailed discussion is beyond the scope of this module. An extra module is needed to deal with it, so at this place we will consider only very basic views.

Assessment of health needs is not simply a process of listening to patients or relying on personal experience. It is a systematic method of identifying unmet health and healthcare needs of a population and making changes to meet these unmet needs. It involves an epidemiological and qualitative approach to determining priorities which incorporates clinical and cost effectiveness and patients' perspectives. This approach must balance clinical, ethical, and economic considerations of need that is, what should be done, what can be done, and what can be afforded (8, 13).

![Figure 6](image.png)

Figure 6. Met and unmet health needs of a population/an individual.

Health needs assessment should not just be a method of measuring ill health, as this assumes that something can be done to tackle it. Incorporating the concept of a capacity to benefit introduces the importance of effectiveness of health interventions and attempts to make explicit what benefits are being pursued. Economists argue that the capacity to benefit is always going to be greater than available resources and that health needs assessment should also incorporate questions of priority setting, suggesting that many needs assessments are simply distractions from the difficult decisions of rationing.

For individual practices and health professionals, health needs assessment provides the opportunity for:

- describing the patterns of disease in the local population and the differences from district, regional, or national disease patterns;
- learning more about the needs and priorities of their patients and the local population;
- highlighting the areas of unmet need and providing a clear set of objectives to work towards to meet these needs;
• deciding rationally how to use resources to improve their local population's health in the most effective and efficient way;
• influencing policy, interagency collaboration, or research and development priorities.

In Box 1, questions that should be answers in health needs assessment are presented.

Box 1. Questions to be asked when assessing health needs.

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<th>Questions in health needs assessments:</th>
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<td>• What is the problem?</td>
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<tr>
<td>• What is the size and nature of the problem?</td>
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<td>• What are the current services?</td>
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<tr>
<td>• What do patients want?</td>
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<tr>
<td>• What are the most appropriate and effective (clinical and cost) solutions?</td>
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<tr>
<td>• What are the resource implications?</td>
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<tr>
<td>• What are the outcomes to evaluate change and the criteria to audit success?</td>
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Importantly, health needs assessment also provides a method of monitoring and promoting equity in the provision and use of health services and addressing inequalities in health (8, 14, 15).

The importance of assessing health needs rather than reacting to health demands is widely recognised, and there are many examples of needs assessment in primary and secondary care.

There is no easy, quick-fix recipe for health needs assessment. Different topics will require different approaches. These may involve a combination of qualitative and quantitative research methods to collect original information, or adapting and transferring what is already known or available.

The stimulus for these assessments is often the personal interest of an individual or the availability of new funding for the development of health services. However, assessments should also be prompted by the importance of the health problem (in terms of frequency, impact, or cost), the occurrence of critical incidents (the death of a patient turned away because the intensive care unit is full), evidence of effectiveness of an intervention, or publication of new research findings about the burden of a disease.

Conclusion

From the public health perspective is very important to be aware of different dimensions of health need of a population/an individual, and how they could be fulfilled. Public health’s role is to be advocate in fulfilling population’s health needs if they are legitimate and justified, and to prevent fulfilling unjustified health needs, especially if their fulfilling would result in cutting down fulfilling other justified health needs.

At the end we need to emphasize again that health needs are not only what people can benefit from health care system (this is health care need), but also from wider social and environmental changes. In meeting health needs in such a comprehensive meaning, health needs assessment is extremely important public health task to be done. It involves epidemiological, qualitative, and comparative methods to describe health problems of a
population; identify inequalities in health and access to services; and determine priorities for the most effective use of resources.

CASE STUDIES
To illustrate the theory on health needs we prepared several case studies. All of them are virtual, and could be only by chance similar to real situations.

**Case study 1**
A twenty-two years old student of medicine has got very high temperature accompanied by dry cough. He felt so badly that he decided to search for medical care. He visited his personal medical doctor who prescribed him antibiotics after pneumonia was diagnosed.

In this case, health need was perceived and expressed in medical terms. Since student’s condition was evidently a clinically expressed disease, which could be treated inside the health care system, there was no doubt that his need for medical care was recognized by a medical professional. His health need was met.

**Case study 2**
A group of people living in a small valley, in which different kind of industry is located, expressed health need in terms of environmental health when they were told that a waste incineration will take place in one of factories. After they tolerated for decades the pollution and degradation of the environment they live in, they decided to search for professional help to prevent additional pollution.

In this case the health need was perceived and expressed but not in terms of medical care. It is expressed in terms of public health advocacy. Since environmental pollution in this valley is evident, evidence based public health reaction is justified, and steps to prevent further pollution needed.

**Case study 3**
A fifty-year old university professor has strongly perceived physical health need, expressed as a need for physical activity. He does not feel comfortable if he cannot be physically active at least few times per week. He mostly uses spinning combined by mountain climbing.

In this case the health need is perceived and expressed but not in terms of medical care. It is expressed in terms of sports activity which could be fulfilled through using recreational facilities provided by community or self-provided recreational facilities.

**Case study 4**
A new vaccine was launched to the market. The studies, mostly driven by the producer of the vaccine, showed for the time being its probable effectiveness in combating the disease that it is meant for. The biggest problem is that the price is rather high. To systemize vaccination with this vaccine, providing of some other health good would be necessary to cut down, since a huge population group needs to be vaccinated by this vaccine. Additionally, the optimal target group is not clear yet. The producers use economic marketing principles to advertise the availability of their product, and a group of citizens with a political support triggered a campaign in support of systematization of this vaccination.
In this case there are a lot of obstacles. First, the health need perception is mainly artificially driven by producer of the vaccine before its definite effectiveness is evident, and before optimal target group is clear. Second, the price of the vaccine is rather high. Third, not advantage of all other available and cheaper measures was used yet.

EXERCISES

Task 1
Carefully read the part on theoretical background of this module and recommended readings.

Task 2
Critically discuss the differences between the terms:

- “need” and “demand”;
- “health need” and “health care need”;
- “health care need” and “health care demand”.

Use method of fishbowl.

Task 3
If yes, then try to find out its characteristics. If not, try to find an example from other countries (e.g. FINBALT Health Monitor Surveys).

Task 4
In a group of three to four students prepare a virtual scenario describing a health need of an individual or of a population group. Prepare a short presentation for other students. The scenario will be a part of the assessment.

REFERENCES


RECOMMENDED READINGS