

**CONCEPTUAL FRAMEWORK  
IN THE DOMAIN OF HEALTHY CITIES:  
MEANING, PURPOSES AND FORMATIVE ELEMENTS**

*UDC 711.4:613*

**Kommen M. Žižić\*, Jelena Ristić Trajković, Vladan Djokić**

University of Belgrade, Faculty of Architecture, Belgrade, Serbia

**Abstract.** *Many recent researches and studies have pointed out the necessity of developing comprehensive conceptual frameworks for healthy cities. Accordingly, this study aims to explain the conceptual framework for healthy cities research, planning, and design by identifying its meaning, purpose and formative elements. The research was conducted through qualitative techniques, such as conceptual, thematic and content analysis of the relevant literature and case studies. Results show that the conceptual framework contains voluminous conceptual knowledge about healthy cities and suggest that conceptual framework on healthy cities can include elements such as: 1) a subject, problems, methods, research questions, 2) theories, models, empirical data and practice data, concepts and relations among these concepts, principles; 3) the visual presentation of its contents, and a manual for its usage and development; authors' values, beliefs and thinking. A conceptual framework, based on the elements mentioned above, serves to systematically explain the healthy cities and to support the research, planning and design in the process of its developing. These findings can help to advance knowledge and scientific understanding of conceptual frameworks of contemporary cities in the domain of health, planning, designing and research. Also, the presented findings can serve as a basis for developing a comprehensive conceptual framework for healthy cities in the future. For example, existing conceptual frameworks could be analysed and new ones developed according to the proposed elements and purposes. In these cases, the proposed elements and purposes would be a unique criterion for the analysis and development of the conceptual frameworks.*

**Key words:** *healthy urbanism, healthy planning and designing, healthy places, healthy urban environments*

---

Received March 22, 2023 / Accepted April 25, 2023

**Corresponding author:** Komnen M. Žižić, Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra 73/II, 11120 Belgrade, Serbia

e-mail: [kommen.zizic@gmail.com](mailto:kommen.zizic@gmail.com)

\*PhD Student

## 1. INTRODUCTION

Today, health is emphasized as one of the essential values in city development. The significance of health has been emphasized in New Urban Agenda [1], Sustainable Development Goals [2, 3], World Health Organization (WHO) - European Healthy Cities Network [4] and Healthy Cities. The idea of developing healthy cities is an ancient one, and it has existed ever since urban planning and designing have existed [*e.g.* 5, 6, 7]. In favour of the stated view, there is the literature on urban planning and design [*e.g.* 8, 9, 10, 11, 12, 13, 14] on development of city areas and places beneficial to the health of people. The knowledge of healthy cities (how they are developed, their origin and behaviour, etc.), has an essential role in transforming the contemporary cities into healthy ones. The need to explain and also understand healthy cities and healthy places assists in the development of conceptual frameworks.

Despite numerous researches and studies, there is still a challenge to explain and understand healthy cities. Since the end of the 90s of the 20<sup>th</sup> century until the present day, researchers have determined different factors, processes and flows in a city affecting health. However, planning and designing healthy places is still challenging since there are numerous factors and relations that influence the development of healthy cities and healthy places to be reconsidered, viewed and explained [16, 17, 18, 19]. The development of conceptual frameworks could significantly contribute to the explanation and understanding of contemporary cities. Conceptual frameworks holistically present the relations between cities and health – they explain and present the relations among different scales of cities that contribute health [20, 21, 22]. Within the literature on healthy cities, there is an emphasized need that conceptual frameworks should be developed and should contain detailed and relevant conceptual knowledge on healthy cities (*for instance*: 17, 23, 24, 25, 26, 20, 27, 28]. Such conceptual frameworks that would contain detailed conceptual knowledge on healthy cities should assist in explaining healthy cities and direct development of contemporary cities towards healthy ones.

Developing new conceptual frameworks that are more complete and detailed than the previous ones implies including relevant contemporary knowledge on healthy cities, as well as systematic comparative analysis with the existing conceptual frameworks on healthy cities. The systematic collection and analysis of literature is an integral part of scientific research and it is a recommended approach in the field of urban planning and public health [15,17,19]. In the development of CF on HC, it is useful to systematically collect, analyse and compare the previous ones in order: (1) to present their achievements and advances; (2) to discover an area in which they can be supplemented, expanded and improved; (3) and to explain the contribution of the newly formed CF in relation to the existing one.

The explicit general meaning of a conceptual framework would be a starting point for analysing the existing conceptual frameworks and developing new ones on healthy cities. Explicitly defined terms allow the reader to clearly consider what they mean and how their meaning is consistently applied throughout the research. Clearly defined term meanings and their consistent application in research contribute to the logic of reasoning, and the derivation of accurate and true claims and conclusions [29, 30, 31]. In scientific research, the meaning of a term/theme can be determined by applying scientific methods and techniques. One of the general approaches to define a meaning of theme\term is to define its elements, the connections between the elements that make it up, its relationships

with other themes, its purpose, and the characteristics/properties of that meaning [38, 39, 40]. In scientific research, the meaning of theme/term can be defined by identifying its elements and purposes.

The primary topic of this research is to determine the meaning of the conceptual framework by recognising its purposes and elements in the domain of healthy cities. However, the main challenge is determining the conceptual framework's meaning pursuant to the literature on healthy cities since the analysed references have different meanings. In the analysed studies, a conceptual framework is very seldom and explicitly defined. Accordingly, in this paper, the meaning of a conceptual framework for healthy cities has been defined related to the article's intention and context. In this research is argued that understanding the purposes and elements of a conceptual framework can provide an understanding of its meaning. The elements and purposes of the conceptual framework have been analysed and synthesised to explain the meaning of a conceptual framework in the domain of healthy cities.

In order to define more precisely what the conceptual framework means in the domain of healthy cities, the general meaning of a conceptual framework (Section 2) and a healthy city (Section 3) are separately explained. Section 2 presents the philosophical and etymological meaning of the conceptual framework while section 3 explains the meaning of healthy cities including knowledge from urban planning, design and health. The methodology used to define the meaning of CF in the field of healthy cities is described in section 4. Research findings, elements and purposes of conceptual frameworks, are presented in the fifth section. Finally, the research findings are synthesised into a new meaning of CF that could represent conceptual knowledge about contemporary healthy cities (Section 6). The conceptual framework can support the planning, designing and researching of healthy cities when it includes elements such as: a topic, methods; theories, models, empirical data and practice data; concepts, relations among these concepts and concept characteristics; principles and approaches; the visual presentation of its contents, a manual for its usage and development, and authors' values, beliefs and thinking.

## 2. PHILOSOPHICAL AND ETYMOLOGICAL MEANING OF CONCEPTUAL FRAMEWORK

A conceptual framework presents a conceptual meaning in a form of concepts, principles, models, classifications and categories. Anderson and Krathwohl explained in the book on knowledge classification, learning and teaching within the chapter " Dimension of Knowledge" that conceptual knowledge is "complex [and] organized" knowledge [32: 4]. Further, they demonstrated that "... [Conceptual knowledge] includes classification knowledge and categories, principles and generalizations, and theories, models, and structures [.]" [*ibid*]. Categories and classifications are the basis for the derivation of principles and generalizations [33], while the meaningful connection of principles and generalizations can serve to develop models, theories and structures.

A *framework* is a boundary within which it can be done, researched and thought about. The framework meaning derives from the term frame and the term work. Also, the word framework can mean a set of beliefs, ideas or rules being the base for conclusion, decision or reconsideration [34, 35]. The framework also designates a structure of a certain system (*e.g.* a society system or a law system)[*ibid*]. A conceptual framework is also named a conceptual structure since it represents the structure or support connecting

parts into an entity. A conceptual framework is a structure, meaning or order among concepts that meaningfully explain phenomena, items and ideas. The following sections closely explain the concepts, categories, topics, and factors.

The word *concept* has similar meanings in Latin and English. In Latin and English, the word concept means a thought or an approach to generalisation/derivation of something basic, pursuant to a line of certain cases, but also organisation around the main idea or a topic. The word concept derives from the Latin word *conceptum*, meaning a conception or a formation (neuter of concepts, past participle of *concipere* to conceive). In the English language, the noun concept means something in conception in mind (*e.g.* thought and ideas) – "abstract or generic idea being generalised in certain cases" [36]. Similar to the noun concept, a concept as an adjective means "[something] organised around the main idea or topic". The synonyms for the concept in the English language are: idea, thought and conception. According to the stated, a concept can be explained as an idea developed according to a line of cases. Such an idea consists of meaningful, connected ideas that explain or briefly describe what it is related to.

According to the Philosophical approach, *epistemological constructivism and critical realism*, ideas, concepts, theories, and models are constructions – men's mind creations. In other words, they are mind presentations of reality. In the Cognitive Science and Philosophy of Mind, mind (mental) presentations of reality are shown as conceptual frameworks and conceptual models. Mental presentations of reality are developed in mind/cognitive processes. Concepts are developed in line with mental processes, and the process of development is called *conceptualisation*. The reality is reconsidered, explained, described and understood by concepts. The synthesis of concepts contributes to the development of conceptual mental presentations of reality.

In the conceptualisation process, concepts and relations among the ones are developed. According to Aristotle, mind presentations consist of concepts and relations among these concepts [37]. David Hume explained that concepts are consequences of cognitive/mind processes. Hume thinks concepts are the base for mind presentations on objects or phenomena of reality [38]. Gilles Deleuze and Felix Guattari explain that "[each] concept has components and is determined with them [.]" and "[there] are no concept with only one component"[39:15]. In their view, a concept is difficult to be determined by itself. However, it is determined in relation to other concepts, and its components [39]. Also, the meaning of a concept is determined in relation to a context and other concepts and sub-concepts.

According to qualitative research methods, more determined towards the grounded theory, the topic can be a concept, and a concept can be a topic. The main/primary concepts are called topics and categories [40]. Also, the key concepts/topics consist of other concepts and topics [*ibid*]. For instance, a concept can be explained with several concepts. Then, such an explanation of a concept can be called a topic or a general concept in relation to the concepts being explained with. Among topics, central topics/concepts can be determined where several topics/concepts are grouped (in this case, with sub-topics/concepts) [*ibid*]. The recommendation is to express the primary topic in a few words [*ibid*]. Also, a topic has its inner structure and order [40]. Thus, pursuant to the stated characteristics, a topic and concept are similar. A topic/concept contains characteristics, dimensions and conditions, being classified into and connected with concepts.

The dimensions and characteristics assist in establishing and explaining the order among concepts. A concept and a topic are closely determined by dimensions and

characteristics [40:34]. Concepts can be classified into dimensions pursuant to their characteristics and conditions where they are reconsidered [40]. The relation among the characteristics and dimensions contains a scope of characteristics. A dimension contains the characteristics of a concept [*ibid*], and a dimension is a scope or a limit where the characteristics of a concept either change or vary [*ibid*]. Topics/concepts can have general but also individual characteristics and dimensions. Within the dimension limit, characteristics can be changed. Dimensions include concept variations.

The following view represents a conceptual framework as a presentation of conceptual knowledge; it can contain categories, classifications, principles, theories, models and structures. Some concepts are named sub-concepts concerning the concepts being reconsidered. Whether we speak of a concept or a sub-concept depends on the hierarchy being established among them—being under reconsideration as superior or subordinate. Concepts can be classified and grouped related to their similar/different characteristics into different dimensions/categories. The same concept can have one or more dimensions, but also their characteristics. Such classified concepts are explained within their characteristics and dimensions. Categories make concepts and components around general/key concepts with similar or different characteristics. Concepts are determined within their characteristics relations and positions within conceptual frameworks, their meaning in a broader context and concepts being explained with a components (meaning within a concept). Concepts can be classified in relation to their characteristics into dimensions/categories.

### 3. HEALTHY CITIES

#### 3.1. Development of Healthy Cities

The *healthy cities* movement was established as a continuation of the discussion from 1977 on health and planning within WHO Health for All [41] and the Ottawa Charter for Health Promotion [42]. The healthy cities movement started by program of the WHO, *Health for All: Healthy Cities-Promoting Health in the Urban Context* in 1986 [43]. Two years later, it was explained in more detail in *Promoting Health in the Urban Context* [44]. In 1997, the WHO started the European Healthy Cities Network [45], emphasising the importance of healthy urban planning. The stated projects contributed to reconsidering the consequences for health within the planning process and policy development *Health in All Policies* [46, 47].

Also, sustainable development tends to improve health in a city environment. One of the goals of sustainable development is to improve health on the planet (no. 13-14) [48:28]. A healthy city has common values, as stated in the third goal of the Sustainable Development Goals (SDGs) [49]. The third goal (SDG 3) explicitly emphasises the importance of people's health and wellbeing as a necessity to be accomplished in the eleventh goal (SDG 11) – reaching healthy, resistant, sustainable and safe cities. According to present-day urban planning and design movements, there is a tendency towards healthy cities. At the same time, the interest for healthy cities and healthy people in the city environment is increasing.

Concerning the stated, several contemporary topics on cities are based on similar or the same values as with healthy cities topic. The topic of healthy cities is similar to the topics of: sustainable, resistant and smart cities. Sustainable development initiates improving

health in the city environment. According to the research [50], wellbeing, health and safety are the common goals for smart and sustainable cities. Smart and sustainable cities are mutually similar regarding the aspect of improving people's health [*ibid*]. On the other side, people's wellbeing, health and safety are the primary goals based on the development of a healthy city [51, 20]. According to the stated views, it can be concluded that mutual goals and values for smart, sustainable and healthy cities are: health, wellbeing and safety of people.

The health concept is the base of a healthy city. The health definition by WHO determines narrative health and what is appropriate for the purpose, intention and institution it derives from and represents a good starting point for further research. Such directions are essential for the development of healthy cities and healthy places; they are important determinations of health and disease in the process of development of a city environment to be applied in.

### **3.2. Complete Health Is a Healthy Cities Base**

Completeness is one of the primary meanings of the term health. Health is the unity of physical, social and mental health, and mental health is the synthesis of emotional, intellectual and spiritual health [52, 53]. According to the World Health Organization:

... Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being, without distinction of race, religion, political belief or economic or social condition. ... [49:16].

According to Kirkwood and Riegelman, behaviour, infections, genetics, a living environment, geography, medical care/system and social-economic-cultural status influence health [54]. The living environment plays a significant role in people's health. According to WHO, exposure to polluted air, water and land, ultraviolet radiation, climate changes and toxic substances at work and home influence more than 100 health problems [55]. Health in a city is called city health. City health influences the health of the population in a city environment. Galea and Vlahov explain, "In its broadest sense, urban health refers to the study of the health of urban populations" [24:1]. According to Galea and Vlahov, Gatzweiler and other researchers [24, 56], city health is unique and conditioned by the context being studied. In this case, the context is a city/city area where the health of a population is studied, and it has consequences for the health of the people in it.

The stated view is related to the city environment where the consequences of the action on the city environment directly/indirectly affect people's health. When the factors of the city environment are being improved, then city health can also be improved, as well as the health of the living environment. It is needed to act on "the social and physical environment and also [onto] infrastructure of city sources" [57, 23] since they affect the city's health. Also, acting directly on the city's health services can indirectly affect people's health. Support in health can be accomplished by improving health services/care, caring and protection [23]. In short, a city's environment affects people's health, and it is one of the significant terms healthy cities are being determined with.

The health concept is the base of a healthy city. The health definition by WHO determines narrative health and what is appropriate for the purpose, intention and institution it derives from and represents a good starting point for further research. Such directions are essential for the development of healthy cities and healthy places; they are important determinations of health and disease in the process of development of a city environment to be applied in.

#### 4. METHODOLOGY

To determine the meaning of the conceptual framework for contemporary healthy cities, this research synthesized methodological approaches such as a systematic literature collecting and a concept analysis. The method concept analysis provides objective approaches to concept clarifications and it is used to develop the conceptual knowledge by using the evidence from various fields.

The literature on conceptual frameworks on healthy cities is collected, analysed and synthesised to accomplish the purpose of this research. The literature on healthy cities in English was systematically collected until October 2022. Scopus and Google Scholar databases were researched by the keywords within a title, abstract and keywords. Each search was conducted using search criteria of “conceptual framework” with research terms such as: healthy cities, healthy environment, definition, understanding, and healthy city environment. Additional searches were done within encyclopaedias and literature not shown in the Scopus database. In line with the references of the analysed articles, additional studies on conceptual frameworks were found.

The resources were screened by content, thematic and conceptual analyses to select relevant studies for the purpose of this research. The auxiliary selection criterion was whether the study contains an explicit or implicit definition of a conceptual framework. The next criterion was to choose the most popular and cited studies on conceptual frameworks, scientific research, health, urban planning and healthy cities were selected. Their quality, reliability and wide acceptance in the scientific fields from which they originate helped to determine their relevance to this research. Although it is a limited number of articles, these were relevant articles to be a starting point to determine the meaning of conceptual frameworks to be accepted clearly in all stated areas. Selected articles were analysed in detail to define explicit and implicit meanings of conceptual frameworks on healthy cities.

The content of various articles from urban planning, designing and public health were analysed by conceptual, thematic and contents analyses. The content of the articles was analysed using the qualitative techniques mentioned above to identify and explain the elements and purpose of CFs. This research phase was conducted in several iterations, and often new knowledge was discovered with each new iteration. New knowledge brought new elements and purposes to the conceptual framework and the connection with the previous/known. Findings on the elements of the conceptual framework and findings on the purposes of the conceptual framework were synthesised to describe the meaning of the conceptual framework for healthy cities. The above mentioned research approach brought new knowledge, interpretation and meaning for the conceptual framework for healthy cities and helped to determine its closer meaning. Moreover, a developed meaning

of a conceptual framework is adapted to the contemporary needs of the healthy city development.

Conceptual frameworks are the perspectives and conceptions of phenomena or an object. According to the stated results, a conceptual framework is a presentation of the reality (Table 1). The presentation of the reality is expressed in key terms and relations among them. The key terms and relations among them are developed due to the models and theories. Concepts, theories and models are synthesised into public health, making frameworks where certain phenomena and occurrences can be explained and predicted [58]. A similar view is present in urban planning, urban and architectural design and scientific research.

**Table 1** Meanings of a conceptual framework in scientific research, urban planning, design and public health.

Definitions	Area
<p>„...The most important thing to understand about your conceptual framework is that it is primarily a conception or model of what is out there that you plan to study, and of what is going on with these things and why—a tentative theory of the phenomena that you are investigating.” [59:39]</p> <p>„... A conceptual framework explains, either graphically or in narrative form, the main things to be studied—the key factors, variables, or constructs—and the presumed interrelationships among them.” [60:20]</p>	Scientific Research
<p>A conceptual framework is not a practical instruction or a guide for planning and designing of cities, it is primarily a possibility to connect/join knowledge from different areas so as to contribute, to reconsider, determine and solve the problems in urban planning [61].</p> <p>“[conceptual framework]... as sets of assumptions, beliefs and concepts that are used implicitly or explicitly to represent real world phenomena.” [62:161]</p>	Urban planning and Public health

## 5. EXAMINING THE PURPOSES AND ELEMENTS OF CONCEPTUAL FRAMEWORK

### 5.1 Conceptual Framework Purposes

The planning and design process includes numerous stakeholders and professionals from various disciplines, as well as citizens and users to whom planning and design are directly or indirectly related. A conceptual framework is important in assisting professionals in this interdisciplinary process to understand each other [17, 63, 64]. Conceptual frameworks assist in reconsidering the phenomenon, object or situation from different views [60]. For instance, a conceptual framework assists participants/researchers in learning, knowing and discovering during the process of planning, realization, and evaluation in a city environment [51, 28, 17]. A conceptual framework is a support to participants in the process of development of healthy cities. In the preliminary planning and designing phase of healthy cities, conceptual frameworks assisted participants in determining mutual values and research goals [65]. In the interdisciplinary process of developing healthy

cities, a conceptual framework assisted in reconsidering different causes and consequences and relations among them that exist in reality.

Adequate use of a conceptual framework can significantly contribute to research development and realisation. For instance, in line with leading work in the area of public health and health behaviour research, Hoehner et al made the following statement:

“In public health, theories and planning frameworks are integrally related to the development of permanent research questions and hypotheses, the identification of factors that influence health and behavior, the determination of program or policy objectives and activities, the implementation of programs, and the measurement and evaluation of program or policy effectiveness over time.” [66:15].

Similarly Hoehner and colleagues, other researchers think that conceptual frameworks are important: to determine the research, a further research flow and direction [60, 64], and to reconsider and study research problem [58]. Conceptual frameworks, besides supporting the development of the starting points of the research, such as: goals, subjects, problems, questions, hypothesis and methods, also assist in developing the research details, such as concepts and concept components and relations among them.

With the assistance of conceptual frameworks, it is possible to determine the most important concepts and relations among them that should be researched or considered within the research. For instance, out of a line of concepts, components and relations in conceptual frameworks, those concepts, components and relations that are the most important to be researched or studied related to be a subject or a phenomenon can only be selected. According to Miles, Huberman, and Saldana, “A conceptual framework forces you to be selective — to decide which variables are most important, which relationships are likely to be most meaningful, and, as a consequence, what information should be collected and analysed — at least at the outset.” [60:20]. A conceptual framework assists in epidemiological analyses to be reconsidered numerous cause-consequence relations among these concepts and factors. For instance, to be determined and established hierarchies among the factors and concepts. A conceptual framework is used in epidemiology to analyse several factors and relations among them [58, 67], and it is a good starting point for developing multivariate analyses [67]. A conceptual framework assists to reconsider different concepts, concept components and relations among them for a particular phenomenon, subject, idea or event and to be selected the most relevant ones for planning, researching and designing.

Selecting the most important concepts, components and relations between them, it is often necessary to develop models in order to reconsider them and also the relations between them in detail. The instances in the analysed articles show that conceptual frameworks contribute to the development of models with different characteristics, goals, intentions and purposes. For instance, from conceptual frameworks can be developed analytical, conceptual, designing models [*e.g.* 66] and descriptive ones [*e.g.* 68]. Also, according to conceptual frameworks and such detailed models, one can develop: (1) policies/regulations to contribute to people’s health in urban development [20]; (2) a list of evaluation of (healthy) cities and (healthy) places [63, 51, 20]. Conceptual knowledge of the selected concepts, concept components and relations between concepts can be deepened by developing a conceptual model according to a conceptual framework. Based on the assumed theories in conceptual frameworks, conceptual models can be developed

for specific cases and precisely determined contexts. When a narrow range of conceptual knowledge is presented, the more detailed and precise knowledge is developed in conceptual models. Conceptual models can be developed for specific local contexts. The development of conceptual models determines detailed views, processes, flows and mechanisms in a local context (according to or by conceptual knowledge stated in a conceptual framework).

Conceptual frameworks and models contribute to the development of the regulation/policy at the local, city, regional and state levels. The framework assists in developing an intervention and contributes to the conducted interventions to be followed and evaluated [68]. In public health, for development of interventions, are used: 1) "systematic planning frameworks: models and logics and theories" [69:33,246] for checking of successfulness of action/intervention in a city environment, and also 2) sequential framework [70:138]. Sequential and analytical frameworks are similar and are "also used in program planning to assist in designing, implementing, and evaluating effective interventions" [71:319]. The analytical or sequential framework describes the relations among population, action/intervention, short-term planned results and long-term results in public health. Pursuant to the stated, conceptual models are relation/connection among conceptual frameworks and planning regulation, such as, for instance strategies, tactics and plans and designs. With the assistance of conceptual strategies, tactics are translated and developed into regulations/policies. Regulations / local, city, regional and state policies, directly affect urban planning and designing, as well as city development.

To conclude, there are multiple advantages or conveniences when conceptual frameworks are developed. A conceptual framework serves as a road sign or a map to guide or direct the research. With the assistance of conceptual frameworks, a subject, problem or phenomenon can be researched and reconsidered from different sides/angles/views. When the stated approach is used in urban planning and designing, different theories and models can be reconsidered on concepts related to the subject or the phenomenon being researched. A conceptual framework shows concepts, concept components and relations among concepts visually and textually. Such a presented conceptual framework offers a possibility for the data to gain information and knowledge. A conceptual framework allows general conceptual knowledge to be developed based on individual and detailed conceptual factual knowledge. In planning and designing, conceptual frameworks contribute and assist in determining mutual goals, values and visions of participants from different areas. Also, conceptual frameworks support the participants to research, plan, and design the possible development directions of healthy cities.

## **5.2 Elements of Conceptual Frameworks**

Comprehensive research has shown that a conceptual framework contains: 1) a subject, problems, methods, research questions; 2) theories, models, empirical data and practice data; concepts and relations among these concepts; 3) the visual presentation of its contents, and a manual for its usage and development; and authors' values, beliefs and thinking; principles and concept characteristics (Table 2). These elements can be classified into three groups according to their characteristics: the introductory elements, the constitutive elements and the auxiliary elements.

**Table 2** Elements of conceptual frameworks are classified in the groups according characteristics and contents. The groups of elements are presented in the table in the order in which they are used in conceptual framework.

domain	authors	date	introductory elements				constitutive elements										auxiliary elements					
			subject	goals	problems	questions (methods)	model	theory	empiric evidence	practice evidence	structure	concepts	relations between concepts	hierarchy between concepts	concept characteristics	concept dimensions	perspective	argument	ideas	principles	approaches	visual representation of content of CF
etymology philosophy and scientific research	Anderson and Krathwohl	2001					o	o			o	o	o			o			o	o		
	Oxford Advanced Learner's Dictionary	2020									o	o	o									
	Cambridge English Dictionary	2020									o	o	o									
	Deleuze and Guattari	1994									o	o	o	o	o			o				
	Hume	2007										o	o	o				o				
	Corbin and Strauss	2015										o	o	o	o							
	Booth, Colomb, and Williams	2008															o					
	Maxwell	2013		o	o	o	o	o		o			o	o			o					o
Miles, Huberman, and Saldana	2014		o	o	o	o	o	o	o			o	o								o	
Ravitch and Riggan	2017		o	o	o	o	o		o			o	o			o					o	
urban planning, public health and urban design	McLoughlin	1969					o	o	o									o	o	o	o	o
	Lawrence	2015						o	o	o		o	o								o	o
	Lawrence, Forbat and Zufferey	2019	o					o	o	o		o	o								o	o
	Axelsson and Bihari Axelsson	2006	o	o				o	o	o	o										o	o
	Barton	2005	o	o	o	o	o	o	o	o		o	o								o	o
	Hoehner et.al.	2003	o	o	o	o	o	o	o	o												o
	Pineo	2020	o	o	o	o	o	o	o	o			o	o							o	o
	Riegelman and Kirkwood	2019	o	o	o	o	o	o	o	o			o	o								o
	Rydin et al.	2012	o					o	o	o							o	o	o	o	o	o
	Victora et.al.	1997	o	o	o			o	o	o	o	o	o	o					o	o	o	o

5.2.1. Introductory and Constitutive elements

According to the stated domains, a conceptual framework contains a subject, a problem, a goal, a method, and in some cases a question and hypothesis. In public health, a conceptual framework includes a broader context of the subject, object, problem, purpose, question, concepts, and relations among the concepts [58]. According to Hoehner and researchers [66], a conceptual framework contains theories, planning frameworks, questions, subject and problem. The research questions and hypothesis as a part of a conceptual framework are presented in a scientific research [e.g. 72, 60]. All these elements are defined at the beginning of the planning and research. Also, they are developed in iterations as the other conceptual framework's elements evolve.

A conceptual framework was based on different forms of knowledge. The knowledge can be factual, empirical, practical and theoretical. A conceptual framework was based on published studies, empirical research [64, 67], theories and models [58, 67] related to the subject. In the domain of healthy cities conceptual frameworks presented the theoretical base where theoretical explanations were based on healthy cities and healthy places [e.g. 51, 73, 74]. Different forms of the stated knowledge were mutually complemented to offer the comprehensive presentation of healthy cities.

Today, although different data can be collected, the challenge is to explain the data meaningfully and synthesised [75, 76, 77], and as such, to be used in urban planning and designing. For instance, the collected data is synthesised and developed into information; the information is further developed until starting knowledge, while starting knowledge is developed into knowledge patterns, and knowledge patterns to principles and regulations [78]. Although it can be reached to different data, the challenge is to be meaningfully and logically interpreted into different elements of conceptual frameworks on healthy cities. In urban planning, a conceptual framework offers theories and thinking ways on a subject based on empirical data [68]. However, due to the same data, different theories and opinions on the research subject can be developed. Pursuant to the stated, according to the same data, different conceptual frameworks can be developed [*ibid*]. The same data can be interpreted differently into meaningful entities, especially when the data is related to complex subjects and phenomena concerning different city areas or entire cities.

Concepts and relations among concepts are the primary elements of conceptual frameworks. In public health, a conceptual framework contains: concepts, concept's components and relations among them; an order/hierarchy among concepts and concept components; and the structure determined with the order and hierarchy among concepts and concept components [67]. With concepts and relations among concepts, they often simply represent the phenomena. Concepts and relations among them usually present simply complexity of the subject, phenomena, idea and events in public health [*cf.* 64]. Concepts and relations between concepts can be synthesised in principles, approaches and ideas.

A conceptual framework contains principles, approaches, and ideas useful for the processes of urban planning and urban designing. Principles and general provisions are useful starting points in the process of urban planning and designing. Conceptual frameworks present general provisions or principles being developed, examined and checked in specific contexts to address the causes and consequences of planning and design [61]. Further on, such conceptual knowledge can be developed into specific contexts with new knowledge and more detailed results and data. Starting conceptual knowledge, e.g. in the form of principles, can be further developed into new knowledge with the development of conceptual models.

### 5.2.2. Auxiliary elements

The visual presentation of a conceptual framework can explain concisely conceptual knowledge on healthy cities. In analysed articles on conceptual models and conceptual frameworks, the conceptual knowledge is presented visually [*e.g.* 20, 51, 28, 17, 21]. Maps and diagrams are possible ways to present the contents of conceptual frameworks [*e.g.* 17, 28, 21]. These visual presentations of conceptual frameworks consist of introductory and constitutive elements. For example, some conceptual frameworks for praxis visually provide: principles, questions and concept's characteristics [*e.g.* 82, 83]. On the other side, in rare cases the content of conceptual framework is not visually presented. For instance, in the article of Gluberman et al. [23], the visual presentation of conceptual framework data is not given. When concepts and relations among them are presented visually they can be reconsidered immediately, and as also the ones not being presented, but they exist.

A conceptual framework was determined with the manual how to be used and how such a concept can be developed further since new knowledge, understanding and explanations (Table 2.2). In grey literature, there were stated instructions for the use of

conceptual frameworks, while in scientific articles, it was not common. In scientific articles, where conceptual frameworks were presented, often, further instructions are not given, but in the articles published before or after the article where a conceptual framework has been presented. For instance, in the article by Barton [51], the instructions for usage were found in the studies published 2003 and 2015 [79,80]. Similarly, for the article of Pineo [17] the usage manual was published in another article [81]. When conceptual frameworks contain the usage manual on how to be used in theory and practice, then it is possible to completely accomplish the potential of conceptual frameworks and its suggested use. On the other side, the possibility of conceptual frameworks to be used inappropriately is reduced.

Besides concepts, components and relations among them, a conceptual framework is determined by the ideas, values and beliefs of an author/researcher [59]. In the book *Reason and Rigor: How Conceptual Frameworks Guide Research*, in the chapter "Introduction to Conceptual Frameworks", Ravitch and Riggan reconsider conceptual frameworks and emphasize that conceptual frameworks contain: personal interests, understandings and values of the authors who made them [84]. In urban planning, urban design and public health was presented author's approach to phenomenon (Table 2.2), and how this approach is related to introductory and constitutive elements of conceptual framework.

To conclude, all above mentioned elements form conceptual framework. They are connected and should be reconsidered together as an entity. One of the approaches to synthesis the stated elements of conceptual frameworks should be in the form of argument. In this case, each argument consists of sub-arguments, and each of these sub-arguments has a line of reasons, based on evidences.

## 6. LINKING ELEMENTS AND PURPOSES OF CONCEPTUAL FRAMEWORKS

Conceptual framework contains general/broad knowledge of phenomena or subjects and is the most voluminous and general form of conceptual knowledge. It contains more detailed forms of conceptual knowledge, such as: concepts, principles, theories, models, classifications and categories. In a conceptual framework, previously stated detailed forms of conceptual knowledge are logically synthesized. It is common for conceptual frameworks to be developed in order to establish a view on a phenomenon, most often in the form of assumed/approximate/starting theories based on knowledge from different areas. A conceptual framework can be explained as a compared structure, organization or order. As a conceptual framework consists of concepts and relations among them, these concepts can be classified into dimensions/categories per their characteristics, and then conceptual frameworks present dimensions of a phenomenon or a subject being researched. In other words, a conceptual framework is closely determined by its dimensions. The conceptual frameworks are needed to establish a meaningful structure and relations between numerous data/knowledge, as well as to develop conceptual knowledge to explain a phenomenon or subject.

In all studied areas (scientific research, urban planning, design and public health) considering conceptual frameworks on healthy cities, there is the synthesis of different knowledge based on different sources and data. It is based on the data, such as empirical data, practice data, theories or models that are connected meaningfully and synthesized to derive principles, rules, regulations, directions and recommendations. Within conceptual

frameworks, there is a clear presentation of relations among them, logic, thinking, conclusions and views of authors and standpoints, directions and views in science and practice. A conceptual framework explicitly presents the views of authors/researchers and the views in theories and practice. With the assistance of conceptual frameworks, the views and standpoints of researchers/authors can be compared to the views of theory and practice. A conceptual framework presents and explains how the views of theories and practice are adjusted or not adjusted, and the views of authors/researchers they derived their conclusions and results from.

Considering a conceptual framework in the domain of healthy cities, a key topic, concept, or meta-concept is a healthy city. The key topic of healthy cities is determined closely with other topics, concepts, and where other topics or concepts consist of other sub-topics and sub-concepts. Concepts and sub-concepts are classified into dimensions, whereas dimensions are stated and classified into concepts per their characteristics. These dimensions and characteristics are reconsidered from different aspects. In this case, the aspects are theories and models with which concepts and topics are explained. For instance, a concept can have one or more dimensions and be reconsidered from one or more aspects. The topics/concepts can be studied from one or more areas or disciplines. For instance, the topic of a neighbourhood, as a sub-topic of healthy cities, is researched in the area of urban planning, sociology, geography, psychology, economy, engineering, traffic and public health. Concerning the primary topic, healthy cities can be reconsidered into sub-topics, for instance: a neighbourhood, social capital in a block, then mental, social and physical health and also the relations among the ones.

In epidemiology, public health, urban planning and urban design a conceptual framework serve to plan, design and create research from early/starting phases. For instance, it serves to select a research method, analyse and recognise/determine the factors that affect a phenomenon or a research subject (health or sickness certain/uncertain), and present the idea on planning or a project being undertaken. For the early phase of planning, it is essential to establish the relations and order among the concepts and factors, so as to be more meaningful and avoid errors and omissions in further research. A conceptual framework determines the ways and approaches in research, planning and designing. A conceptual framework is an introduction or the beginning for qualitative and quantitative research and assists in directing further research. Conceptual frameworks are often used in reaching healthy cities, especially when it is necessary to reconsider beliefs, theories and standpoints from different areas. One of the primary roles of a conceptual framework is to systematically and thoroughly direct research and design within the complexity of the subject. A conceptual framework contributes to understanding the development of healthy cities. At the same time, it assists stakeholders in actively participating in planning and designing healthy cities. Additionally, it assists in the mutual understanding of different stakeholders.

Pursuant to the meanings of conceptual frameworks in the stated domains, a unique meaning of conceptual framework can be derived. Concerning area such as scientific research, urban planning and design, conceptual frameworks serve for: (a) models to be studied, evaluated and developed and (b) principles, approaches, and characteristics to be determined. However, it is not always the case. In certain conceptual frameworks, only the primary conceptual knowledge is presented, and the principles and regulations are not developed [e.g. 51, 17]. Concerning the analysed conceptual frameworks on healthy cities (both theory and practice), the suggested meaning of these frameworks in this research contains advantages of theory and practice. For instance, in relation to the analysed

conceptual frameworks of theory, it contains principles, regulations and characteristics of concepts. The suggested meaning of conceptual frameworks on healthy cities should contain principles since they can be adjusted in further research and used locally. Similarly to principles, conceptual frameworks should also contain characteristics since, in further research, they can be developed into indicators and variables to be used in the development process of healthy cities.

The views on the meaning of conceptual frameworks in the field of urban planning are broadened with the views presented in the scientific research and public health. The suggested meaning of conceptual frameworks is a synthesis of mutual meanings of conceptual frameworks in the stated areas and the synthesis of individual meanings of conceptual frameworks presented in one but not being presented in other areas. For instance, the principles and characteristics are not frequent in scientific research but are in urban planning. Thus, in relation to the analysed conceptual frameworks, defined conceptual frameworks contain the principles and characteristics of healthy cities. The advantage of the suggested meaning of conceptual frameworks on healthy cities is to contain principles, regulations and directions, directly contributing to practice in urban planning and designing of healthy cities. Also, they can serve as a research standpoint in urban planning and designing, starting from the early phases. The advantage of the stated approach is that the suggested principles, regulations and directions of conceptual frameworks are based on evidence and facts deriving from empirical, practice and theory, contributing to their quality and applicability. The characteristics of individual elements of healthy cities suggested with conceptual frameworks are the established standpoint for indicators development. The advantage is that qualitative characteristics can be developed into quantitative ones. Pursuant to indicators, they can be analysed, compared, valued, evaluated and followed on healthy cities.

The suggested meaning of conceptual frameworks is limited with: selected articles, collecting methods, and the way the results have been synthesised. The quality and presence of the articles in the area they derive from have been a good starting point for selection. Although the meaning of a conceptual framework is determined by relevant scientific articles, there is a necessity for adjusting the meaning through time.

## 7. CONCLUSION

A conceptual framework is a structure of concepts that contains perspectives for a phenomenon to be seen or reconsidered. These perspectives can be reconsidered as supposed/starting/approximate theories/views on a phenomenon or a subject they are related to. A conceptual framework is changeable and develops as the knowledge of the subject, or the phenomenon is developed. The conceptual framework helps to better understand healthy cities and to support planning, research and design in their development process. In a general sense, conceptual framework on Healthy cities should contain:

1. introductory elements: subject, problem(s), goal(s), method(s) and in some cases, questions and hypothesis; the method how to be developed since new knowledge;
2. constitutive elements: theories, models, empirical data and practice data from different scientific areas and disciplines, concepts and relations among concepts (e.g. concepts, sub-concepts, concept components and relations among them), different orders among concepts, dimensions; approaches, principles, and characteristics;

3. auxiliary elements: visual presentation of a conceptual framework content; a manual and directions on how to be used in the process of healthy cities development; knowledge, experiences, beliefs, claims, ideas, understanding, conclusions, profession and values of the author/researcher; a relations among previously stated elements.

According to the suggested meaning of conceptual frameworks, in future research, the existing conceptual frameworks on healthy cities shall be analysed, and new ones shall be developed. With the analysing of the existing conceptual frameworks on healthy cities, it is expected to be determined well and not well developed elements of conceptual frameworks on healthy cities. Also, when well and not-well-developed elements of conceptual frameworks on healthy cities are determined, then, these elements of conceptual frameworks can be analysed in further research related to broader scientific articles on healthy cities. Intending to discover and determine the elements that are not stated and reconsidered in the existing conceptual frameworks on healthy cities, undeveloped parts of a conceptual framework can be complemented with other elements of a well-developed conceptual framework to develop a complete and precise conceptual framework on healthy cities. Also, pursuant to the stated meaning of conceptual frameworks on healthy cities, the contents of conceptual frameworks shall be analysed. For instance, it could be determined what the most important concepts and relations among the concepts being presented by healthy cities are, and they are significant to be explained and understood in healthy cities.

#### REFERENCES

1. UN-Habitat, 16. "New urban agenda", United Nations, Nairobi, 2017. [Online]. Available: <https://habitat3.org/wp-content/uploads/NUA-English.pdf>
2. United Nations (UN), "Transforming Our World: The 2030 Agenda for Sustainable Development", United Nations, New York, 2015. Accessed: Mar. 05, 2020. [Online]. Available: <https://sustainabledevelopment.un.org/post2015/transformingourworld>
3. UN-Habitat and WHO, "Integrating health in urban and territorial planning: a sourcebook", Geneva: UN-HABITAT and World Health Organization, 2020.
4. A. D. Tsouros, "Twenty-seven years of the WHO European Healthy Cities movement: a sustainable movement for change and innovation at the local level", *Health Promot Int*, vol. 30, no. suppl\_1, pp. i3–i7, Jun. 2015 doi: 10.1093/heapro/dav046.
5. J. Barnes, Ed., *Complete Works of Aristotle, Volume 1: The Revised Oxford Translation*. 1984. Accessed: Feb. 02, 2022. [Online]. Available: <https://press.princeton.edu/books/hardcover/9780691016504/complete-works-of-aristotle-volume-1>
6. M.V. Pollio, *Vitruvius: The Ten Books on Architecture*. Cambridge: Harvard University Press, 1914.
7. Hippocrates, *On Airs, Waters and Places*, vol. 1, 11 vols. Loeb Classical Library, 1923.
8. B.W. Richardson, *Hygeia: a city of health*. London: Macmillan and Co, 1876.
9. E. Howard, *To-morrow: a peaceful path to reform*. London: Swann Sonnenschein, 1898.
10. P. Geddes, *Cities in Evolution*. London: Williams and Norgate, 1915.
11. J. Jacobs, *The Death and Life of Great American Cities*. Random House, 1961.
12. World Health Organization (WHO), "Development of Environmental Health Criteria for Urban Planning: report of a WHO scientific group", Geneva: World Health Organization, 1972.
13. J. Ashton, *Healthy cities*. Milton Keynes: Open University Press, 1992.
14. H. Barton, and C. Tsourou, "Healthy urban planning: A WHO guide to planning for people", London: Spon Press, 2000.
15. Z. Munn, M. D. J. Peters, C. Stern, C. Tufanaru, A. McArthur, and E. Aromataris, 'Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach', *BMC Medical Research Methodology*, vol. 18, no. 1, p. 143, Nov. 2018, doi: 10.1186/s12874-018-0611-x.
16. M. Sepe, "Introduction", in *Designing Healthy and Liveable Cities: Creating Sustainable Urban Regeneration*. New York: Routledge, 2023, pp. 1–4.
17. H. Pineo, "Towards healthy urbanism: inclusive, equitable and sustainable (THRIVES)—an urban design and planning framework from theory to praxis", *Cities & health*, pp. 1–19, 2020

18. D.F. Cushing, and E. Miller, "Introduction: Why Evidence-Based Design?", in *Creating Great Places: Evidence-based Urban Design for Health and Wellbeing*, New York: Routledge, 2020, pp. 1–14.
19. A. Forsyth, E. Salomon, and L. Smead, "Introduction", in *Creating Healthy Neighborhoods: Evidence-Based Planning and Design Strategies*, 1st ed., Routledge, 2017, pp. 1–20.
20. M. E. Northridge and E. Sclar, "A joint urban planning and public health framework: contributions to health impact assessment", *American journal of public health*, vol. 93, no. 1, pp. 118–121, 2003.
21. Y. Rydin et al., "Shaping cities for health: complexity and the planning of urban environments in the 21st century", *Lancet*, vol. 379, no. 9831, pp. 2079–2108, Jun. 2012 doi: 10.1016/S0140-6736(12)60435-8.
22. M. Grant, "Planning for healthy cities", in *Integrating Human Health into Urban and Transport Planning*, Springer, 2018, pp. 221–250.
23. S. Glouberman et al., "A Framework for Improving Health in Cities: A Discussion Paper", *JURH*, vol. 83, no. 2, pp. 325–338, Mar. 2006 doi: 10.1007/s11524-006-9034-9.
24. S. Galea and D. Vlahov, "Urban Health: Populations, Methods, and Practice", in *Handbook of Urban Health: Populations, Methods, and Practice*, New York: Springer-Verlag, 2005. Available: <https://www.springer.com/gp/book/9780387239941>
25. J. Corburn, "Urban planning and health disparities: Implications for research and practice", *Planning Practice & Research*, vol. 20, no. 2, pp. 111–126, 2005.
26. J. Corburn, "Confronting the challenges in reconnecting urban planning and public health", *American journal of public health*, vol. 94, no. 4, pp. 541–546, 2004.
27. I. van Kamp, K. Leidelmeijer, G. Marsman, and A. de Hollander, "Urban environmental quality and human well-being: Towards a conceptual framework and demarcation of concepts; a literature study", *Landscape and Urban Planning*, vol. 65, no. 1, pp. 5–18, Sep. 2003, doi: 10.1016/S0169-2046(02)00232-3.
28. H. Barton and M. Grant, 'A health map for the local human habitat', *Journal of The Royal Society for the Promotion of Health*, vol. 126, no. 6, Nov. 2006 doi: 10.1177/1466424006070466.
29. W. C. Booth, G. G. Colomb, and J. M. Williams, 'Acknowledgments and Responses', in *The Craft of Research*, 3rd ed., Chicago: University Of Chicago Press, 2008, pp. 139–151.
30. H. R. Fowler and J. E. Aaron, 'Reading Arguments Critically', in *The Little, Brown handbook*, 13<sup>th</sup> ed., Boston: Pearson Education, Inc., 2016, pp. 180–205.
31. L. F. Locke, W. W. Spirduso, and S. Silverman, 'The Function of the Proposal', in *Proposals That Work: A Guide for Planning Dissertations and Grant Proposals*, 6th ed., Los Angeles: SAGE Publications, Inc, 2013, pp. 3–24.
32. L. W. Anderson et al., Eds., 'The Knowledge Dimension', in *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*, New York: Longman, 2001.
33. B. Glaser, and A.L. Strauss, *Discovery of grounded theory: Strategies for Qualitative Research*. London: Aldine Transaction, 1967/2006.
34. 'framework n. | meaning in the Cambridge English Dictionary'. <https://dictionary.cambridge.org/dictionary/english/framework> (accessed May 23, 2020).
35. 'framework n. | Oxford Advanced Learner's Dictionary'. <https://www.oxfordlearnersdictionaries.com/definition/english/framework?q=framework> (accessed May 23, 2020).
36. 'Concept Definition & Meaning - Merriam-Webster'. <https://www.merriam-webster.com/dictionary/concept> (accessed Feb. 01, 2023).
37. Aristotel, "On the soul", in *Complete Works of Aristotle, Volume 1: The Revised Oxford Translation*, J. Barnes, Ed. 1984. Available: <https://press.princeton.edu/books/hardcover/9780691016504/complete-works-of-aristotle-volume-1>
38. D. Hume, *Hume: An Enquiry Concerning Human Understanding: And Other Writings*. Cambridge: Cambridge University Press, 2007.
39. G. Deleuze and F. Guattari, *What Is Philosophy?* New York: Columbia University Press, 1994.
40. J. Corbin and A. Strauss, 'Inspiration and Background', in *Basics of Qualitative Research*, 4<sup>th</sup> ed., SAGE, 2015, pp. 25–38.
41. WHO Regional Office for Europe, "Targets for health for all", World Health Organization, 1985, [www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/109779/WA\\_540\\_GA1\\_85TA.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/109779/WA_540_GA1_85TA.pdf), accessed December 2022.
42. WHO, "Ottawa Charter for Health Promotion", New York: United Nations, World Health Organization, 1986.
43. T. Hancock and L. J. Duhl, "Healthy cities: Promoting health in the urban context", Copenhagen: FADL Publishers, 1986.
44. L. J. Duhl and T. Hancock, *Promoting Health in the Urban Context*. Copenhagen, Denmark: WHO Healthy Cities Project Office, 1988.
45. E. Ison, "The introduction of health impact assessment in the WHO European healthy cities network", *Health Promotion International*, 24 (Suppl 1), pp. i64–i71, 2009.
46. WHO, "Adelaide statement on health in all policies: moving towards a shared governance for health and well-being", Adelaide, South Australia: World Health Organization, 2010.

47. WHO, "Health in All Policies: Helsinki Statement. Framework for Country Action", Helsinki: World Health Organization, 2014, <https://www.who.int/publications/i/item/9789241506908>.
48. UN (United Nations), "Transforming Our World: The 2030 Agenda for Sustainable Development", New York: United Nations, 2015.
49. UN-Habitat, "New urban agenda", Nairobi: United Nations, 2017, <https://habitat3.org/wp-content/uploads/NUA-English.pdf>.
50. H. Ahvenniemi, A. Huovila, I. Pinto-Seppä, and M. Airaksinen, 'What are the differences between sustainable and smart cities?', *Cities*, vol. 60, pp. 234–245, Feb. 2017 doi: 10.1016/j.cities.2016.09.009.
51. H. Barton, 'A Health Map for Urban Planners: Towards a Conceptual Model for Healthy, Sustainable Settlements', *Built Environment*, vol. 31, no. 4, pp. 339–355, 2005
52. WHO, 'Summary report on proceedings, minutes and final acts of the International Health Conference held in New York from 19 June to 22 July 1946', United Nations, World Health Organization, Interim Commission, New York, International Health Conference, Jul. 1946. Accessed: Apr. 30, 2020. [Online]. Available: <https://apps.who.int/iris/handle/10665/85573>
53. S. Kuykendall, 'Health', *Encyclopedia of Public Health Principles, People, and Programs*. Greenwood, Santa Barbara, California, pp. 269–272, 2018.
54. B. Kirkwood and R. K. Riegelman, 'Public Health: The Population Health Approach', in *Public health 101: healthy people - healthy populations*, Enhanced 2<sup>nd</sup> ed., Burlington: Jones Bartlett Learning, 2015, pp. 3–20.
55. A. Prüss-Ustün, J. Wolf, C. Corvalán, R. Bos, and M. Neira, 'Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks', World Health Organization, 2016. [Online]. Available: <https://www.who.int/publications/i/item/9789241565196>
56. F. W. Gatzweiler, J. I. Boufford, and A. Pomykala, 'Harness urban complexity for health and well-being', in *The Urban Planet: Knowledge Towards Sustainable Cities*, 2018, p. 113-129.
57. D. C. Ompad, S. Galea, and D. Vlahov, 'Urban Health Systems: Overview', in *International Encyclopedia of Public Health* 2<sup>nd</sup> ed., S. R. Quah, Ed. Oxford: Academic Press, 2017, pp. 311–317. doi: 10.1016/B978-0-12-803678-5.00481-1.
58. R. Riegelman and B. Kirkwood, 'Social and Behavioral Sciences and Public Health', in *Public Health 101: Improving Community Health*, 3<sup>rd</sup> ed., Burlington: Jones&Bartlett Learning, 2019, pp. 172-217.
59. J. Maxwell, 'Conceptual Framework: What Do You Think Is Going On?', in *Qualitative Research Design: An Interactive Approach*, 3<sup>rd</sup> ed., Thousand Oaks (Calif.): SAGE Publications, 2013, pp. 49–77.
60. M. B. Miles, A. M. Huberman, and J. Saldana, 'Research Design and Management', in *Qualitative Data Analysis: A Methods Sourcebook*, 3<sup>rd</sup> ed., Thousand Oaks, California: SAGE Publications, 2014.
61. J. B. McLoughlin, 'Man in his Ecological Setting', in *Urban & regional planning: a systems approach*, London: Faber and Faber, 1969, pp. 19–37.
62. R. J. Lawrence, J. Forbat, and J. Zufferey, 'Rethinking conceptual frameworks and models of health and natural environments', *Health (London)*, vol. 23, no. 2, pp. 158–179, Mar. 2019 doi: 10.1177/1363459318785717.
63. M. Grant, 'Planning for healthy cities', in *Integrating Human Health into Urban and Transport Planning*, Springer, 2018, pp. 221–250.
64. R. Axelsson and S. B. Axelsson, 'Integration and collaboration in public health—a conceptual framework', *The International Journal of Health Planning and Management*, vol. 21, no. 1, pp. 75–88, Jan. 2006 doi: 10.1002/hpm.826.
65. S. Eker and N. Zimmermann, 'Using textual data in system dynamics model conceptualization', *Systems*, vol. 4, no. 3, p. 28, 2016
66. C. M. Hoehner, L. K. Brennan, R. C. Brownson, S. L. Handy, and R. Killingsworth, 'Opportunities for integrating public health and urban planning approaches to promote active community environments', *American journal of health promotion*, vol. 18, no. 1, pp. 14–20, 2003
67. C. G. Victora, S. R. Huttly, S. C. Fuchs, and M. T. Olinto, 'The role of conceptual frameworks in epidemiological analysis: a hierarchical approach.', *International journal of epidemiology*, vol. 26, no. 1, pp. 224–227, 1997.
68. R. J. Lawrence, 'Mind the gap: bridging the divide between knowledge, policy and practice', in *The Routledge handbook of planning for health and well-being: Shaping a sustainable and healthy future*, New York: Routledge, 2015, pp. 74–84. doi: 10.4324/9781315728261.
69. R. C. Brownson, E. A. Baker, A. D. Deshpande, and K. N. Gillespie, 'Building Capacity for Evidence- Based Public Health', in *Evidence-based Public Health*, Oxford University Press, 2017, pp. 29–48.
70. R. C. Brownson, E. A. Baker, A. D. Deshpande, and K. N. Gillespie, 'Developing an Initial Statement of the Issue', in *Evidence-based Public Health*, Oxford University Press, 2017, pp. 133–148.
71. R. C. Brownson, E. A. Baker, A. D. Deshpande, and K. N. Gillespie, *Evidence-based Public Health*, 3<sup>rd</sup> ed. Oxford University Press, 2017.
72. J. Maxwell, *Qualitative Research Design: An Interactive Approach*, 3<sup>rd</sup> ed. Thousand Oaks (Calif.): SAGE Publications, 2013.

73. H. Pineo, N. Zimmermann, and M. Davies, 'Integrating health into the complex urban planning policy and decision-making context: a systems thinking analysis', *Palgrave Communications*, vol. 6, no. 1, pp. 1–14, Feb. 2020 doi: 10.1057/s41599-020-0398-3.
74. H. Pineo, K. Glonti, H. Rutter, N. Zimmermann, P. Wilkinson, and M. Davies, 'Use of Urban Health Indicator Tools by Built Environment Policy- and Decision-Makers: a Systematic Review and Narrative Synthesis', *J Urban Health*, Sep. 2019 doi: 10.1007/s11524-019-00378-w.
75. L. M. Bettencourt, 'Cities as complex systems', *Modeling complex systems for public policies*. Brasília: Ipea, pp. 217–238, 2015.
76. L. M. A. Bettencourt, 'The Origins of Scaling in Cities', *Science*, vol. 340, no. 6139, pp. 1438–1441, Jun. 2013 doi: 10.1126/science.1235823.
77. A. Ramaswami, A. G. Russell, P. J. Culligan, K. R. Sharma, and E. Kumar, 'Meta-principles for developing smart, sustainable, and healthy cities', *Science*, vol. 352, no. 6288, pp. 940–943, May 2016 doi: 10.1126/science.aaf7160.
78. L. Gallón, 'Systemic Thinking', in *Quality Education*, W. Leal Filho, A. M. Azul, L. Brandli, P. G. Özuyar, and T. Wall, Eds. Cham: Springer International Publishing, 2019, pp. 1–11. doi: 10.1007/978-3-319-69902-8\_58-1.
79. H. Barton, M. Grant, and R. Guise, *Shaping Neighbourhoods For Local Health and Global Sustainability*, New York: Routledge, 2003.
80. H. Barton, 'Planning for health and well-being: the time for action', in *The Routledge handbook of planning for health and well-being: Shaping a sustainable and healthy future*, 2015, pp. 3–16. doi: 10.4324/9781315728261.
81. H. Pineo, G. Moore, and I. Braithwaite, 'Incorporating practitioner knowledge to test and improve a new conceptual framework for healthy urban design and planning', *Cities & Health*, vol. 0, no. 0, pp. 1–16, Jun. 2020 doi: 10.1080/23748834.2020.1773035.
82. Gehl Institute, 'Inclusive healthy places: a guide to inclusion & health in public space: learning globally to transform locally', New York City, 2018, [https://gehl.institute.org/wp-content/uploads/2018/07/Inclusive-Healthy-Places\\_Gehl-Institute.pdf](https://gehl.institute.org/wp-content/uploads/2018/07/Inclusive-Healthy-Places_Gehl-Institute.pdf).
83. NHS Scotland, 'Place Standard – How Good is Our Place?', 2017, <https://placestandard.scot/place-standard.pdf>.
84. S. M. Ravitch and M. Riggan, 'Introduction to Conceptual Frameworks', in *Reason & Rigor: How Conceptual Frameworks Guide Research*, 2<sup>nd</sup> ed., Los Angeles: SAGE Publications, Inc, 2017, pp. 22–40.

## **KONCEPTUALNI OKVIR U DOMENU ZDRAVIH GRADOVA: ZNAČENJE, SVRHE I FORMATIVNI ELEMENTI**

*Mnoga nedavna istraživanja i studije su ukazivale na neophodnost razvoja sveobuhvatnih konceptualnih okvira za zdrave gradove. Shodno tome, ova studija teži da objasni konceptualni okvir za istraživanje, planiranje i projektovanje zdravih gradova određujući njegovo značenje, svrhu i formativne elemente. Istraživanje je sprovedeno kroz kvalitativne tehnike, kao što su konceptualna, tematska i analiza sadržaja relevantne literature i studija slučaja. Rezultati pokazuju da konceptualni okvir sadrži obimno konceptualno znanje o zdravim gradovima i sugerišu da konceptualni okvir o zdravim gradovima treba da sadrži elemente kao što su: 1) predmet, problemi, metode, istraživačka pitanja, 2) teorije, modeli, empirijski podaci i praktični podaci, pojmovi i odnosi između ovih pojmova, principa; 3) vizuelni prikaz njegovog sadržaja i priručnik za njegovu upotrebu i izradu; vrednosti, uverenja i razmišljanja autora. Konceptualni okvir zasnovan na prethodno navedenim elementima služi da podrži istraživanje, planiranje i projektovanje u procesu razvoja zdravih gradova. Ovi nalazi mogu pomoći da se unapredi znanje i naučno razumevanje konceptualnih okvira o savremenim zdravim gradovima u domenu zdravlja, planiranja, projektovanja i istraživanja. Takođe, prikazani nalazi mogu da posluže kao osnova za razvoj sveobuhvatnog konceptualnog okvira za zdrave gradove u budućnosti. Na primer, postojeći konceptualni okviri bi mogli da se analiziraju kao i da se razvijaju novi prema predloženim elementima i svrsi. U navedenim slučajevima, predloženi elementi i svrhe bi bili jedinstveni kriterijum za analizu postojećih i razvoj novih konceptualnih okvira.*

**Ključne reči:** *zdravi urbanizam, zdravo planiranje i projektovanje, zdrava mesta, zdrava gradska sredina*