

Analysis of definitions of General Practice/Family Medicine and Primary Health Care

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Abstract

Background

There are numerous definitions of General Practice and Family Medicine (GP/FM) and Primary Health Care (PHC), but the distinction between the two concepts is unclear.

Aim

To conduct a terminological analysis of a set of definitions of GP/FM and of PHC, to clarify what binds and what distinguishes these two concepts.

Design

The terms of 20 definitions were collected in two bags of words (one for GP/FM and one for PHC terms). A terminological analysis of these two bags of words was performed to prioritize the terms and analyze their world of reference.

Methods

The two collected bags of words were extracted with Vocabgrabber[®], configured in two term clouds using Wordle[®], and further explored for similarities using Tropes[®]. The prioritized terms were analyzed using the Aristotelian approach to categorization of things.

Results

Although continuity of care (with person-centered approach and shared decision making) is the central issue of the two sets, the two sets of definitions differ greatly in content. The prioritized terms specific to GP/FM (*community, medicine, responsibility, individual, problem, needs, ...*) are different from prioritized terms specific to PHC (*home, team, promotion, collaborator, engagement, neighborhood, medical center...*).

Conclusion

Terminological analysis of the definitions for GP/FM and PHC shows two entities which are overlapping but distinct, necessitating a different taxonomic approach and different bibliographic search strategies.

How this fits in

1. There are numerous definitions of General Practice/Family Medicine (GP/FM) and Primary Health Care (PHC). The governance of these concepts is related to their origin in two distinct institutions: The World Association of Family Doctors (WONCA) and the World Health Organization (WHO).
2. In GP/FM textbooks and bibliographic retrieval systems, there is often confusion between these concepts.
3. A clear understanding of the similarities and differences between the two concepts is needed for the organisation of medical training, for the development of the profession and health policy, and for optimal information storage and retrieval in this scientific discipline.

Keywords: Primary Health Care / General Practice / Terminology as Topic / Qualitative Research

Introduction

General Practice designates a branch of medicine characterized by its broad scope. The term 'general', also extended to generalism(1), encompasses the comprehensive range of proceedings performed, and thus the "to do" and the "to be" of the practitioner.

Family Medicine emphasizes the relationship with the patient and his family (next of kin or relevant others), and the entire environment of the patient as a human being. The World Organization of Family Doctors (WONCA) dictionary states: *'Many medical practitioners in the primary health care prefer the terms family physician and family medicine in order to emphasize the recognition of their branch of medical practice as a specialty in its own right'*(2). In other countries, other terms are used such as "General Practitioner (UK), "Hausart" (DE), "Huisarts" (NL), "médecin généraliste" and "médecin de famille (FR), "Family physician (US). WONCA has always used the pair General Practice/Family Medicine (GP/FM), in order to present and discuss the situation of the members of this professional organization. Hence, GP/FM is a people-oriented profession aiming at the management of an extended and general set of human health problems(3). Core values of GP/FM have been extensively discussed. Patient-centeredness, as well as the biopsychosocial model, are now definitely considered as undisputable attributes of a profession directed towards personal relationships along the patient's lifetime(4).

The concept of Primary Health Care (PHC), endorsed by the World Health Organization (WHO) in 1978 at Alma Ata, is an organizational concept(5). It addresses the place, management and workload of the first level of care, as well as its inclusion in the network of care facilities. *'Strong primary health care is the foundation of healthy communities'* is still a WHO motto.

A clear understanding of the similarities and differences between the two concepts (GP/FM and PHC) is needed for the organization of medical training, for the development of the profession and health policy, and for optimal information storage and retrieval in this scientific discipline.

Our aim is to conduct a terminological analysis of a set of definitions of GP/FM and of PHC, to clarify what binds and what distinguishes these two concepts.

Methods

To construct a set of relevant definitions for each of the two concepts (GP/FM and PHC), we searched Pubmed, Google Scholar, Global Index Medicus, the bibliographic database of the World Health Organization(6), and Handbooks of the field. For GP/FM, we used the following keywords: *family practice; general practice; general practitioners; physicians, family; physicians, primary care*. For PHC we used: *Primary Health Care, community health centers, community health services, rural health services, home care services*.

Definitions that were repetitive or brought no further information were disregarded. We aimed at geographical and cultural dispersion. We stopped after ten definitions for each theme, because new definitions did not provide any additional significant information.

Furthermore, a terminological analysis of these two sets of ten definitions in GP/FM and PHC was performed to prioritize the terms used in each of the two sets. In order to do that, we first targeted the key vocabulary in the definitions by using Vocabgrabber®, a text analyzing tool produced by Thinkmap® which ranks the relevance of all of the words appearing in a source text by comparing the frequency of their use in the presented text to their overall frequency of use in written English (<https://www.visualthesaurus.com/vocabgrabber>). In this

system the more frequent words can be shown also in a tabular list with the numerical frequency and relevance of each word, or in a semantic map with a view of the relationships between words and meanings. The relative relevance of terms can be displayed in a tag cloud through the use of a specific viewer like Wordle® (<http://www.wordle.net>), the most popular “word clouds” generator on the net. Here words that appear more frequently in the source text are given greater prominence in the cloud (they appear in a larger font).

In addition, we used Tropes®, a natural language processing software program designed for semantic classification, keyword extraction, and linguistic and qualitative analysis.

(<https://cyberlexport.wordpress.com/produse/tropes-2/bibliografie/>).

Finally, the prioritized terms within each set of definitions and their semantic relationships were then used to perform a comparative analysis of the two concepts (GM/FM and PHC). To clarify what binds and what separates the two concepts, we used the classical *Category Theory* approach of Greek philosopher Aristotle (4th century BC), in which the meaning of a term is explored by asking ten fundamental questions about the universal categories of Things: (i) essence, (ii) quantity, (iii) quality, (iv) relation, (v) place, (vi) time, (vii) posture, (viii) state, (ix) action, (x) passion. This approach is still used for example in the development of taxonomies and ontologies to identify relevant concepts of a domain of application and to categorize these concepts.(7, 8)

Results

Twenty definitions (ten of GP/FM and ten of PHC) were selected from the result of a larger exhaustive search. These definitions were in English, Spanish, Portuguese, and French, and represented Europe, the United States, Canada, South America, Australia and India. The dates of the ten GP/FM definitions ranged from 1974 to 2016, while those of the ten PHC

definitions ranged from 1996 to 2016 (see Table 1). The full text of these 20 definitions is reproduced in Annex 1.

TABLE 1: LIST OF TEN DEFINITIONS FOR GENERAL PRACTICE/FAMILY MEDICINE AND PRIMARY HEALTH CARE

Ten GP/FM definitions	Ten PHC definitions
Leeuwenhorst definition (1974)(9)	Institute of Medicine (1996)(10)
AAFP Primary Care Physician definition(1977) (11)	PAHO Primary Health Care statement (2007)(12)
AAFP Family medicine definition (1984)(13)	EU Expert panel definition of primary care (2014)(14)
F. Olesen's proposal for a new definition of General practice (2000)(15)	Brazil organization of Primary Health Care (2013)(16)
WONCA dictionary (2003)(2)	World Health Organization Glossary (2016)(17)
WONCA Europe definition Euract (2011)(18)	PHC-RIS Australia (2015)(19)
The CIMF Carta de Quito definition (Latin America) (2014)(20)	The Belgian Medical Home (FMMCSF)(2016)(21)
The Role Definition Group definition (USA)(2014)(22)	The Primary care medical home (AHRQ)(2016)(23)
National Board of Examination India definition (NBE India) (2015)(24)	The French Medical Home (FFMPS) (2016)(25)
AAFP Primary Care Physician (2016) (11)	AAFP Primary Care (2016)(11)

With the mentioned tool Vocabgrabber[®], 319 words were grabbed from the GP/FM set of definitions and 262 words from the PHC set, to be displayed in two tag clouds in the online facilities Wordle[®] (Fig. 1).

TABLE 3: THE MAIN TERMS OF THE TEN DEFINITIONS OF GP/FM AND PHC DISTRIBUTED ALONG THE 10 ARISTOTLE'S CATEGORIES

Aristotelian categories <i>Greek and Latin translations</i>	Question	General Practice / Family Medicine	Primary Health Care
Essence οὐσία (ousia) <i>Quod est?</i> <i>Essentia</i>	What is it? Essence or substance?	Licensed medical graduate who gives care, specialty in breadth, primary care services, take care, promotion of health, prevention of disease, early diagnosis, initial decision, provision of clinical care, rehabilitation, palliative care, education, research	Clinician provides health care services, care, health, prevention, promotion, first contact primary care, intersectoral action, health promotion, illness prevention, treatment and care of the sick, community development, rehabilitation.
Quantity Ποσόν (poson) <i>Quantum,</i> <i>Quatitas</i>	How much, how many, how tall?	General, every, both sexes, all age, irrespective of age, each organ system, every disease entity, repeated contacts, entire family	Large majority, any, set, variety, every family, entire population
Quality Ποιόν (poion) <i>Quale</i> <i>Qualitas</i>	How is it? What kind or quality?	Personal, access, available, comprehensive, effective, necessary, personal, respecting autonomy, safety, satisfaction, sustainability	Universal coverage, comprehensive, integrated, person-centered, accessible, socially appropriate, critical, effective, scientifically sound, include, partner, professional, specifically, undiagnosed, undifferentiated, whole-person
Relation πρός τι (pros ti) <i>Relativum</i>	What is it related to? Toward something?	In the context of their family, their community, and their culture, family doctor, general practitioner, individual, population, undifferentiated patient, cultural diversity	Multiprofessional health teams, partnership, patient, caregivers, population, family, communities, local network
Place ποῦ (pou) <i>Ubi</i>	Where?	Where necessary, at the point of first contact, entry point, in the front line, consulting room, homes, acute and chronic care settings	Set of functional and structural elements, home, office, setting, coverage area, geographic, territory
Time Πότε (pote) <i>Quando</i>	When?	First contact, prolonged contact, continuing, repeated, maintaining, always, preventing, chronic, recurrent, terminal	First contact, first-level, over time, prevention, primary, continuing, acute, chronic, limited, long-term
Posture κεῖσθαι (keisthai) <i>Situ</i>	From what action does it result?	Autonomy, balance, basis, clinical, contact, cultural, disease, existential, health, illness, needs, self, physical, biomedical, psychological, social and behavioral sciences	Autonomy, behavioral, biological, communication, concern, consultation, contact, disease, health, illness, organ, problem, sign, social, symptom, living conditions, health risks, health status, health inequalities
State ἔχειν (echein) <i>Habitus</i>	What is it required to have or be?	Socially responsible, reliable, leader, professional, advocate, trust, knowledge, personal balance and value	Equity-enhancing, responsible, concern, accountable, cost, role, professional, self-reliance, participation and control, advocacy, social justice, equity, solidarity
Action ποιεῖν (poiein) <i>Agere</i>	What is it doing? (change), to make or do	Provide, train, integrate, intervene, promote, maintain, prevent, serve, manage, practice, define, optimize, negotiate, coordinate, monitor, devote, gather information, organize, assist	Perform, participate, measure, utilize, monitor, understand, reorganize, maximize, collaborate, assess, inform, integrate, gather, encourage, enable
Passion Πάσχειν (paschein) <i>Pati</i>	How is it being acted upon (be changed)?	Must be trained, developing and maintaining their skills, personal balance and values, discipline, professional role	Accomplish, appropriate, perform, skilled, trained

Both sets share “continuity of care”, “patient centeredness”, “community health”, and “shared decision-making”. Although “care is” the central issue of the two sets, they differ greatly in content. As seen in Table 2, the prioritized terms specific to each content differ greatly. GP/FM is determined by such term as *medicine, responsibility, individual, problem, disease, peculiarity...*. PHC is quite service oriented with *home, team, promotion, collaborator, engagement, neighborhood, medical center*.

Among the prioritized terms from both concepts, the terms “global health”, “environmental hazard”, “ethics”, economic aspects, and the recent concept of quaternary prevention (danger of overmedicalisation)(27) are almost absent. None of the definitions specifically addressed medical anthropology. Only in the GP/FM definition of Latin America (*‘Carta de Quito’* [letter from Quito])(20), the terms « sustainability » and “social responsibility” are mentioned.

Discussion

Summary

To the best of our knowledge, this is the first terminological analysis of the terms used to depict people and structure of the first level of care as found in published definitions of General Practice/Family Medicine (GP/FM) and Primary Health Care(PHC).

Although continuity of care (with person-centered approach and shared decision making) is the central issue of the two sets, the two sets of definitions differ greatly in content. The prioritized terms from 10 definitions of GP/FM pertain to a professional discipline, conducted by *practitioners* who are *responsible physicians* referring to *sciences* and who care for *family problems* with a *social* role.

The prioritized terms of 10 definitions of PHC still speak of *care* and *health* as central elements, but here, it is a *service* to the population made by *unspecified professionals* in a *geographic area*.

Strengths and limitations

This study provides an innovative method to examine the nature of GP/FM and PHC through a terminological analysis.

The prioritization of terms based on software tools may be subject to variation over time, as tools evolve. The qualitative interpretation of the terminological findings is a potentially subjective process that needs further validation.

Comparison with existing literature

As stated by F. Olesen (2000) and Pereira Gray (2017), many definitions confuse the setting with the role and the person (28, 29). However, the American Academy of Family Physicians (AAFP) clearly separates between the two concepts, arguing that '*primary care*' and '*family medicine*' are not interchangeable'(11). As stated on the web site of the WHO Primary Health Care Performance Initiative, PHC is deeply embedded in the following main values: People's First Contact, People-Centered, Comprehensive, Continuous, Coordinated, Accessible (also echoed by a Canadian analysis of 25 attributes of Primary Health Care)(30, 31) . Worldwide, General Practitioners and Family Physicians, referring to comprehensiveness, personal and patient-centered care and universal accessibility provide and sometimes organize Primary Care in Primary Health Care settings(32). In this terminological analysis, we also found that the two concepts (GP/FM and PHC) are related but distinct.

Implications for information science

This terminological analysis of definitions of GP/FM and PHC may have implications on the construction of field-specific filters for bibliographic searches (e.g. a GP/FM filter, a PHC filter). In the current filters, the two concepts tend to be mixed. (33, 34). The present paper is part of the development of a taxonomy for the organisational aspects of the activities in GP/FM, as an extension of the International Classification of Primary Care (ICPC-2) (35) for clinical aspects. (36).

Implications for health policy

This study may facilitate a dialogue between the two organizations, who have pioneered these two concepts and are still governing them, i.e. WONCA for GP/FM, and WHO for PHC. These organizations could come to a better understanding of the commonalities and complementarities of their endeavors, to foster mutual collaboration (37-39). In addition, we observed that in both sets of definitions important aspects are missing. Environmental issues are very poorly addressed. Ethical challenges are numerous and are a core task for General practitioners (e.g. ethics of information; ethics of prevention(27). There is a need to adapt the definitions of the two concepts to new insights of the 21st century. Both organizations should collaborate to produce updated, profound and distinct definitions for both GP/FM and PHC.

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Ethical approval

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Competing interests

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Authorship

The first author has conceived and designed the study and is the guarantor for the integrity of the data on which the article is based.

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