Disambiguation of psychotherapy: a search for meaning

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Summary

This analysis identifies the significant problem of ambiguity, variation and vagueness in relation to the intervention described as 'psychotherapy'. Its purpose is to raise international awareness of this problem and alternative solutions.

The global need for mental healthcare far outstrips available services.[1,2] Several countries are attempting to address this crisis by increasing expenditure on mental health, particularly through public investment in the provision of psychotherapy services. This willingness to invest in publicly funded, evidence-based psychotherapy extends to many countries of the Organisation for Economic Cooperation and Development (OECD)[3] and other nations, such as China[4] and Zimbabwe.[5] Although the desire to effectively address mental illness is laudable, such investment is not straightforward. Certain types of psychotherapy have been demonstrated to be effective in a wide range of mental disorders,[6–8] but the evidence regarding the efficacy and cost-effectiveness of many psychotherapeutic procedures is uneven.[9] Classifications of psychotherapy already exist in some countries to fulfil clinical and healthcare management purposes. For instance, current procedural terminology (CTP) codes are used by public and private health insurance in USA programmes for reporting services and procedures, and the *Klassifikation therapeutischer Leistungen* (KTL) is used as reference classification for psychotherapy interventions throughout Germany in different healthcare fields.[10] However, psychotherapy covers a very broad range of generally ill-defined activities[10] and the increasing allocation of public funds for psychotherapy[3,4,11–13] occurs in the absence of any internationally agreed classification of relevant interventions.

This dearth of clear definition casts doubt on public investment in psychotherapy as a first-choice treatment for common mental disorders. We lack a clear description of the services provided and the professionals providing the care. We cannot compare one jurisdiction with another.

This ambiguity is illustrated by recent concerns regarding the level of evidence and grading of the recommendations of National Institute for Health and Care Excellence (NICE) guidelines on psychotherapy for bipolar disorder.[14] The picture is further complicated by the growing use of e-psychotherapies, such as internet-delivered cognitive–behavioural therapy (ICBT). The methods demonstrating the benefit and value of these approaches (including randomised controlled trials and cost-effectiveness analysis) are under scrutiny (e.g. selection of samples and comparators, representativeness, effect sizes over the long term and patterns of use of the different modules of the eHealth intervention).[15] Achieving clarity on what psychotherapy is and what psychotherapists do is essential in building a solid evidence base concerning the efficacy and cost-effectiveness of psychotherapeutic interventions.

According to Kutschenko:[16] 'classification systems that are used in different settings by a variety of actors can mediate between them and thus provide important opportunities for exchange of information and integration of explanations'. International classifications can promote the disambiguation of psychotherapy. They can help us more clearly understand related terms and better identify and manage sources of vagueness and ambiguity affecting current usage of these terms, particularly when psychotherapy is the main type of care provided.

The current debate around psychotherapeutic interventions has so far focused mostly on their intended outcomes, whereas issues related to the phases of input (professionals and services) and process (interventions and activities) are less studied. The path we followed was conceptualised by Thornicroft & Tansella[17] in the 'mental health matrix model', where different phases of mental care were divided into input, process and outcomes at the different levels of the mental health ecosystem (macro, meso and micro).

The purpose of this paper is to raise awareness about the problem of uncertainty related to the classification and coding of the process of care in psychotherapy. Our aim is to decrease this ambiguity and the vagueness of health terms related to psychotherapy, focusing on input and process phases. This means being clearer about the professionals who provide this intervention, the settings in which services are provided,[18] the types of intervention, including the operational definition of core activities, and an understanding of when psychotherapy is the main type of care provided.

This is part of a series of studies on the development of the World Health Organization's (WHO) International Classification of Health Interventions (ICHI) (https://mitel.dimi.uniud.it/ichi/) and its applicability to mental healthcare.[10]

Ambiguity and vagueness in the ontology of psychotherapy

Types of ambiguity and vagueness (Appendix) have been the subject of considerable attention in general ontology, linguistics, information technology and healthcare.[19] 'Disambiguation' refers to the resolution of both vagueness and ambiguity[19] and requires the development of international domain-specific taxonomies, related glossaries, vocabularies or dictionaries, and the semantic mapping of the international taxonomy to national listings, directories and classifications.[18] 'Psychotherapy', which shares similar issues with 'psychiatry' in regard to vagueness,[20] has been identified as a major problem in the ontology of mental health interventions.[10]

Definition of psychotherapist as a professional

The lack of specification regarding the professionals delivering psychotherapy amplifies the ambiguity and vagueness associated with

this intervention. This problem is present in standard classifications, such as the International Standard Classification of Occupations (ISCO-08),[24] the Healthcare Provider Taxonomy Code Set[25] and the International Classification of Mental Health Care (ICMHC)[10] and in professional organisations from different countries, such as the UK and USA.

According to ISCO-08, psychologists are the core professionals providing psychotherapy, but in reality psychotherapy can be provided by a broad span of professionals with very different levels of qualification, such as social workers, specialised educators, nurses and physicians,[12,26] as well as delivered by apps and e-therapies with little or no human interaction.[15] In addition, ISCO-08 identifies psychologists not in the 'health professions' group, but instead within 'social and religious professionals', together with sociologists, philosophers and social workers. Trainee psychologists or graduate psychologists not licensed and registered as clinical psychologists, who may also provide psychotherapy, are not classified in ISCO-08. Furthermore, the psychologist's tasks as defined by ISCO-08 are very broad, even noting that psychotherapist is included only among psychologists' occupations[24] (Table 1; Appendix).

A similar picture can be found in the Health Care Provider Taxonomy Code Set in the USA, where providers such as 'counsellor', 'psychologist' and 'psychoanalyst' are classified under 'Behavioural health and social service providers' together with 'poetry therapist' and 'social worker'.

In the ICMHC,[10] clinical psychologists are the core professionals providing psychotherapy, but other highly trained professionals without a psychology degree may also provide it. The level of training of the professional included in the ICMHC requires only that the psychological interventions be based on 'well-defined theoretical models', provided by professionals after 'extensive training' for high and intermediate levels of specialisation, albeit in these cases the exact meaning of 'extensive training' requires further specification. For instance, in France, residents in psychiatry are not really trained in psychotherapy, nevertheless psychiatrists bear the title of psychotherapist without the need for additional training.[3]

Some professional organisations, such as the Accredited Counsellors, Coaches, Psychotherapists and Hypnotherapists (ACCPH) in the UK (https://www.accph.org.uk/) or the Medicare refundable peer-support services in the USA,[27] do not make a clear distinction between these interventions and the professionals qualified to provide them, albeit counselling, emotional support[10] or peer-delivered therapies[5] are usually differentiated from psychotherapy.

Clear requirements to be defined as a psychotherapist were introduced in Canada,[3] although the professionals involved vary from psychiatrists and psychologists to nurses and social workers. Continuous training is mandatory and is implemented by both the College of Psychology for the psychologists and other professionals practising psychotherapy and the College of Physicians for physicians practising psychotherapy.[3]

Health services providing psychotherapy

This level of vagueness and ambiguity makes it difficult to communicate with patients about where to go for help and who to see. Vagueness and ambiguity can affect the definition and cost of individual therapies in a single patient–professional care contact or visit. Moreover, they have an impact on the definition, planning and cost of services at the micro-level of the care system (individual services), the meso-level (local areas) and the macro-level (regions, states and countries)[18,28] (Table 1; Appendix). According to the International Classification for Health Accounts' Classification of Health Care Functions (ICHA-HC), in the System of Health Accounts (SHA),[29] individual psychotherapy should be provided by 'psychological and behavioural rehabilitation' (PBR) services. However, these PBR services are themselves defined very broadly. This makes it very difficult to assess the extent to which any particular PBR service is providing public psychotherapy interventions in comparison with PBR services in another region or another country and hence map relevant service coverage.[18,30]

Definition of psychotherapy as an intervention

The vagueness and ambiguity of the distinction between psychotherapy and less-structured interventions, such as counselling or emotional support, is a major problem in the current classification of healthcare.[10] We have previously conducted a content analysis of the different classifications of mental health interventions, such as the ICMHC, the Common Language for Psychotherapy (CLP) procedures and the KTL.[10] When these classifications define psychotherapy as an intervention, different types of vagueness and ambiguity present, as summarised in Table 1. All current classifications suggest underspecification of the term psychotherapy. In the ICMHC for instance, psychotherapy refers more generally to 'psychological interventions'. A 'low-level' psychological intervention may be limited to so-called 'talking therapies' in low-income countries,[5] with no clear-cut theoretical models supporting these interventions. Therefore, 'psychological intervention' should be used not as a synonym of 'psychotherapy', but as a broader concept incorporating multiple forms of emotional support. In fact, health classifications are typically focused on defining different types of psychotherapy, such as cognitive–behavioural therapy (CBT), dialectical behaviour therapy (DBT), psychodynamic therapy and interpersonal therapy.[10] Psychotherapists have identified about 100 different psychotherapy procedures to describe their interventions.[31] Similarly, SNOMED-CT in the UK has included 63 categories under the heading 'psychotherapy', but it does not provide a hierarchical ontology-based classification. For example, categories listed under 'regime/therapy' include 'psychotherapy', 'eclectic psychotherapy', 'general psychotherapy' and 'integrative psychotherapy', which all refer to general psychotherapy.[32]

Finally, several classifications define psychotherapy as a 'conversation' between a provider and a patient.[10] This contributes to ambiguity and vagueness because it merely describes an observable activity and fails to provide enough information on the specific activity performed during the clinical encounter.[10]

Pathways to disambiguation

An unambiguous use of the term psychotherapy, the professionals involved and the settings, would permit the establishment and promotion of global standards, monitoring, resource allocation and accountability. We have therefore identified three international classifications that may be used together fulfil these purposes:

(a) the Description and Evaluation of Services and Directories for Long Term Care (DESDE-LTC): to standardise descriptions and classifications of long-term care services worldwide
(b) ISCO-08: to classify professionals providing psychotherapy
(c) ICHI: to define the term psychotherapy and differentiate it from other overlapping terms.

Strengths and limitations of these classifications

The DESDE-LTC distinguishes between 'core health', which refers to services providing direct clinical treatment, and 'other care',

Table 1 Sources and types of ambiguity and vagueness with regard to psychotherapy

Type	Main terms and synonyms	Overlapping terms	Other terms	Type of ambiguity	Type of vagueness
Professional (e.g. ISCO; Health Care Provider Taxonomy Code set; ICMHC)	Psychotherapist; psychologist	Core health professionals: Physician Psychiatrist Nurse Other health professional: Social worker Occupational therapists Psychoeducation Others	Training psychologist; clinical psychologist; other psychologist	–	Non-ordinal underspecification
Service (e.g. ICHA-HC)	Psychotherapy clinic, unit; PBR service	Peer-support services; counselling services; other	Neuropsychology service	Semantic	Non-ordinal underspecification
Intervention (e.g. CLP, KTL, ICMHC; SNOMED-CT)	Psychotherapy	Psychological intervention; treatment; coaching; counselling; emotional support; peer therapy; educational therapy; spiritual care	'Session' of (e.g. clinical visit for) Examples: CBT; dynamic therapies; behavioural therapy; scheme therapy; relational therapy	Semantic	Ordinal, non-ordinal underspecification

ISCO, International Standard Classification of Occupations; ICMHC, International Classification of Mental Health Care; ICHA-HC, Classification of Health Care Functions; PBR, psychological and behavioural rehabilitation; CLP, Common Language for Psychotherapy procedures; KTL, *Klassifikation Therapeutischer Leistungen*; CBT, cognitive–behavioural therapy.

which includes more general facilities, such as accommodation, training, promotion of independence and autonomy, case management, employment support and social skills.[33] Core health is usually provided by health professionals with over 3 years of training in health sciences, such as physicians and psychologists, whereas other care is provided by non-specialised staff.[30] A key advantage of the DESDE-LTC is that it does not merely list the names of the services or how they are funded. Instead, it clearly focuses on consistently describing the main activities or functions provided by the service. This approach has permitted regional and international comparisons between mental health services, a key step in systemic quality improvement typically missing from other classifications and indicators.[30,33] According to the DESDE-LTC, psychotherapy is an intervention that takes place in many services within a healthcare system. When this activity is the principal action or process that characterises a particular service, this activity is used as the main type of care (MTC) for defining a specific set of services in the local mental healthcare system. These services are 'out-patient' (characterised by a face-to-face contact for a duration lasting less than day care) and could be mobile (e.g. a vehicle-based clinic), non-mobile (e.g. hospital or health centre), online, individual or group therapy. Psychotherapy services are mainly but not only performed by a facility typically described as out-patient, non-acute, non-mobile care (Fig. 1).
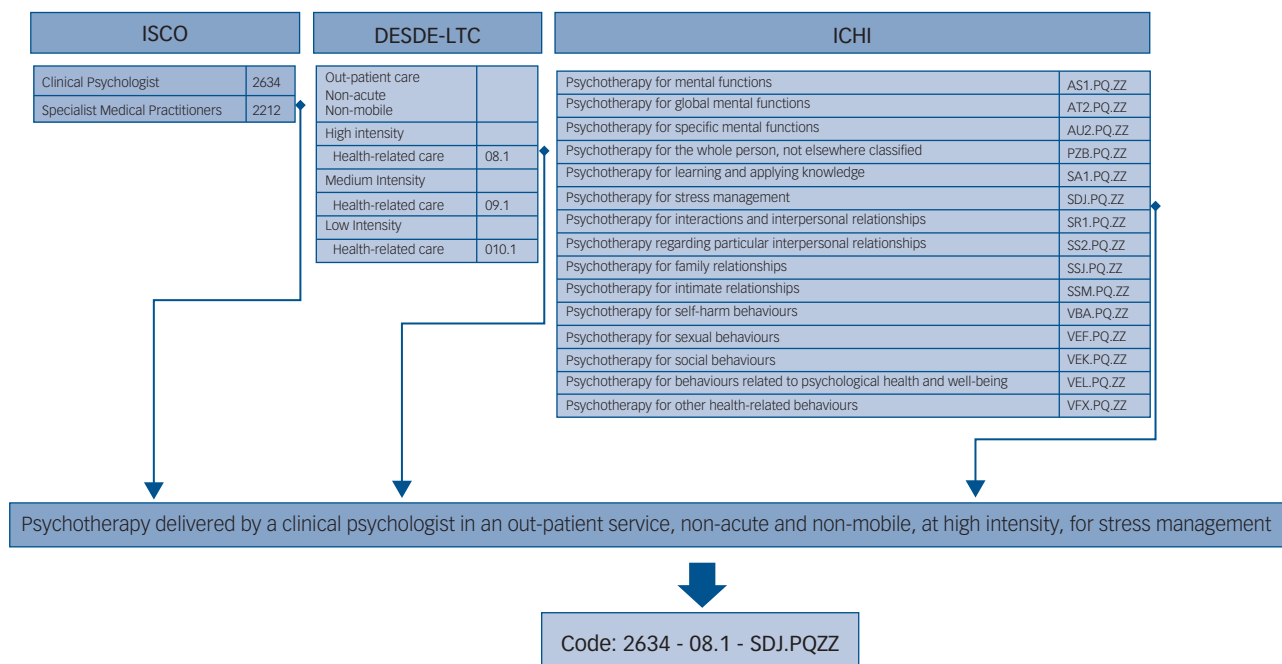
Fig. 1 Example of how to classify a psychotherapeutic intervention using the International Standard Classification of Occupations (ISCO), the Description and Evaluation of Services and Directories for Long Term Care (DESDE-LTC) and the International Classification of Health Interventions (ICHI).

Moreover, professionals providing psychotherapy may be classified with ISCO-08 coding, as shown in Fig. 1.

Finally, WHO has been developing ICHI,[34] which separates the coding of psychotherapy from counselling and emotional support.[10] This could usefully distinguish levels or types of intervention, from more highly standardised and theory-based techniques in psychotherapy, to other less defined or standardised treatments, better described as counselling, coaching, talking therapy and other interventions for emotional support. According to ICHI,[10] psychotherapy is defined as an action 'providing therapeutic communication, based upon the systematic application of psychological theory'. However, it does not specify setting and provider. This means that information on the professional who provided the intervention, and the setting where it was performed, would have to be captured using other classifications alongside the ICHI.[34]

In Fig. 1, we show an example of how to integrate the three international classifications mentioned, in order to classify psychotherapeutic interventions.

There are some limitations to this integration. First, ICHI is still under testing. and there are problems related to its hierarchical rules to avoid ambiguity and excessive granularity.[34] Second, ICHI's definition encompasses a broad list of different psychotherapies' targets, such as mental functions or stress management, but does not detail any specific type of psychotherapy (CBT, DBT, psychodynamic and so on). Third, ISCO-08 does not provide a definition of which health professionals can be clearly identified as psychotherapists. A possible alternative to solve this problem could take into account the European Skills, Competences, Qualifications and Occupations (ESCO) classification.[35] Psychotherapist has a specific classification code in this system that has been updated recently. According to ESCO, however, 'psychotherapists are not required to have academic degrees in psychology or a medical qualification in psychiatry', which does not comply with the need to have specific occupations providing psychotherapy.

Possible future directions

In this paper we have emphasised the importance of the link between proper classification of mental health services providing psychotherapy and accountability for public expenditure on mental healthcare. Resources for mental health are too precious[2] to sustain ambiguous investments. With growing mental healthcare needs, nations need to minimise the risks and maximise the benefits associated with public funding, including psychotherapy. They need to address the lack of clarity in how both psychotherapy treatments and professionals (e.g. psychotherapists) are described.

We have demonstrated the potential for ISCO-08, DESDE-LTC and ICHI to operate as a pathway to disambiguation of psychotherapy and to facilitate a better comparison between different standardised interventions across settings. Further improvement will require refinement and/or update of existing classifications, particularly ICHI and ISCO-08. This paper also sheds light on different issues related to health classifications which may be further scrutinised, suggesting extending this analysis to other critical terms in health systems research, such as case management. Future research should focus on the applicability of ICHI and DESDE-LTC for health classification purposes at the global level, including the costing of mental healthcare as part of future economic evaluations. This is underway already, within the PECUNIA project (an acronym derived from 'ProgrammE in Costing, resource use measurement and outcome valuation for Use in multi-sectoral National and International health economic evaluAtions'). This work should continue to ensure that vital mental health resources are targeted to best effect, and real-world applications should be analysed in order to describe benefits in terms of supporting accountability and informing resource allocation.

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Declaration of interest

None.

Appendix

Definitions of key terms

Classification[21]

Classification provides an exhaustive set of mutually exclusive categories to aggregate data at a prescribed level of specialisation for a specific purpose.

Taxonomy[22]

Taxonomy develops consensus and a common language in any given topic by organising knowledge, providing definitions and articulating the relationship between concepts and components.

Ontology[23]

Ontology provides a conceptual network with explicit definitions of the semantic relations between all the concepts in the network. These relations are expressed by axioms in a formal language with the goal of providing a machine-readable, application-independent and interoperable view on reality in information systems and computer science.

Service[18]

Service is an umbrella term that encompasses different units of analysis in service research. At the micro-organisation level of care delivery it describes a combined and coordinated set of inputs (including structure, staff and organisation) that can be provided to different user groups under a common domain, to improve individual or population health and to diagnose or improve the course of a health condition and/or related functioning.

Ambiguity[19]

Ambiguity exists when a term can reasonably be interpreted in more than one way. It applies when a definition is imprecise and can be translated into more than one code in the reference classification system. It is differentiated into:

(a) syntactic: ambiguity caused by the structure or syntax of a statement; for instance, 'A or B and C' without clarifying whether this means '(A or B) and C' or 'A or (B and C)'
(b) semantic: where a term can reasonably be interpreted in more than one way; for instance, the word 'bank' can refer to a financial institution or a riverside
(c) pragmatic: ambiguity associated with usage; for instance, if you say on Wednesday 'See you next Friday', it is not clear whether this means in 2 or in 9 days.

Vagueness[19]

Vagueness exists when a word or phrase is underspecified and therefore admits borderline cases or relative interpretation. It applies when a definition is imprecise and cannot be translated into a code in the reference classification system. It is differentiated into:

(a) ordinal underspecification: when there are insufficient details for definitive interpretation; for instance, temporal terms, ranging from 'never' to 'always' with terms such as 'rare' and 'common' in between, or probabilistic terms, ranging from 'impossible' to 'certain' with terms such as 'unlikely' and 'probable' in between, or quantitative terms ranging from 'none' to 'all' with terms such as 'few' and 'many' in between

(b) non-ordinal underspecification: implicit statements and incomplete information, which cannot be classified using ordinal scales; for instance, stating that psychotherapy is a 'conversation' between a provider and a patient can reduce clarity regarding the specific activity being performed.

Disambiguation[19]

The act of making something clear. In this paper we use the term to include the resolution of both vagueness and ambiguity.

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