How does psychology fit within a population health framework?

Situating mental health within a population health perspective:

Physical and mental disorders often lead to anomalies in thoughts, perceptions, emotions, behaviors and social interactions that reduce an individual's productivity and lifespan (WHO, 2022). Recent global challenges, such as the COVID-19 pandemic, the climate crisis, and geopolitical turmoil have increased incidence of anxiety, depression, and suicide ultimately leading to an unprecedented need for mental health services worldwide (Cianconi, Betro, & Janiri, 2020; Persaud et al., 2018; Torales et al., 2020).

To address the ongoing mental health crisis, health care providers need to adopt an inclusive, forward-thinking framework. In most countries, physical and mental health frameworks are built around a traditional medical model which focuses on acute care for individuals. This provider-intensive approach contributes to treatment gaps resulting from an imbalance between need for services and availability of those services (Carbonell, Navarro-Pérez, & Mestre, 2020). A population health approach can help relieve treatment gaps and address population health needs.

Mental health is a vital part of health care. As the World Health Organization (WHO) has stated, "there is no health without mental health." Current events continue to reinforce how vital mental health is to well-being, world economies, and human rights. However, mental health is historically under-serviced. About 80% of people with severe mental disorders receive no treatment low-income and middle-income countries (LMIC); up to 50% receive no treatment in high-income countries (Evans-Lacko et al., 2018; Rathod et al., 2017). Globally, annual spending on mental health is less than two dollars per person, and less than 25 cents per person in low-income countries (WHO, 2013).

To improve global mental health and reduce the suffering associated with mental illness we need to implement innovative solutions. Addressing the global mental health burden is not just a moral imperative: investing in global mental health initiatives can produce significant positive economic outcomes, with benefit to cost ratios of approximately 2.3–3 to 1 across countries (Chisholm et al., 2016). This benefit to cost ratio increases to 3.3–5.7 to 1 when the value of health returns (i.e., the economic value of healthy life-years) is included (Chisholm et al., 2016).

Effective prevention and treatment interventions exist, but low investment in mental health has meant that access to services is limited to an inadequate number of individuals, and those who do receive access frequently receive low quality interventions (Carbonell, Navarro-Pérez, & Mestre, 2020). New models, such as those described in the recent *World Mental Health Report* (WHO, 2022) promise to increase both access and quality.

Challenges in mental health service provision:

Several interrelated challenges magnify the need for attending to mental health service delivery:

1. **Global economic priorities do not include mental health:** Regardless of the economic status of any specific country, mental health is underfunded relative to overall healthcare spending. On average, less than 2% of national health care budgets are earmarked for mental health spending (Health, 2020).

2. **Changing demographics:** Populations around the world are growing and – in many countries - aging rapidly. This is happening simultaneously with challenges like the pandemic, geopolitical instability, and the climate crises which each result in increased demand for mental health services. High demand puts stress on health care systems designed using a medical model as they need to provide services to more people who are dealing with often chronic and complex health problems.

3. **Inequity of care:** In comparison with somatic health services, there is a significant gap in unmet mental health needs in most countries globally, regardless of country income level.

4. **Rising demand for quality mental health service:** Worldwide, there is a clear and rising demand for improved access to high quality mental health services. Over a billion people across the globe were living with a diagnosable psychological disorder in 2019 and suicide rates continued to rise (WHO, 2022). In high-income countries, 30% of the seriously mentally ill (SMI) receive no treatment and in LMICs, 88% of the SMI receive no treatment; that which they do receive is often sub-par. Mental health care must not only be available, but trained clinicians and community liaisons are required to avoid doing more harm than good.

How can these challenges be addressed?

Addressing mental health needs, as with addressing all health needs, is most effectively done as a combination of promoting prevention and making interventions widely available.

Most current mental health models focus on the provision of clinical services to individuals, not on affecting the conditions that promote good mental health or prevent mental disorders. This has resulted in a focus on individual, rather than population health, that exacerbates unmet needs in favor of minimal adequate treatment.

It is critical to complement individual clinical approaches with population-based approaches that serve large groups of individuals. To accomplish this, the global psychology community must adopt a population health framework and engage in population health services to promote mental health and well-being, prevent mental disorders, support early intervention, foster referral and recovery services, and reduce relapses.

What is a population health framework?

Purtle et al. (2020) define population-based approaches to mental health as "interventions and activities intended to improve mental health outcomes and the determinants of these outcomes among a group of individuals that are defined by shared geography, sociodemographic characteristics, or source of clinical services utilization" (p. 202).
A population health framework is anchored in a broad perspective that strives to improve and protect health and well-being for all members of a community. Thornicroft and Tansella's (2009) explanation of public vs. individual health approaches is nevertheless instructive:

Public Health Approach	Individual Health Approach
(1) Whole population view	(1) Partial population view
(2) Patients seen in socio-economic context	(2) Tends to exclude contextual factors
(3) Interested in primary prevention	(3) Focus on treatment rather than prevention
(4) Individual as well as population-based interventions	(4) Individual level interventions only
(5) Service components seen in context of whole system	(5) Service components seen in isolation
(6) Favours open access to services on the basis of need	(6) Access to services on the basis of eligibility, e.g. by age, diagnosis or insurance cover
(7) Teamwork preferred	(7) Individual therapist preferred
(8) Long-term / life-course perspective	(8) Short-term and episodic perspective
(9) Cost-effectiveness seen in population terms	(9) Cost-effectiveness seen in individual terms

Table 1. Differences between the 2 perspectives "public health" versus "individual health" of Thornicroft and Tansella (2009).

A Population health framework adopts a public health perspective into health services. It focuses not only on care for existing health issues, but also on determinants of health (such as lifestyles and other social factors), the prevention and tracking of risk factors, and the implementation of interventions to prevent health problems. The success of this approach is determined not so much by the optimal quality of individual care, but by the health condition of the population at large.

When considering a population health perspective, it is important to capture the perspective of the health consumer. This means that an intervention should be proportional, effective, participative, satisfactory and responsive to the patients' needs and preferences. This is part of a value – based health care system (Porter & Teisberg, 2006).

How does psychology fit within a population health framework?

A population mental health framework would expand the activities of health service psychologists beyond health promotion at the individual level of treating mental disorders in

a 1-on-1 consultation model to a model in which interventions would take place across a broad continuum.

The Global Psychology Alliance (GPA) encourages psychology and psychologists to adopt a transformative paradigm of mental health and well-being that encompasses the entire spectrum of possible interventions (Figure 1) and does so within a human rights framework (Chapman et al., 2020; Mazrek & Haggerty, 1994). The GPA calls for the development and application of broader mental health and well-being systems that not only provide the range of care required by global populations, but makes this care accessible and ensures quality.

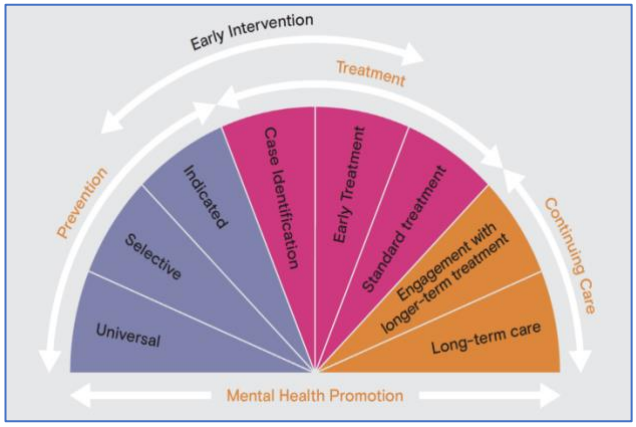

Figure 1: Spectrum of Mazrek & Haggarty (1994).

Population health centered psychology means that interventions will vary according to the populations they target; they may be preventative, treatment-focused, or ongoing. For example, preventive interventions may typically target large populations long-term treatment, more intense treatment may be targeted to smaller groups. This spectrum can, also be situated within a pyramid type of organizational model such as being used by the WHO (Figure 2 & Table 2 WHO 2009) which addresses the kinds of professionals and levels of training needed for comprehensive mental health care delivery.

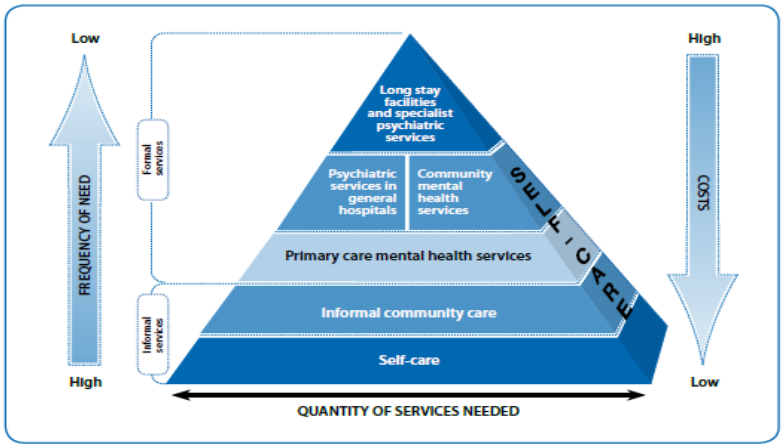

Figure 2: WHO Service organization pyramid for optimal mix of services for mental health (WHO, 2009).

Care Level	Definition
Self – care	Where most people can cope with their psychological issues or with the support of family and friends. Self – care is most effective when supported by professional health care. Self – care is something that needs to be facilitated by all health care workers and in all layers of health care organization.
Informal community care	Services that are offered within a community that aren't necessarily are a part of the formal health care and well – being system. This level of care can help prevent relapse of patients discharged from hospitals. It can also help to reinforce the community (helping people to take better care of each other). Examples are professionals in other sectors such as teachers or police workers, services by NGO's, people with lived experiences, etc. Informal care is accessible because it's an integral part of the community. Still, informal care should not be the core of mental health care that should not depend solely on these services.
Primary care services for mental health	The first layer of care within the professional health system. Essential services on this level involve the early identification and treatment of mental conditions, the managing of stable psychiatric patients, counseling of common mental health conditions, referring towards other service providers, when necessary (appropriate care), promoting mental health and prevention. This mental health care can be provided by psychologists, but also by general practitioners, nurses and other primary care healthcare workers. These services are the most accessible, affordable and acceptable for communities.
Community mental health services	Formal mental health services such as daycare centers, rehabilitations centers, programs preventing hospitalization, mobile crisis teams, supervised therapeutic and (outreaching) residential care, care homes, family care and other supportive services. Strong community mental health centers are a vital part of programs for socialization of care and the avoidance of unnecessary hospitalizations.
Psychiatric services in general hospitals	The development of mental health care in general hospital settings is considered to be a vital part in the organization of mental health care. Due to the nature of certain mental health conditions hospitalization is sometimes necessary during acute phases. Local general hospitals provide an accessible and acceptable location for 24/24 available medical supervision for people with an acute decompensation of mental health conditions in the same way as acute physical problems are being dealt with.
Long – stay facilities and specialist services	Specialized services are required that go beyond those that can be provided by a general hospital. For example, people who are not responding well to treatment or with complex conditions sometimes need to be referred to specialized centers for extensive testing or treatment. Others require often permanent care in residential facilities as a consequence of their severe mental health condition or intellectual limitations and lack of family support.

Table 2: Different care levels as defined by the World Health Organization (WHO, 2009)

Economics of healthcare:

A population health perspective often incorporates a health economy perspective which balances needs and services with a goal of ensuring that services are available for those who need them the most. From this perspective, it is important to avoid "unmet need" (services can fail to reach target groups) as well as "overmet need" (services applied ineffectively when they are provided to a group that don't need them) (Thornicroft & Tansella, 2009; Nicaise, 2020; Bruffaerts et al., 2015).

In addition to striving for "Met need" (providing professional services to someone meets the criteria of having a mental health condition), it is also important to ensure that treatment is appropriate or achieves a criterion "Minimally Adequate Treatment (MAT)". That is, it is not enough to simply access services (e.g. have a professional contact with a healthcare worker or be placed on a wait list). Services must be provided and those services must be grounded in scientific evidence, based on clinical experience, and adjusted to the patient's needs and situation (e.g. "evidence-based").

A population health approach also considers impact, and strives for larger population health impact. This impact is often expressed as changes to the Disability – Adjusted Life Years

(DALY's), a measure for the number of life years lost by premature death plus the life years with disability adjusted for the severity of that disability (Wittchen et al., 2011). For example, the health impact for mental health problems expressed in DALY's in the graph below (the yellow section) is the largest for the age group 14 and 24 years (figure 3). From a population health perspective, investment in mental health services directly targeting the age groups 14 – 24 would be especially effective.

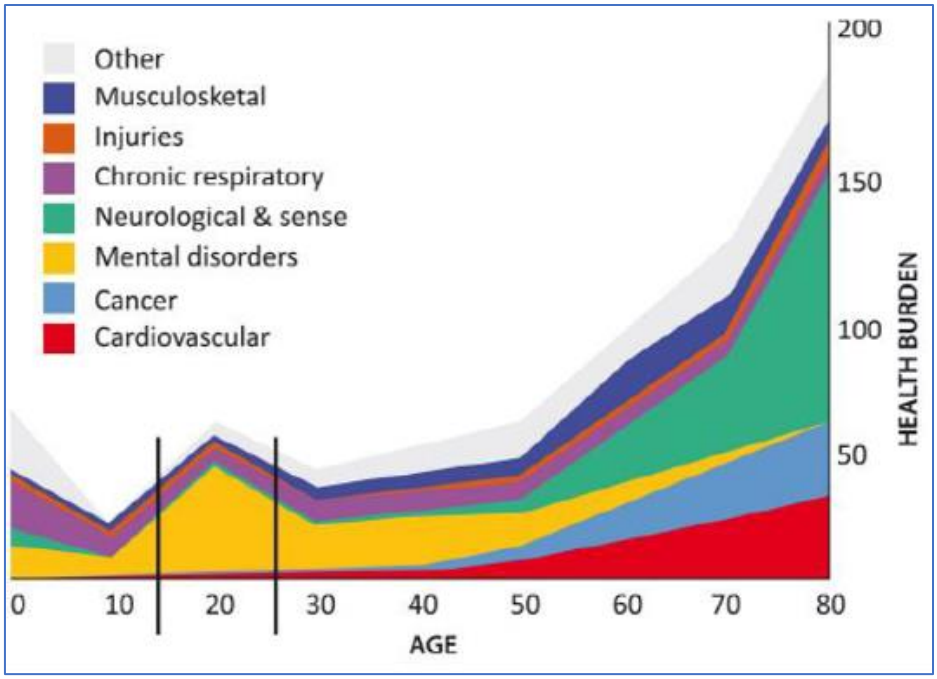

Figure 3: "Health burden" by age category (Wittchen et al., 2011)

Recommendations:

A population health approach requires that psychologists rethink the way they deliver services, provide training, and engage with the community. Utilizing a population health approach psychology can make meaningful contributions consistent with the WHO service-provision pyramid:

- Psychology and psychologists must **expand activities out of the clinical consultation room and into the community**, using the full spectrum of interventions described by Mazrek & Haggarty (1994), within and across diverse systems like schools, workplaces, and community centers.
    - Psychologists can actively collaborate with programs which have been shown to enable communities to increase their health motivation and self-advocacy, such as West Side United in Chicago, USA (Lynch et al., 2020).

- Psychologists must **develop and apply culturally-appropriate community mental health** programs that are widely applicable for shared needs (for example, stress–

reduction group programs) or targeted toward specific vulnerable groups (for example, locally embedded treatment for the seriously mentally ill to training seminars on bullying).
    - The RECOVER-E project is an evidence-based, community-oriented service delivery model assisting the seriously mentally ill as they transition from institutional to community settings (Shields-Zeeman et al., 2020). The project serves five sites in middle-income countries (Croatia, Montenegro, North Macedonia, Bulgaria, and Romania) with the aim of improving functioning, quality of life, and mental health outcomes for people with severe and enduring mental ill health conditions (such as schizophrenia, bipolar disorder, and/or severe depression).
    - The Universidad CES in Medellín, Colombia sponsors the annual Simposio Internacional Acoso Escolar training programs for students, psychologists, educators and other health providers to learn how to integrate emotion regulation and pro-social decision making into community programs.

- Psychologists must **consider social determinants of mental health** such as safety, housing, education, economic stability, racism, and stigma. Psychologists can share psychological science relevant to these issues to make recommendations for change to policymakers, community leaders, and others, and can inform their own practices.
    - Housing First, provides permanent housing for individuals living with mental illness in Canada. By providing housing stability first, even before addressing their mental health conditions or employability, residents report an improved quality of life and further had reduced need for inpatient psychiatric care (Kerman et al., 2017).

- All psychology students and practitioners **must be educated on the definition, implementation, and importance of population** health and community engagement, particularly those studying or trained in clinical specializations. This means psychology must broaden the content of content incorporated into student coursework as well as continuing education options for professionals.
    - For example, graduate programs that include courses on community based mental health care and integrate population health core principles rather than these being mutually exclusive programs. One example of public health oriented training for health clinicians – although not specific to psychology – is the PhD in the Science of Health Behavior offered at the Universidad Autónoma del Estado de Hidalgo in Mexico.

- Psychologists and students must **develop a deep understanding of the communities, systems and settings in which they work**, including cultural and linguistic competence, in order to understand relevant contextual factors impacting the day-to-day lives of their clients.
    - For example, programs that address historical power inequities and belief differences between mental health providers and indigenous groups Ecuador have been shown to increase patient confidence in care systems and program outcomes.

- Psychologists **must partner across disciplines and systems** to ensure wraparound care, for example, school-based programs that identify at-risk students and families and provide community, social, and mental/ behavioral health referrals and supports.

Other partnerships could include with healthcare associations, hospitals, neighborhood associations, local businesses, law enforcement, and others.
    - The school-based early intervention program titled, "Getting On Track In Time – Got It!" from Australia where mental health clinicians worked with children from kindergarten to 2nd grade with disruptive behaviors by engaging parents and other caregivers from the school community (Lewis et al., 2015).

- Utilizing the task-sharing model, **psychologists may provide training** to generalist health providers and informal caregivers who can provide simple treatment for everyday mental health problems.
    - The Community Engagement Mental Health (CEMH) model in Kingston, Jamaica which uses task sharing to deliver acute psychiatric treatment within the community setting- allowing for increased social inclusion and reduced hospitalization of persons (Nelson et al., 2020).

- Psychologists **should create online services** such as e-health, mobile apps, and group programs.
    - In Europe the EU funded a project titled Recover-e in which EFPA served as a partner.
    - The H-WORK project aims to promote healthy workplaces by applying and validating a multi-level intervention protocol in public organisations via the 'Mental Health at Work Platform.' This online tool provides guidance and resources for employers, employees, and occupational health professionals on the promotion and protection of mental health in the workplace.
    - A mindfulness app based on the scientific research of Dr. Richard Davidson employs psychology for enhancing well-being: https://hminnovations.org/meditation-app
    - Positive psychology apps with a solid evidence base, such as Happify: https://www.happify.com/

- Psychological science needs **to inform policies and legislation related to population mental health** resources, services, and evaluation.
    - Programs such as the EVidence To Agenda setting, or EVITA 1.1, help low- to middle-income countries bridge the gap between mental health research and evidence-based policy setting to address population mental health (Votruba, Grant & Thornicroft, 2020).
    - Professional psychology associations can support advocacy training workshops, like the Practice Leadership Conference in the United States. They can also organize association-wide committees Science & Public Policy to offer training on psychological science translation to policy, such as in Ireland.

Psychologists need to be adequately supported with proper training and sufficient resources to acquire the competencies needed to transform the profession to embrace a population health service delivery model. Basic training in universities need to nourish students in a systemic ecological model that delves into risk and protective factors for developing mental health problems and further introduces them to the broad spectrum of psychological service delivery tools and approaches. Psychologists also need to be properly introduced in other disciplines to prepare them for a multidisciplinary and integrated way of service delivery. The aforementioned aspects of training are supported by significant evidence base in psychological science.

Incorporating a population health framework into psychological science and practice requires that psychologists rethink the way they deliver services. Of course, establishing a safe therapeutic relationship is important during intensive psychotherapy and certainly fundamental for an individual in need of a specific treatment protocol.

A population health framework further posits that psychologists must be ready to work with one another as well as in multidisciplinary teams. In this way, health practitioners and key figures in the community can work together with psychologists to define and address key challenges. Delivering services within a population health framework requires an integrated approach where each participant is aware of the insights and expertise that can be provided by a range of members on a team.

At the population level, however, mental health programs are based on different kinds of relationships, notably those within and between community members. Where psychology and psychologists develop useful online mental health monitoring systems, hands-on prevention skills training options, and neighborhood well-being initiatives - to name only a few – psychological services will be available to many more people in need in a relatively seamless, broadly integrated manner at every location where vulnerable individuals engage on a daily basis. That is, a focus on population health permits psychologists to serve in spaces beyond clinics, like schools, workplaces, and community hubs, among others, and to do so in a way that makes mental health a possibility for all of us, not just a select few. In this way, psychology can truly serve humanity.

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Footnote:
These suggestions are in alignment the recommendations of the latest WHO Mental Health Report (2022) and would support the realization of the WHO Comprehensive Mental Health Action Plan 2013 - 2030 (WHO, 2021).