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Clinical Psychology

Clinical Psychology of Aging: the Italian Manifesto

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Abstract

In the context of Italian aging population, clinical psychology can play a crucial role in enabling older adults to cope with the multiple challenges associated with the aging process and disease-related issues. This manifesto was written by the 'Clinical Psychology of Aging' working group, which is part of the Italian Association of Psychology (AIP) consisting of academic experts in this field who collaborated to elaborate the contents highlighting the most relevant dimensions of the clinical psychology of aging. Specifically, the aging process was addressed from multiple points of view (i.e., theoretical perspectives, multidimensional assessment, interventions), and the role of the clinical psychologists in the National Health System along with training issues were discussed in the attempt to specify the unique contribution of the clinical psychology in aging.

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1. Introduction

The progressive aging of the population represents an important anthropological and social result, deriving from the decrease in fertility of the young population together with the general improvement of people's living conditions and health. It implies that people can live longer and go through the different stages of life up to the most advanced ones. Therefore, in addition to living longer, it is important to understand how one can live "subjectively well" and with a good quality of life, autonomy, and independence, albeit with pathologies or disabling health conditions that may accompany aging. To achieve this goal, clinical psychology offers theories, methods, and tools to promote and foster healthy aging and adequate and timely treatments to manage the onset of pathological conditions. As a phase of the life cycle, aging can be accompanied by transitions, continuity, adaptations, learning, roles, and relationships (Baltes, 1991, 2006; Baltes & Baltes, 1990). Aging as a process is characterized by several losses, such as loss of physical function, loss of strength, loss of 'status' in society (i.e., being productive) due to retirement, loss of social network etc. These aspects tap on how the older adult lives or experiences the aging process. Not everybody ages the same way, regardless of physical illnesses or pathologies. If aging is accompanied by suffering, it can and must be faced and elaborated through the knowledge, practices, and tools of clinical psychology.

Aging, even healthy aging, is accompanied by changes in cognitive abilities, the rate and entity of which may vary considerably between individuals. The diagnostic systems used to assess the presence of a cognitive decline and its severity refer to very diversified protocols in the tools and criteria used. Generally, the diagnosis is solely made based on the autonomy and the cognitive performance of the older adults. The psychological, relational and social dimensions, as well as the individual's ability to adapt to the continuous changes, and often to the limitations that the aging process entails, are rarely considered. This manifesto was written by the 'Clinical Psychology of Aging' working group, which is part of the Italian Association of Psychology (AIP) consisting of academic experts in this field who collaborated to elaborate the contents highlighting the most relevant dimensions of the clinical psychology of aging. In this contribution, various areas of interest and applications relevant to clinical psychology will be introduced, and potential contents will be outlined. This is not exhaustive, since the authors' intention was starting a reflective thinking process which can assist scientific progress. Each paragraph starts with the presentation of a topic and the reasons for its relevance, followed by the description of main theories and dimensions to be evaluated, as well as specific tools and interventions in clinical psychology.

2. Demographic scenarios

According to the World Health Organization recent estimate (WHO, 2021), by 2030 the over 60s will represent a sixth of the world's population, doubling by 2050. Following this projection, the number of people over 80s will triple by 2050, surpassing 425 million. On the one hand, these data are an encouraging sign as they represent a clear consequence of medical progress and a general improvement in the population's health conditions; on the other hand, they represent a challenge.

The increase in life expectancy corresponds only partially to gain in health. As a rule, even in healthy aging, increasing longevity involves the need to live with age-related pathologies and comorbidities which sometimes can be disabling, while others represent only minor annoyances (Pili & Petretto, 2020, Petretto & Pili, 2022).

In the aging process two developmental trajectories can be defined: “aging with disability” and “disability with aging” (Verbrugge & Jette, 2002; Verbrugge et al., 2017; Petretto & Pili, 2022). The first one concerns individuals living with disabling illnesses and health conditions from early phases of their lives (either from adolescence or early adulthood), who can now live longer due to increased life expectancy. The second trajectory refers to individuals living with disabling pathologies and unhealthy conditions only from the later phases of their lives, due to the general increase in life expectancy.

Among aging-related pathologies Non-Communicable Diseases (NCDs) are increasing worldwide (WHO, 2021). Examples are hearing and vision impairment, diabetes, osteoarthritis and osteoporosis, cardiovascular diseases, and neurodegenerative diseases such as Parkinson's and Alzheimer's diseases. NCDs have a markedly negative impact on the quality of life of patients and their families as well as on society. According to a recent WHO report (2021), NCDs would cause the death of 41 million people every year or 71% of global deaths, with about 26 million deaths in individuals over 70s.

Therefore, it becomes crucial to prevent and reduce disability and functional limitations associated with NCD-s, thus promoting what is defined by the WHO as "healthy aging" in the 2020-2030 decade. Accordingly, the WHO proposes four highly interconnected strategies for action. The clinical psychology of aging, of which the following sections represent the manifesto, plays a crucial role in these strategies. Indeed, a focus on the clinical psychology of aging can increase knowledge and awareness about age-related psychological changes. It can also contribute to the development of new tools for the assessment and early detection of atypical psychological changes that may accompany the aging process, and of programs for

health promotion, prevention of psychological problems and maladaptive behaviours, as well as to planning and delivering interventions. These actions should aim at reducing the impact of NCDs on individuals' quality of life, thus achieving the objective defined as "aging well with a chronic disability" (i.e., living well with chronic diseases).

The transition between "aging with disability" and "aging well with chronic disability" is twofold. Firstly, the trajectories of aging predispose to the transformation of problems into chronicity. Secondly, promoting well-being is linked to successful strategies of aging and living positively and profitably, despite old-age related issues.

3. Theoretical perspectives

To better understand the processes related to aging, it is necessary to mention some of the most significant theories on the psychological aspects of healthy aging. These can roughly be divided into two categories. The first one is a general theory on the development of the individual throughout the lifespan. The second one focuses on the adaptation and coping processes related to changes and challenges of aging.

Erickson (1950) lays the foundations for a theoretical perspective that considers the entire life cycle by outlining specific stages of development accompanied by specific psychosocial crises. For what concerns old age, he identifies a specific tension between two opposite ends: the preservation of integrity and despair. The synthesis of these aspects would lead to the development of wisdom and a detached involvement. According to Baltes' life cycle perspective with emphasis on selection, optimization, and compensation mechanisms (SOC; Baltes & Baltes, 1980), successful aging depends on each individual's ability to compensate for the limitations and losses associated with advancing in age – both at a cognitive and emotional level – through functional strategies involving the selection of activities and objectives, continuous effort in optimising skills and possibly compensating unavailable skills with other ones. All this can be summed up with the expression: "do the best you can with what you have".

Among the theoretical perspectives focused on the changes and adaptations necessary in old age, Peck (1968) introduces the concept of "gero-transcendence" and identifies three main tasks associated with older adults' adaptation skills. The first task concerns retirement and the re-definition of one's self-worth achieved by maintaining interests, activities and relationships. The other two tasks relate to the acceptance of illnesses - and, more generally, of body changes associated with aging - and to the bereavement as inevitably older adults have to cope with the loss of friends, relatives and the loved ones. Furthermore, different theoretical formulations emphasise the concept of "Disengagement" and "Re-engagement", whose focus is on the

progressive reduction of the involvement of older adults in social and relational contexts. These aspects are considered functional and protective of the self (for example, see Cumming & Henry, 1961; Carstensen, 1992). Interestingly, the theory by Kahana & Kahana (2002) focuses on older adults' proactivity and on their ability to intervene in the environment. Internal resources are crucial such as self-esteem, self-efficacy, being motivated to invest in physical activities, as well as external resources such as economic availability, social networks and the availability and use of new technologies. These theoretical approaches, along with other ones in the field of clinical psychology, offer a basis for understanding and developing specific tools and interventions to promote well-being and prevent or, at least, mitigate older adults' suffering.

4. Living well while aging: the main challenges of frailty, disability and reduced autonomy

The clinical psychology of aging offers methods and tools for helping older adults to progressively adapt to and cope with changes in their health, thus promoting a better awareness of their needs as well as of their resources to satisfy them. Accordingly, an integrated and multidimensional approach for the initial assessment, and subsequent treatment of the frail older adults or older adults at risk of frailty appears increasingly necessary.

Frailty represents an age-related syndromic condition characterised by an increased vulnerability to external and internal stressors, due to an alteration of the body's homeostatic reserves which leads to a reduced ability to react to adverse events. This vulnerability exposes older adults to an increased risk of negative outcomes including the progressive reduction of autonomy in daily activities, institutionalization and even earlier death (Clegg et al., 2013). These elements must be considered for recognizing frailty and articulating a care project calibrated on specific dimensions.

From a multidimensional perspective, the psychological component represents an integral part of the frailty construct (Gobbens et al., 2010). The clinical psychology of aging defines the relationship between aging, frailty and disability by emphasising constructs such as developmental tasks, transitions, identities, roles, individual differences, motivation, self-esteem, resilience, coping strategies, ability to adapt, as well as the intertwining of protective and risk factors (individual, relational, social and community ones).

The ability of older adults to adapt to their frailty condition can be favoured by various factors such as cognitive reserve and psychological resilience (for example, dispositional optimism). These psychological factors are known for their proactive function, since they can promote health-oriented behaviours such as maintaining healthy lifestyles (i.e., reduced use of alcohol,

not smoking, doing physical activity, adopting proper eating habits, and strengthening of social relations).

Among the psychological factors important for promoting or hindering healthy aging, affect (e.g., mood, emotional deprivation) is an important factor to be assessed. Namely, depression is a relevant expression of psychological frailty in aging and it is dramatically magnified by the feeling of loneliness, characterized by experiencing loss of meaningful connections because of the reduced life expectancy and social messages of worthlessness, or because of the loss of beloved ones due to bereavement, or simply because there is a mismatch between the individual's expectations and the existing relationships. The clinical psychology of aging considers aging a process, emphasises the relational and affective aspects of the person as factors connected to the personality and experience of the individual. These can also represent supporting factors.

Enriching the multidimensional assessment of the older adults also with these psychological components appears necessary, as well as useful for prognostic and therapeutic purposes, and it seems useful to implement personalized interventions based on individuals' strengths and resources. These interventions should be oriented towards primary (i.e., to prevent disease) and secondary (to reduce its impact) prevention, with the aim of improving the quality of life of older adults while preserving and maintaining their autonomy and independence for longer. In addition, these interventions are equally useful in reinforcing the hot processes of cognition such as motivation and the sense of self-efficacy in mastering different environments and situations.

In older adults, and especially in the frail ones, emotions also have relevant adaptive purposes, since they guide behaviours, assist decision-making processes and play a key role in social cognition and in maintaining satisfactory interpersonal relationships. Moreover, promoting adequate strategies of emotion regulation is useful considering the progressive reduction in the levels of autonomy and self-sufficiency that may characterize aging, when older adults will have to accept the need for support without their sense of identity being undermined.

5. Promotion of psychological health in older adults: models and interventions

The lengthening of life implies the need to guarantee its quality, following the dictates of successful aging (Havighurst, 1963; Baltes & Baltes, 1990; Rowe & Kahn, 1998). To pursue this aim, it is necessary to think in terms of activities (Regione Piemonte, IUHPE & ICHE, 1997; Grano & Lucidi, 2005). In addition to prevention activities aimed at anticipating/minimizing conditions of malaise, discomfort or frank pathology, clinical psychology considers promotional

activities equally important aimed at promoting adequate levels of knowledge and awareness regarding issues of older adults' psychological health (i.e., psychoeducation), and at intervening to build/reconstruct their ability to perceive, plan and implement the "positive things" in life. It should be emphasized that, according to the life cycle perspective, promotion and prevention must not concern older adults only, but rather they should become part of an authentically intergenerational cultural baggage that involves everyone: those who respond to the logic of productive output, work, and those who are faced with evolutionary input, study. These objectives can be pursued within the framework of appropriate community policies.

For what concerns promotion, it is necessary to enhance the Lifelong and Lifewide Learning (LLL) that is now established as an optimal cultural tool through courses, associations, conferences and meeting groups in order to enhance various skills/capacities (i.e., cognitive, emotional, relational and socializing), favouring active and healthy aging (Peirone & Gerardi, 2012; Cesa-Bianchi, Cristini et al., 2014; Peirone, 2015).

Clinical psychology adopts many strategies to promote the psychological health of older adults including:

- a) physical activity (Saccomani, 2006);
- b) "cold" psychological activities (cognitive abilities: perception, thought and memory) (De Beni et al., 2008);
- c) "hot" psychological activities (emotional and motivational activities: positive emotions and proactive drives and relational/socializing activities: communication and prosocial drives) (De Beni et al., 2009).

It is also important that older adults can recognize and train their creativity potential in different conditions of aggregation (for example, groups of older adults and associations), where the group led by a facilitator represents a resource capable of enhancing individual abilities and cultural interests. Furthermore, it should be considered how the use of computers and smartphones can be a protective and prodromal factor of successful aging (Riva, Ajmone Marsan & Grassi, 2014).

6. Mental health in aging: an overview

More health-related problems may be experienced during aging than during the entire life cycle. These late-onset (>65 years) disorders are different from those that emerge in adulthood and persist into old age.

Late-onset mental health disorders may be accompanied by cognitive and functional impairment with reduced autonomy in daily living activities (Friedman & Ryff, 2012; Makovski et al., 2019). Of equal importance are social exclusion, the load of physical and mental suffering, separations linked to the loss of loved ones, or factors that favour a series of psychological problems and pathological conditions that are not always easy to deal with (Maier et al., 2021). Many of the events that accompany old age can alter the quality of life, but above all they can compromise the mental health, sometimes triggering neurological or psychological symptoms among which depressive episodes are common.

The WHO has recently emphasised the issue of mental health and put forward the 2012 document (<https://extranet.who.int/agefriendlyworld/wp-content/uploads/2014/06/WHO-Dementia-English.pdf>) which takes into consideration various aspects of neurological, psychological and neuropsychiatric disorders, including Alzheimer's disease that is recognized as an important cause of morbidity with impact on NCDs-related burden. The resolution also highlights how mental disorders are often associated with chronic conditions and other health problems, but also with social factors such as poverty, drug abuse and the harmful use of alcohol.

Major depression and depressive symptoms are particularly frequent among older adults (Minicucci et al., 2002). The prevalence of depressive syndrome is approximately 12% in Europeans over 65, with higher levels in women and in Mediterranean countries. In Italy, depression affects about 30% of men and 50% of women (Dalle Carbonare et al., 2009). Longitudinal findings show that the severity of depressive symptoms recorded over time in the Ilsa cohort is significantly associated with an increase in mortality (approximately 40%), and this risk is doubled in older adults with severe symptoms such as apathy, anhedonia, psychosomatic symptoms and social withdrawal. It has been postulated that the motivational decline linked to depressed mood can influence unhealthy lifestyles, physical inactivity, non-compliance with therapeutic prescriptions, social and relational isolation. All these conditions can lead to a deterioration of the neuroendocrine and immune systems with a reduction in physical and cognitive functions (Soysal et al., 2017). In addition, the relationship between the various behavioural, biological, and functional risk factors involved in the depression-mortality association appears to be bidirectional. However, since depressive symptomatology is not an irreversible condition due to its fluctuating trend, clinical psychology must implement those preventive, diagnostic and therapeutic measures aimed at improving this condition which is prevalent among older adults (Frost et al., 2019; Jonsson et al., 2016).

In addition to neuropsychological problems and neurodegenerative changes, anxiety and depression represent the maximum "punctum dolens" in the old age stage. They affect older adults with an extremely variable range - on a continuum from mild/moderate to serious/severe one -, thus requiring a sophisticated and sensitive capacity for both assessment and intervention. Moreover, in the context of such frequent and disturbing nuances, empathic capacities are needed for both professionals and researchers.

In addition to depression, sleep disturbances, late-onset psychosis (e.g., schizophrenia), delirium, bipolar disorder, obsessive-compulsive disorder and paranoid disorder are often observed among older adults (Andreas et al., 2017). According to the ISTAT survey "Deaths and causes of death", in 2010 3,876 people living in Italy committed suicide, of whom 78% were men and a third of all suicide victims were over 65s with a similar incidence between genders (34% among men and 36% among women). In light of this scenario, clinical psychology faces many challenges:

- a) accompanying the person in the transition from normal to pathological aging, thus preventing comorbidities such as depression and cognitive deterioration;
- b) identifying psychological markers that are predictive of deterioration when in interaction with biological ones in order to design multidisciplinary interventions;
- c) implementing clinical psychological prevention strategies to improve the health and well-being and promote an active life in the old age stage;
- d) designing and validating preventive interventions to mitigate psychological risk factors while strengthening psychological protective factors.

Furthermore, the clinical psychology of aging aims at ensuring:

- a) the necessary psychoeducation in prevention initiatives that promote mental health and prevent illness and disease;
- b) the development of psychodiagnostic tools, including information technology approach or robotic support to be used as a baseline assessment for prevention or rehabilitation interventions;
- c) the design of person-centred interventions aimed not only at improving the individual's cognitive and physical performance, but at also achieving a better psychological adaptation to its own health state.

7. Psychological therapies for older adults

The longer the life, the more conditions and related existential experiences accumulate, alternate and add up (Chattat, 2009): fragility, discomfort, states of malaise and frank pathologies. Therefore, the person can undergo various forms of psychological suffering: retirement shock, couple conflicts, death-mourning-widowhood, social isolation, marginalization (hetero- and self-determined), cognitive and physical fatigue, low self-esteem, sense of inadequacy, loss of motivation, inability to plan, identity crisis, etc.

Furthermore, more problems, symptoms and diseases can occur simultaneously in the same person, thus moving towards a plural conceptualization. Such a context of comorbidity enhances the complexity, both diagnostic and therapeutic one, which requires the adjustment of clinical interventions along the line of the "combined" actions (i.e., psychological and pharmacological ones) (Isaia, 2018). It is necessary to proceed with sufficiently "open" and flexible treatments, because "pure" syndromes and diseases are not common. Indeed, it is important to read the concomitance and correlation between several factors of health loss, since the plurality of health problems requires the professional to have a rich nosographic knowledge, high anamnestic and diagnostic abilities, and a creative ability to choose the appropriate therapy or therapies in combination.

In such a context, aging can be accompanied by suffering that can and must be addressed and elaborated using the tools of clinical psychology. Aims are several: the relief of symptoms, the best adaptation to its own condition through the rediscovery of activities and interests, the maintenance of the highest level of autonomy, the improvement of mental efficiency, etc.

Despite it, older adults are currently under-represented in services (Saunders et al., 2021). In this regard, there is a belief that older people do not benefit from psychological interventions, that they may be less psychologically flexible or unable to change. However, meta-analytic reviews suggest that interventions are equally effective for older and working-age adults (Cuijpers et al., 2018; Haigh et al., 2018).

Despite the robust support for the efficacy of therapeutic interventions with older adults and the evidence that older adults prefer psychological to pharmacological interventions, older adults are less likely to receive psychological interventions than people of working age (Nielsen et al., 2019). Reasons for this include stigma, the challenges of recognizing and assessing anxiety and depression in older adults, and the lack of suitable services (Bryant, 2017).

Evidence-based therapies for older adults include interpersonal therapy, cognitive behavioural and problem-solving therapy and, to a lesser extent, reminiscence therapy and short-term psychodynamic therapy (Bryant, 2017). Newer approaches are also emerging, including mindfulness-based approaches and therapies delivered through the Internet.

In clinical work, cognitive-behavioural therapy is widely used. It focuses on the dysfunctional behaviours and thoughts that prevent people from adjusting themselves to their condition (Wilkinson, 2013). The behavioural model considers depression as a consequence of insufficient social reinforcements or self-reinforcements for older adults, which can derive from difficulties in carrying out daily activities and limited activities available in the environment in which they live.

Cognitive training is a pool of widely used interventions to enhance one or more cognitive domains, and to improve the performance of older adults in everyday life (De Beni et al., 2008).

Among the available psychological therapies, reminiscence therapy is a psychosocial rehabilitation intervention based on the use of memories, which allows older adults to take track of their lives by recovering pleasant emotional experiences and stimulating their memory (Gagnon, 1996). This intervention values the positive and satisfying aspects of life, thus allowing older adults to face the anguish of death. Overall, group psychological therapies (with various backgrounds) are suggested for older adults with mild or mild-moderate mood disorders aiming a reduction of isolation, exchange of problem-solving strategies to cope with anxiety and discomfort, stimulation of activity and higher self-sufficiency.

Psychodynamic therapy helps older adults to re-plan their lives and rediscover old and new interests, while mitigating the consequences related to events such as bereavement and the loss of skills and activities with impact on individual self-esteem (Corsa, Vanda & Fattori, 2020). In such a context, the clinical psychologist should act as a transitional object that favours new external engagements while reducing youthful expectations (Spagnoli, 2012).

Relevant psychological issues in aging also concern the fear of dependency which sometimes lead older adults to reject any kind of help, whereas the anguish related to death can only be faced positively if inserted into a life path that is perceived as endowed with meaning and experienced as a whole (Cristini, Porro & Cesa-Bianchi, 2011).

Given the aforementioned deleterious effects if mental health conditions go untreated, increasing access to psychological therapies for older people should be an international priority (Saunders et al., 2021).

8. Beyond cognitive enhancement: the role of technologies for older adults' psychological well-being

In the context of interventions with older adults, AgeTech is one of the innovative programs concerning health. This term includes Information and Communication Technologies, robotics, mobile technologies, artificial intelligence, environmental systems, tele-consulting services, the Internet of Things, ambient assisted living and, more recently, the recent applications in the field of tele-neuropsychology with specific advantages in the personalized management of the patient even remotely. AgeTech solutions are generally planned to support health, safety and personal mobility paths, as well as to promote older adults' communication skills (Kim et al., 2017). Health technologies can also include teleconsultation services (e-health), diagnostics and response systems in emergencies (Ollevier et al., 2020), thus facilitating information flows between patients, family members and health professionals, while monitoring psychophysiological parameters and providing support for correct lifestyles. This can lead to older adults' higher feelings of autonomy and safety, greater satisfaction in the use of tools and adherence to treatment.

Furthermore, a growing body of evidence shows that digital technology can help older people to maintain a cognitive vitality essential for daily living activities, while contrasting isolation and uncertainty that typically characterize the old age stage (Lattanzio et al., 2014). By using technology, relationships with family and community can be strengthened, thus improving older adults' mood, self-esteem and coping skills (Fang et al., 2018).

Research on assistive technology has highlighted that the motivation for change has greater value for older people than their actual ability to use and interact with technology, thus highlighting the importance for clinicians to work on it (Tyler et al., 2020). Due to the digital divide, the decision-making process for the use of technological solutions can refer to the SWOT analysis (Strengths, Weaknesses, Opportunities and Threats; Leigh, 2009). To understand how the person interacts and responds to the solicitations from the devices, and to provide the designer with information on the characteristics that products/services should have, it is necessary to use a paradigm capable of considering the older adult as an active subject, capable of exploiting the opportunities offered by technology. In this perspective, the work of the clinical psychologist will mainly consist of guiding the decision-making process on the usability and acceptability aspects of technological solutions for older adults, while accompanying them in the device appropriate management.

9. Multidimensional assessment of aging

Psychological interventions with older adults are possible and desirable in the context of an accurate psychological, clinical and diagnostic assessment (Chattat, 2004). The multidimensional assessment should aim at obtaining a general and articulated picture of the various aspects and processes involved in defining the individual well-being and quality of life. It must concern the healthy older adult to intercept any mild cognitive decline or to detect all those risk factors (e.g., anxiety, depression, sleep disturbances, cardiovascular disorders) that may predispose to the development of mild or severe cognitive decline, as well to highlight their interconnection. The multidimensional assessment should target populations with chronic (e.g., hypertension, cardiovascular disorders etc.; see below in the anamnesis) or degenerative (e.g., Parkinson's disease; see below in the anamnesis) pathologies with an increased risk of developing mild or severe cognitive decline. It should also target people with mild cognitive decline (Mild Cognitive Impairment; MCI) or with various types of dementia characterized by different levels of severity. From a prevention perspective, this assessment should concern people over 50s, especially those populations presenting risk factors for dementia (e.g., hypertension; Forte & Casagrande, 2020; obesity; Ho et al., 2010; Parkinson's; Garcia-Ptacek & Kramberger, 2016).

To pursue this aim, a multidimensional assessment is necessary including socio-personal data, lifestyles and behavioural habits, social relationships and interactions, as well as the psychological, medical and cognitive conditions. This evaluation should follow a standardized protocol that allows overcoming the heterogeneity of the diagnostic systems adopted (e.g., type and number of psychological and cognitive dimensions evaluated), which inevitably leads to a wide range of prevalence estimates of cognitive decline (Casagrande et al., 2022).

Specifically, as far as socio-demographic information is concerned, it will be important to evaluate age, marital status, education, socio-economic status, occupation, presence of a partner, children, siblings, and people with whom the house is shared, and geographical location of the residence.

In the assessment of lifestyles and behavioural habits, physical activity (e.g., walking, travel routes), sport (e.g., gyms attendance, dance classes), eating behaviour, any dysfunctional lifestyles such as smoking, excessive use of alcohol and behavioural addictions (e.g., excessive use of mobile phones, internet, gambling), recreational activities and hobbies, use of television (specifying number of hours, programs seen), daily social relationships (relationships with family, friends, neighbours) must be evaluated.

The clinical history must cover medical, psychological, psychiatric aspects and include the assessment of the family history of the various diseases. The medical history should evaluate the presence of chronic medical conditions (e.g., cardiovascular disorders, hypertension, hypercholesterolemia, metabolic syndrome, diabetes, obesity); chronic or previous neurological pathologies (e.g., epilepsy, stroke, head trauma, coma, Parkinson's disease, parkinsonism, headaches, Huntington's chorea, Amyotrophic Lateral Sclerosis, Multiple Sclerosis); acute and chronic infectious diseases (e.g., HIV, infectious encephalitis, hepatitis, multiform encephalopathies, herpes simplex); diagnosis of dementia (e.g., vascular dementia, Alzheimer's disease, frontotemporal dementia, Pick's disease, dementia with Lewy bodies). Evaluating the body mass index and blood pressure is also useful.

Furthermore, psychological and psychopathological aspects must be considered such as anxiety and depression, personality, and general psychopathological symptoms and characteristics (e.g., anger, distress, excessive impulsivity, aggression, loneliness, sense of self-efficacy and locus of control). Of interest is the presence of psychiatric (e.g., schizophrenia, bipolar disorder, personality disorders and major depressive disorder), and neuropsychiatric (e.g., ADHD, specific learning disabilities, autism spectrum disorders, intellectual disabilities) pathologies. The current and chronic intake of any drug should also be examined (i.e., active principle or commercial name of the drug including dosage), and information on blood chemistry parameters and any laboratory tests should be collected.

Sleep quality and disturbances will also need to be investigated due to the strong association with cognitive decline (Casagrande et al., 2022). It will be necessary to assess the quality, duration, and efficiency of sleep, the presence of disturbances in the circadian organization of the sleep-wake cycle, the presence of excessive daytime sleepiness, sleep disturbances (e.g., insomnia, sleep apnoea, REM sleep disorders, early awakenings, sleep fragmentation, restless legs syndrome, parasomnias such as sleepwalking, night terrors, nightmares, bruxism, narcolepsy). In the presence of doubts, a sleep diary should be added, and a polysomnographic evaluation is needed when frank sleep disturbances occur.

It is necessary to evaluate older adults' independence in daily life activities (such as dressing, washing, using the telephone, arranging the house, doing shopping, managing the bank account, using transport, scheduling medical visits, managing pharmacological therapy), by using standardized tests such as the Activity of Daily Living (ADL; Katz et al., 1963) and the Instrumental Activity Daily Living (IADL; Lawton et al., 1969).

The general cognitive assessment using a standardized test, such as the Mini-Mental State-Examination (MMSE, Folstein et al., 1975), is relevant to distinguish between adequate functioning, mild cognitive impairment and dementia. To obtain information about general functioning, it is important to assess the logical-deductive reasoning by means of a standardized test (e.g., Raven's Progressive Matrices; Raven & Court, 1938), along with cognitive reserve with reference to schooling, job and leisure activities such as reading books and newspapers, going to the cinema or theatre, pursuing a hobby (Nucci et al., 2012). It is also important to assess specific cognitive functions, such as short-term and long-term verbal (literal, semantic and autobiographical) and visuospatial memory, visuospatial and praxis skills, lexical and semantic language access, selective attention and vigilance. Basic executive functions (cognitive and motor inhibition, behavioural conflict information control, cognitive flexibility and working memory), and higher-order executive functions (planning, reasoning, problem-solving and decision-making) should also be assessed, since mild and especially severe cognitive decline is usually associated with impaired executive functions (Guarino et al., 2019; 2020; Corbo & Casagrande, 2022).

The multidimensional assessment is needed to quantify older adults' limitations and deficits, thus allowing to capitalize over their preserved resources and abilities and to plan personalized interventions. Therefore, as previously discussed, the chance of multiple, multimodal interventions targeting psychological problems, lifestyles and dysfunctional behaviours, sleep hygiene programs, and enhancing single or multiple cognitive domains are necessary. All these interventions may also have a preventive or health promotion nature. The relevance of the multidimensional perspective also implies the need to collaborate with the primary care physician and with specialists to evaluate the opportunity for medical treatments along with psychological interventions.

Finally, to personalize the intervention, it would be useful to evaluate an index of well-being or severity given by the relationship between the functions, processes, behaviours, and deficiency parameters and the total number of assessments carried out. This index could also be calculated separately for the different domains (social, psychological, cognitive, medical). Similar to what has already been done to evaluate the frailty of the older adults from a medical point of view (Clegg et al. 2013), this frailty index could be used to assess the longitudinal trend of the overall well-being.

10. Living well with dementia: models and interventions

The multidimensional and articulated assessment of older adults, aimed at implementing personalized and effective interventions, is fundamental in the context of the NCDs. Among them, dementia is one of the most common that is characterized by a progressive limitation of individual's cognitive abilities. This limitation significantly impacts not only on patients' daily functioning, but also on their caregivers' experience. The biomedical perspective emphasizes the role of the neurodegenerative component, and research in this area focused on the biological mechanisms and drugs needed to reduce or stop the deterioration process. This disease-centred approach overshadowed a number of important research findings, such as the discrepancy between neurodegeneration and clinical manifestation of the disease; the diversified trajectories of cognitive impairment; factors that modulate the disease progression; the individual response to changes resulting from the disease; the role of personality and life history, and the role of the social and environmental context, with particular reference to stigma and social exclusion.

A constellation of symptoms defined as psychological and behavioural symptoms (Behavioural and Psychological Symptoms of Dementia; BPSD) are actions generated by a context that should be interpreted as having a meaning (Finley et al., 1996). Therefore, it is important to consider the person's subjectivity, how the person perceives his/her own body, his/her actions in the surrounding environment, and above all the quality and intensity of affects. This can help to recognize and give sense to the modifications of older adults' thoughts, language, and behaviour. In this regard, BPSD are often considered as affective and behavioural manifestations rather than symptoms of people living with dementia.

Consequently, attention has been focused on the post-diagnostic process from the communication of the diagnosis to the implementation of all those psychosocial strategies and interventions that can promote well-being, quality of life, adaptation, social inclusion, and the preservation of the dignity of the person until the end of life, in the absence of effective pharmacological therapies (Chirico et al., 2021; Ottoboni et al., 2021). A similar approach is called "living well with dementia" whose pioneer was Kitwood (1997). He underlined the importance of a person-centred approach to care aimed at maintaining personhood ('being a person') despite the illness. According to the dialectical/enriched model of dementia (Kitwood, 1993), dementia is represented by the formula: 'Dementia = NI + H + B + P + SP', where NI stands for neurological impairment, H for physical health, B for life history, P for personality, SP for social psychology. Given the extreme variability in these aspects, it follows that there are as many experiences of disease as many are people with dementia.

A similar perspective calls for interventions defined as psychosocial targeting functional, cognitive, behavioural, emotional, socio-relational, and environmental aspects of the experience of people living with dementia (Chirico et al., 2021). They aim at reducing the impact of neuropsychological symptoms, at maintaining or improving personal functioning, interpersonal relationships, the person's well-being, and at decreasing risk of future social disability (McDermott et al., 2019; Nice, 2018). Psychosocial interventions mainly include approaches oriented towards behaviour (e.g., challenging behaviour), emotions (e.g., psychotherapy, reminiscence therapy), cognition (e.g., Cognitive Stimulation Therapy), and sensory stimulation (e.g., music therapy). In line with the person-centred approach to care, these interventions should be selected based on the person's characteristics (life history, preferences, intrapsychic, interpersonal and social functioning), rather than on the type of disease or on the degree of impairment.

Interestingly, Damasio (2012) put emphasis on the regression process as a sort of backward process: as if the final life stages bring back the individual to experience – in the brain and on affective and behavioural levels – those psychological and affective domains where the higher cognitive functions no longer exist, leaving space for those more original, archaic, and bodily ones.

Family members can react to dementia in different ways such as with astonishment, bewilderment, pain, anger and helplessness. These mechanisms can hinder the chance of facing the crisis adaptively, thus creating distance, blindness, incommunicability, lack of affective attunement, ambivalent feelings, and sometimes even violent and destructive ones. If such emotional responses are well managed, the relative/caregiver can help the older adult, through a meaningful relationship, to reconnect with his/her affective knowledge, thus reassuring him/her on the fact that his/her affectivity is preserved and intact, helping to guarantee a sense of continuity.

Recently, attention has been paid to the social health of people with dementia and their families (Vernooij-Dassen, 2019). Starting from the bio-psycho-social model of health (Engel, 1977), an attempt was made to identify the role of the interaction between the person and the environment, taking into consideration the intrapsychic and relational functioning, the social representation of the condition and the environmental responses to the person and to the disease. This approach outlines what Kitwood defined "malignant social psychology" and, consequently, the role of stigma and social exclusion. Related to this approach, the model of "friendly communities" of people with dementia has been developed with the aim of promoting

inclusion, participation, and community awareness of the needs and limitations of people with dementia.

11. Services for older adults: the role of the clinical psychology

Within the community and services, in line with the bio-psycho-social model (Engel, 1977), the clinical psychologist puts the person at the centre of the treatment process, giving equal importance to the aspects concerning health, social participation and psychological well-being, connected to the person's history and the current life context. From this point of view, clinical psychology offers knowledge, tools and methodologies useful for managing the psychological and psychopathological aspects of aging and those intrinsic to all dimensions of care.

Clinical psychologists have in-depth knowledge and skills to help the person in elaborating losses and depressive symptoms related to aging, while enhancing the 'gains' and the resources useful for restructuring its life plan. From this point of view, clinical interventions should aim not only at stimulating cognitive enhancement, but also at reactivating the more strictly emotional-motivational aspects linked to well-being.

In the perspective of care and the clinical psychology of aging, psychotherapies with older adults represent a promising field. Contrary to what happened in the past, various effective tools have emerged that can provide supportive care or in-depth and intensive care (Cristini, Porro & Cesa-Bianchi, 2011; Spagnoli, 2012; Hepple, Pearce & Wilkinson, 2014). Furthermore, over the years, the awareness of care needs has increased among older adults, accompanied by satisfactory and innovative results (Peirone and Gerardi, 2009): greater trust in the therapist, collaboration and effectiveness.

In such a context, the family represents a resource that should be included and involved in the care pathway, i.e., listened to, validated and helped to adjust to their relative's condition. Otherwise, family conflicts can lead to the collapse of the family system, when it fails to restructure ties and adjust to changes in the roles and functions of their relative (e.g., from 'carer' to 'cared for').

Another role of the clinical psychologist consists of training professionals and volunteers, thus promoting their ability to read older adults' needs from a multidimensional and multi-professional perspective. In this context, supervisions represent a useful space for reflecting on staff difficulties in the relational/emotional sphere, training in managing emotional reactions, and helping to prevent burn-out which is frequent in helping relationships.

Last but not least, the clinical psychologist is increasingly called to coordinate and integrate the network of social and health services following the logic beyond the emphasis on performance - treating the disease - in favour of a culture of service centred on the 'person'. Therefore, the clinical psychologist, by virtue of their training and experience, can read the complexity of situations by offering an integrated vision, capable of understanding and explaining the phenomena involving the older adults, as well as the role of proximal and distal relationships in adjusting to their condition.

12. Higher education in the clinical psychology of aging

The complexity and nuances of the clinical work with older adults requires that the contexts of academic training and higher education are accurately managed and focused on consistent scientific evidence. In line with what previously discussed, the bio-psycho-social nature and multidimensionality of aging, with the characteristics of the cohorts and the individual differences, represent the reference points that psychologists should consider to better understand clinical issues and to plan effective interventions with older adults.

In order to develop such a wealth of knowledge and skills, training needs to be reviewed. On the one hand, there is a need for university courses to provide transversal knowledge relating to all the cornerstones of the bio-psycho-social model (i.e., cognitive, emotional, relational, socio-personal, socio-economic, pharmacological and aspects related to lifestyles). On the other hand, it is necessary to deepen the milestones above mentioned within the study programs characterizing specific master's degrees. Indeed, an analysis of the academic teachings delivered to students of master's degrees during 2021 (Universitaly - Search courses) supports the need to revise training programs. Within the 84 degree courses in psychology (LM-51) that the 40 Italian universities offer, the number of teaching courses whose title referred to the aging area (i.e., elderly OR aging) was 19. If these numbers are compared with the courses in the developmental field (i.e., "infan" OR "develop*" OR "educat*" OR "learn*"), an important disparity emerges. In fact, among the 84 degree courses available in 2021, students could find 149 courses in developmental psychology. While the calculations do not include courses with emphasis on lifespan changes, the ratio of the two domains is approximately of eight courses in developmental psychology to every course on aging. Furthermore, the lack of a specific discipline (and of a scientific disciplinary sector) for the psychology of aging can be noted.

The adherence of the programs included in the degree courses to the framework of the disciplinary fields hinders the articulation of a functional response to the training needs of a category of professionals capable of responding to a growing population of users. On the other

hand, adherence responds to the international guidelines that suggest the combination of theoretical knowledge and practical insights in academic studies (UNESCO Institute for Statistics, 2015). Therefore, this disparity could negatively impact on clinicians' ability to respond to the growing level of chronicity of the aging population.

Furthermore, more recently, government decrees have outlined the new qualifying psychology degrees. This implies that future psychologists will be trained for professional work while they are acquiring psychological knowledge. To do so, there will be a reduction in the hours of study needed to acquire knowledge and develop understanding and models, in favour of training professional activities that lead students to apply what they have learned, and to learn while working. To reduce the associated risks, psychologists from the Academy as well as from professional bodies together with scientific societies should continue their training in suitable training institutions, thus filling potential gaps created by the implementation of these norms. Thus, students should be trained through practice, benefiting older adults and those who learn and grow while providing a service. Through the hours of curricular internship, future professionals should acquire the preparation required by the job market. However, the chance of attending advanced training courses, specialized but professionalizing, masters or annual courses will enrich or deepen the amount of knowledge necessary to adjust to the demands of the job market. Furthermore, the need for professionalization must not be reduced to the mere execution of techniques. Future psychologists and especially clinical psychologists willing to work in the field of aging – and for whom there is a limited range of training offers – should be able to choose whether to be employed operationally or in the management field, without being forced to obtain diplomas in psychotherapy. In fact, four-year specializations run the risk of training professionals who adhere to the future working context only marginally.

In other words, the training model should be organized so that, at the first level, there are personalized reflection modules accompanied by psychologists with extensive experience in the psychology of aging, as to foster the connection between academic and practical knowledge. At the second level, the training model will have to support the specialist through guided practical experiences in the context of intervention, so that the student becomes capable of designing aids and support programs also by means of advanced solutions in the technology field. At a third level, it will be important to invest in the training of professionals capable of working with specialized models of treatment for the individual psychological suffering characterizing old age, as well as for its impact on family and social systems. Ultimately, it is necessary to think about the articulation of careers that provide for high specializations, but that are responsive and

capable of leading professionals out of the short-circuit of the expectation, whereby the highest specialization is the one most capable of meeting all needs.

13. Conclusions

Taking care of older adults implies taking care of their psychological health, including negative aspects of aging (suffering related to bereavement, loss of skills and abilities, and the multiple challenges of chronic diseases and non-self-sufficiency), as well as of positive aspects (transitions, continuity, adaptations, and learning). Taking care of older adults also implies taking care of their family members and caregivers who may be overburdened by care work without adequate external help. Finally, it is important to overcome a reductive vision of aging to promote an idea of health that includes a vision of aging not directed primarily towards health or pathological aspects. From this point of view, in addition to functional self-sufficiency, it seems appropriate to consider the emotional and cognitive aspects concerning other dimensions of life, allowing the inclusion of positive aspects as well.

Only if the person remains the main actor of its life and possibilities, albeit reduced, of sharing and relating, he/she can aspire to improve his/her quality of life so that the aging process becomes flexible and with still modifiable aspects. In this case, aging cannot be pre-established, unchangeable, and other-directed.

Accordingly, it is easy to understand how the psychological health of older adults and their context deserve greater investment at various levels: public health, community policies, and adequate university training for the new generation of psychologists and other professionals in this field.

Conflict of interest statement

The authors declare that the research was conducted in the absence of any potential conflict of interest.

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