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Contents

Editorial

Rosette Farrugia-Bonello[1] and Christian Vella[2]

This volume of the *International Journal of Ageing in Developing Countries* (IJADC), is composed of four papers. The first two papers selected by the editorial board, focus on the social and psychological aspects of ageing. The first paper looks at how the discourse practices surrounding ageing affects ageing identities in Bali, whilst the second paper discusses how familial support towards older women coming from below poverty line families has changed over the years, thus challenging the tradition care for older persons in India. The other two papers chosen to be published in this volume take a more medical approach. One investigates the subclinical inflammation in older persons with coronary artery disease, whilst the other focuses on the increase in connective tissue growth. Both studies are based in Hospital for War Veterans in Moscow. Besides, in this issue one also finds two book reviews-namely, 'The Sociology of W. E. B. Du Bois: Racialized modernity and the global color line by Itzigsohn, J. & Brown, K. (Eds.), (2020), reviewed by Elaine M. Eliopoulos, and Social exclusion in later life: Interdisciplinary and policy perspectives by Walsh K, Scharf T, Van Regenmortel S, & Wanka A. (Eds.), (2021), reviewed by Eniola Cadmus.

The first article 'Decline or successful ageing discourses: When local knowledge and dominant discourses intersect to shape personal stories of ageing' written by Made Diah Lestari, Christine Stephens, and Tracy Morison, takes a narrative approach in looking at how the discourses on ageing surrounding decline or successful ageing vary among different cultures, and how contemporary ageing discourses influence and shape identity. In particular, by applying positioning-discursive analysis, this article explores the interaction between local understandings and the dominant discourses of ageing, focusing on how these shape personal stories about ageing and the subject positions. These are provided by the discourses among 11 multigenerational households in Bali. Unlike previous research from different socio-cultural context which described pressure and shame among older people who could not achieve successful ageing ideals, this article found that both 'decline' and 'successful ageing' discourses were used to legitimate a positive identity for being an old person in decline.

Shyam Singh and Amod Gurjar explore familial support (and the lack of it). In this contribution on 'Family support related problems of older women living in Below Poverty Line (BPL) families in Lucknow City of Uttar Pradesh, India', Singh and Gurjar portrays the Indian ideal of care for older persons, by being provided by the family members and within the family setting. Through a diagnostic research approach, whereby 200 older women were

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interviewed, this paper takes a deep look at how changes within contemporary society has come to challenge the very notion of familial support which has placed the Indian ideal under threat. The Major finding of the study shows that the older women living in below poverty line families are not receiving the appropriate help and cooperation from their family members.

The third paper in this volume by Svetlana Topolyanskaya, Tatyana Eliseeva, Anna Sanina, Olga Vakulenko and Leonid Dvoretski focuses on the 'Connective tissue growth factor in very old patients with coronary artery disease'. This is a cross-sectional study approach by looking at patients diagnosed with coronary artery disease (CAD), with mean age of 87.8 years (75-96 years). This paper sought to determine the concentration of connective tissue growth factor in the blood of CAD patients in old age and to establish its clinical significance in various pathologies in this group. The study enrolled 50 people, out of which 38 were diagnosed with coronary artery disease and constituted the main group, whilst 12 healthy young people (on average 22.9 years) not diagnosed with coronary artery disease were the control group. Within the framework of this pilot study, in older persons diagnosed with coronary artery disease, significant effect of connective tissue growth factor on echocardiographic indicators of myocardial dysfunction and the course of chronic heart failure was revealed.

The fourth and last contribution by Svetlana Topolyanskaya, Tatyana Eliseeva, Olga Vakulenko, and Leonid Dvoretski, is on 'Subclinical inflammation in very old patients with coronary artery disease'. This paper looks at the concentrations of tumor necrosis factor-alpha and interleukin-6 and to analyze the relationships of these cytokines with a number of various disorders in very old patients with coronary artery disease. One hundred and thirty very old patients were enrolled in this cross-sectional study, with 102 diagnosed with coronary artery disease in the study group, whilst 28 not diagnosed with coronary artery disease, as the control. Findings from this study indicate that in very old patients with chronic coronary artery disease an increased serum TNF-α and L-6 levels are often found. Higher TNF-α and IL-6 concentrations are associated with the chronic heart failure and hyperuricemia.

All four articles come from a range of disciplinary backgrounds and use a variety of models and concepts. Yet, the findings and analyses presented in all show that whilst ageing is increasingly evident on policy agendas, there are still significant challenges and obstacles ahead as we strive to build a global society for all ages. To conclude, all papers bring a range of expertise and insights to the issue. We do hope that you find this journal's content instructive and inspirational and trust that you will find all articles intellectually stimulating and welcome additions to your library.

Decline or successful ageing discourses: When local knowledge and dominant discourses intersect to shape personal stories of ageing

Made Diah Lestari[1], Christine Stephens[2], and Tracy Morison[2]

Abstract. The decline and successful ageing discourses are key contemporary discourses of ageing, which provide contrasting identities for older people. Although the successful ageing discourse now appears to be globally dominant in policy and beyond, people engagement with both these discourses varies by culture. People draw on discourses that are culturally available and legitimated in their contexts to produce ageing identities. This study aimed explores the interaction between local understandings and the dominant discourses of ageing, focusing on how these shape personal stories about ageing and the subject positions provided by the discourses among older people who need family care. Applying positioning-discursive analysis to the narrative data of older people and their family members who are co-resident in 11 multigenerational households in Bali, we identified culturally available discursive resources and their use in self-positioning and positioning by others. Four subject positions were identified, namely frail and vulnerable old person, disengaged and dependent family member, compliant patient, and unsuccessful ager. We found that both 'decline' and 'successful ageing' discourses were used to legitimate a positive identity for being an old person in decline. These findings contradict previous research from different socio- cultural context which described pressure and shame among older people who could not achieve successful ageing ideals. The policy implications and the importance of a life-course preventive approach to facilitate ageing well are discussed.

Keywords: ageing identities, cultural knowledge, decline discourse, positioning – discursive analysis, successful ageing.

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Introduction

Globally, ageing is framed by two dominant and oppositional discourses: the decline discourse and the successful ageing discourse (Fealy et al., 2012; Sandberg, 2013). The decline discourse is part of a more established and common-sense way of understanding the life course. It is essentially deficit focused, emphasising increasing physical frailty, mental deterioration, non-productivity, passivity, and dependency (Rowe & Kahn, 1987; van Dyk, 2016). In contrast, successful ageing emerged in response to the deficit view of the decline narrative, and highlights activity, autonomy, and responsibility (Caddick et al., 2018; Sandberg, 2013). From the early 1980s, scholars in ageing began pointing out the disadvantages of the decline discourse, which cohere around its deficit focus. They argued that discourse exaggerates the negative aspects of becoming old and categorises older people as non-productive and a social and economic burden, encouraging their dependency on public provisions (Rowe & Kahn, 1987; Townsend, 1981). Ultimately, this discourse has been shown to be disempowering, limiting possibilities in later life and contributing to social stigmatisation of older people (Caddick et al., 2018).

To challenge the decline discourse's deficit view—and its resultant ageist constructions, stigma, and disempowerment—the successful ageing discourse was developed to focus on the positive aspects of ageing (Rowe & Kahn, 1987, 1997). While the decline discourse imagines older people as passive and dependent, the successful ageing discourse facilitates identities centred around the importance of healthy life, social contribution, and autonomy. While The decline discourse envisages loss of agency, the successful ageing discourse sees the older person as agentic, in control of their body and life (Jolanki, 2009; McGrath et al., 2016). Given these positive associations, the notion of successful ageing has been seen as beneficial to older people and also to countries seeking to reduce the negative impacts of population ageing (Bülow & Söderqvist, 2014; van Dyk, 2014). It has therefore been promulgated widely through public policy and the media (Breheny & Stephens, 2019).

Although successful ageing discourse offers more positive social identities than the decline discourse, several disadvantages have also been highlighted. Chief among these is the construal of successful ageing as a personal responsibility and, in turn, the inability to achieve successful ageing is considered an individual failing (Bülow & Söderqvist, 2014). This discourse highlights individual choice, planning, and positive health-related behaviours, but without consideration of the context of older people's lives (Rowe & Kahn, 1997). What is not recognised is that successful ageing is only available to those who are *able to* maintain a healthy life. The physical and material resources needed to age successfully are not equally available to all older people (Breheny & Stephens, 2019). Successful ageing discourse can therefore have marginalising effects on those who do not meet its criteria, because they do not have the means to age successfully, such as ill or disabled older people, those already requiring care, and those with fewer economic resources (Baars, 2017; Stenner et al., 2011; van Dyk, 2014, 2016).

Both these dominant ageing discourses (decline and successful ageing) circulate in society and are available for people to draw on when making sense of their and others' experiences of ageing. These discourses act as resources for constructing contrasting identities for older people. However, understandings of ageing are also shaped by local cultural understandings of ageing (Andrews, 2009; Corwin, 2020). For instance, research indicates that some cultures focus on individual responsibility for maintaining well-being in later life (Bennett et al., 2017; Caddick et al., 2018; McGrath et al., 2016; Pack et al., 2019), while others emphasise interdependency and accept decline (Jolanki, 2009; Pfaller & Schweda, 2019). In doing so, people identify with discourses that are available within and legitimated by their socio-cultural context (Andrews, 2009; Liang & Luo, 2012). The decline and successful ageing discourses may co-exist, working in tandem with localised meanings to shape ageing stories (Calasanti, 2016). Accordingly, there are always diversity in people's understandings and accounts of ageing (Andrews, 2009). However, research has tended to study the decline or successful ageing discourses independently from one another, paying little attention to how they interact with localised cultural understandings of ageing, and to what effect.

Addressing these oversights, we consider the interaction of local understandings of ageing with dominant ageing discourses (decline and successful ageing) and explore how they are drawn on in personal narratives about ageing recounted by older Balinese people and the family members who care for them. The Balinese is a useful case example because the decline and successful ageing discourses coexist in Indonesian regional ageing policies (Lestari et al., 2021, 2022). The Indonesian Government has followed global trends by incorporating successful ageing ideals while also preserving cultural understandings of ageing and family, which largely cohere with the decline discourse (Lestari et al., 2022). Balinese consider old age (*bhiksuka/sanyasin)* as a life stage centred on disengagement from the mundane world to focus on the spiritual (Sukerni, 2018; Suteja, 2018). Older family members relinquish power and responsibility to the younger generation, remaining as dependents requiring family care (Geertz & Geertz, 1964).

In the context of Balinese cultural values, and Indonesian regional ageing policy, the ways in which the decline and successful ageing discourses are taken up in personal narratives on ageing was examined. The accounts of both older people and their families were included to illuminate how older people who need family caregiving are positioned by themselves and others, and to highlight the rights, obligations, and expected behaviours attached to those identity positions.

Methodology

The approach used was a narrative inquiry that draws on positioning theory (Davies & Harré, 1990) to investigate the socially situated production of identity (e.g., Bamberg, 2004; Currie et al., 2007; Taylor & Littleton, 2006). Smith and Sparkes (2008) have named this a 'storied resource' approach in which "people do things with words, and they do things with narratives…Through them they construct their own lives and those of others…Such accounts are certainly not private, and they do not yield accounts of unmediated personal experience… [and therefore] we need to analyse them in terms of the cultural resources people use to

construct them" (Atkinson et al., 2003, p. 117). Accordingly, both discourses and localised meanings are considered discursive resources that are available for narrating experiences and constructing identities (Bamberg, 2004).

In the storied resource approach, the concept of positioning is used to connect the social construction of identity to larger discourses (e.g., ageing discourses) and dominant cultural storylines (e.g., Balinese life stages, including *bhiksuka*/*sanyasin*) (Morison & Macleod, 2015). According to this perspective, people "draw from a cultural repertoire of available stories larger than themselves that they then assemble into personal stories. [In so doing] …constructing certain kinds of selves and identities in specific social contexts" (Smith & Sparkes, 2008, p. 19). In this way, people negotiate their identity in everyday talk, including the context of the research interview (Breheny & Stephens, 2019; Morison & Macleod, 2015). How people talk about and make sense of experiences of ageing depends on the available discourses in their social milieu (Allen & Hardin, 2001; Hardin, 2001). Moreover, culture legitimates specific discourses per others (Andrews, 2009). Hence, people take up the subject positions provided by discourses (Wetherell & Edley, 1999) that fit to the cultural expectation of ageing (Pfaller & Schweda, 2019).

In the context of ageing, individuals negotiate multiple and contradictory discourses in everyday life that make various, sometimes contradictory, positions possible (Allen & Hardin, 2001; Fealy et al., 2012). For example, decline and successful ageing discourses position older people in opposing subject positions: passive/active, dependent/autonomous, and frail/fit (Fealy et al., 2012). Each position includes certain rights, obligations, and expected behaviors (Breheny & Stephens, 2019), so that ultimately the discourse facilitates or constrains what can be said and done by older people (Katz, 2000).

Since individuals usually negotiate a position that provides a positive identity in a specific context and certain situation (Currie et al., 2007), certain subject positions can be taken up or resisted. Moreover, one is positioned by others *and* can actively position oneself; selves and identities are therefore conferred *and* actively claimed and contested (Breheny & Stephens, 2019; Smith & Sparkes, 2008). In this study, interviews with older people and their family members were used to identify culturally available discursive resources and their use in self-positioning and positioning by others.

Participants and data collection

Interviews with members of 11 Balinese multigenerational households were conducted by the first author. Participants were recruited through a hospital, community health services, and private practices. Among the participants, 14 individuals are the members of the first generation (grandmother and grandfather), 19 individuals within the second generation (son, daughter-in-law, and niece), and 16 individuals as the third generation (grandchildren and grandchildren-in-law) who were co-residents. All members of the first-generation experienced declining health and received care from the second and third generation.

Table 1. Structure of participating families

Family	1st generation	2nd generation	3rd generation	Primary caregiver	Health and mobility
1.	Grandmother (80)	Son (45) Daughter-in-law (43)	Two Granddaughters (21 and 17)	Son	Limited mobility due to decubitus ulcer
2.	Grandmother (72) Grandfather (75)	Son (44) Daughter-in-law (37)	Granddaughters (18)	Daughter-in-law	Frailty Cardiovascular
3.	Grandmother (75) Grandfather (75)	Son (53) Daughter-in-law (45)	Two Grandson (25 and 21)	Son	Frailty Hearing loss, Visual Acuity
4.	Grandmother (75)	Son[a] Daughter-in-law (42)	Granddaughter (18) Grandson (23)	Daughter-in-law	Diabetes Mellitus, Hypertension, Frailty
5.	Grandmother[b]	Son (54) Daughter-in-law[a]	Two Grandson (27 and 20) Granddaughter in-law (24)	Son	Parkinson Frailty Decubitus ulcer
6.	Grandmother (90)	Son (53) Daughter-in-law (53)	Granddaughter in-law (27)	Daughter-in-law	Diabetes Mellitus
7.	Grandmother (75)	Son (45) Daughter-in-law (40)	Grandson (23)	Son	Kidney diseases
8.	Grandmother (95)	Son (56) Daughter-in-law (52)	Grandson (20)	Daughter-in-law	Frailty
9.	Grandmother (80)	Son (49) Daughter-in-law (47)	Grandson (16)	Daughter-in-law	Obesity, Mobility disability
10.	Grandmother (80) Grandfather (81)	Son (42) Daughter-in-law (43)	Grandson (20)	Grandson	Kidney diseases Vertigo
11.	Grandmother (76) Brother (66)	Niece (44)	Granddaughter (17)	Niece	Vertigo Respiratory diseases Frailty

Note: [a] was not interviewed, [b] died after the initial meeting

The first author provided and explained information sheets describing the study to older people and their caregivers attending public healthcare facilities. In private practices health workers provided the information sheets to potential participants. Initial consent was followed by a meeting with the family members to explain the study. Private interviews were conducted with each family member after gaining consent from all family members.

The interviews were held at the participants' house or office or at the hospital. Narrative interviews involved inviting the participant to share their own stories about family caregiving, for example: "Can you tell me about your life and experience as an older person/caregiver in your family?" Thereafter, prompts were used to probe participants' stories. The anonymised interviews were transcribed in Balinese and Indonesian by the first author and a professional transcriber. Interview segments were back-translated for quality assurance.

Data analysis

The first author read and reread participants' interview transcripts in Balinese and the Indonesian language. She marked interview segments in which participants provided personal narratives about ageing and caregiving for an older family member, identifying how they those drew on the decline or successful ageing discourses. Identification of discourses involves noting patterned ways of talking represented by recurrent words, phrases, metaphors, imagery, and statements. For example, a decline discourse was identified by the use of words such as 'old', 'physically decline', 'dependent', 'emotionally vulnerable', 'limited mobility', 'frailty', 'high risk', 'memory decline', or 'deteriorated'. Whereas, the use of a successful ageing discourse, was identified through descriptors such as 'active', 'productive', 'healthy', 'autonomous', 'financial contributor', and 'socially active'. The authors then focused on positioning, exploring how older participants positioned themselves or were positioned by others within the identified discourses, which positions were taken up and resisted by older people, and how older people and their families viewed ageing from the vantage point of those subject positions.

Findings

The analysis demonstrated the dominant use of a discourse of decline in older people's stories about their ageing and caregiving experiences. However, the successful ageing discourse was also drawn upon so that decline and successful ageing discourses were often used together to construct participants' stories. This section describes how the decline and successful ageing discourses were drawn on by participants to position themselves or their older family members as older people in ways that accord with local cultural and medical knowledge. Overall, it was found that both decline, and successful ageing discourses were used to legitimate subject positions that allow older people to be passive, dependent, and accepting their limitations. Table 2 provides an overview of the positions that were identified within each discourse.

Decline discourse

Participants drew on a decline discourse in constructing their stories about ageing, living with illness, and family caregiving. Older people positioned themselves and were positioned by others as a person subject to decline both in their physical functioning and their contribution to society. According to this construction, physical and productive decline are inevitable.

Supporting the decline discourse, participants drew on local cultural knowledge of ageing and their health providers' advice to construct their narratives of decline, showing the role of culture and medical institutions in promoting the decline discourse among our participants. Older people were positioned/positioned themselves in two common ways: (1) as a frail and vulnerable person, and (2) as a disengaged and dependent family member. Each position is discussed in turn below.

Table 2: Subject positions, discursive functions, and effects

Discourse	Positions	Discursive function & effect
Decline discourse	1. Frail & vulnerable old person	Legitimates a positive position as a care recipient within the family and can allow person to secure ongoing care by younger family members without negative identity (burden, drain on family, slack etc.)
	2. Disengaged and dependent family member	
Successful ageing discourse	1. Compliant patient	Reinforces subject positions provided by decline discourse and allows older people to accept their limitations.
	2. Unsuccessful ager	

Frail and vulnerable old person

Drawing on a decline discourse, older people positioned themselves as frail and dependent, as shown in an extract provided by Tuniang who relates her physical decline to her age.

> Extract 1: My daughter-in-law always goes to Banjar for doing exercise and aerobic. I have never participated, I couldn't do physical exercise, I am old. I stay at home, never go anywhere. At home, I make offerings from coconut leaves. If I have strength and energy, I will finish making the offering. If I don't feel well, I take a rest and do nothing. I can't do anything about it, my condition has started to deteriorate. Sometimes I have an appetite, sometimes I don't (Tuniang, Family 3).

Rather than illness, old age is drawn on here to explain physical limitations and poor functioning. Tuniang positions herself as weak and physically frail (lacking strength and energy, needing rest). This construction of ageing aligns with the dominant Balinese cultural storyline in which the ageing person withdraws from society ("never participated", "stay at home, never go anywhere") and responsibilities ("Rest and do nothing). Here withdrawal is explained in terms of bodily decline and physical limitations (weakness, lack of energy, illness, deteriorating condition).

This positioning becomes more salient when older people are similarly positioned by the family. The extract below shows how a son positioned his mother as physically and emotionally vulnerable due to old age.

> Extract 2: For example, when my mom fell down, my brothers and sisters scolded Mom thinking that she was strong. When you are old, the stress level is high. If we respond angrily, she will be even more disappointed. I usually make her happy first, then I advise her to be careful in the future, so that she won't fall again (Tutde, Family 8).

Tutde draws on the decline discourse in constructing his narrative about ageing and care provision. The positioning of his mother as a vulnerable person requires Tutde to adjust the way he interacts with her, for example, providing a careful and gentle approach, in order to support her. The subject position not only determines his mother's rights, but also obligations and expected behaviors of the family members. Consequently, he criticises his siblings for failing to recognise and meet their mother's needs as an ageing person.

Beyond family, in the public domain, the medical institution legitimises the primacy of a decline discourse and educates participants accordingly. Medical discourse constructs ageing as a disease by associating old age with illness. For example, Pakde described how health personnel talked about his mother's illness:

> Extract 3: The doctor said the illness is because of her age, "She is already old". For me, she is only 76 and many people in her age are still active if they are healthy (Pakde, Family 5).

In this extract, Pakde describes how the doctor accounts for his mother's illness and inactivity as related to her age. This example shows how health personnel may use ageing as an explanation of ill health, excluding older people from the category of healthy people. The label of 'old' that the health personnel attached to older people's illness was also experienced by Mardika.

> Extract 4: My doctor said that stress causes illness. It is the major cause of every type of illness, especially when you think too hard about something. My doctor said, "You are already old, do not think too much unless you want to get S3: 'stress, stroke, and setra (cemetery)', don't you?". I think it is true (Mardika, Family 2).

Mardika repeats a joke told by his doctor about old age and stress which positions older people as susceptible to stress-induced illness and needing to take it easy. Agreeing with the doctor, he takes up a position of being "already old" and vulnerable. His extract shows the marginalization and exclusion of older people from being positioned as strong, active and resilient persons. They are expected to be passive by following the prescription of "do not think too much" if they want to avoid worsening their medical condition.

The position of being old ("already old" or "you are old") was repeated across data, both in older people's self-positioning and family and medical authorities' positioning of older people, in a way that was synonymous with physical decline, frailty, and vulnerability. The

physically declining subject position excludes older people from social categories such as a healthy fit person and one engaged fully in society. Some older people accepted this subject position, accepted the medicalised view of ageing as a disease, and conformed with expectations around the disengagement of older people.

The disengaging and dependent old person

Decline discourse includes expectations of disengagement from many social roles and responsibilities in later life, aligning with Balinese understandings. Participants understood ageing as a period of inevitable disengagement from active life while shifting responsibilities to the younger generations. Being dependent on the children and family is expected as one aged. For example, in the following extracts Luhtu and Sadhu explicitly use the words 'old age' to position themselves as someone who is disengaged from activities and dependent on family support.

> Extract 5: My life now, as I said earlier. I'm old, I can't work anymore. My life now depends on my sons and daughters-in-law. Since I'm no longer working, I don't hesitate to depend on my children, whatever they provide for me (Luhtu, Family 4).

> Extract 6: Now, I do not have anything to be worried about. I only think about eating and sleeping, nothing more than that. My children and grandchildren are already mature and independent (Sadhu, Family 6).

Both Luhtu's and Sadhu's accounts describe the shifting responsibility and reciprocity between older and younger generations in Balinese culture. As people age, it is time for them to be dependent on their successors. Their identity changes from provider to being provided for and from caregiver to care-recipient. Emphasising the normality of this ('I don't hesitate') in her account of family support, a disengaged and dependent subject position secures rights to family provision for Luhtu that she is able to depend on unreservedly and without guilt. Likewise, Sadhu perceives her later life as a detachment from responsibility which allows her to be a passive person who does not need to think about anything serious. This subject position is situated within the Balinese cultural ideal of older people as those who need care and local narratives of family caregiving that emphasise family obligations to care (blinded for review).

Family members also drew upon the decline discourse to position older people in terms of their role in the family. For example, a brother explains in the following extract how the older person in the family should be less dominant and more dependent as they age.

> Extract 7: She was interfering. She's never positioned herself as an ill and old person. She did not understand the current situation, still she always interferes. … But because her hobby is making offerings, she felt that she has to follow her hobby. Even though she does the work, but still this becomes a burden for our family […] As a parent, I am ready to lose my role. For example, for kitchen matters, whatever my daughter-in-law serves for my

> meal, I accept it. I am ready (Suandi, Family 11).

Suandi positions his sister as a troublesome older person who would not follow the cultural norms, therefore, creating trouble through her interference in family matters. He invokes the Balinese cultural norms (*bhiksuka*/*sanyasin*) that dictate the appropriate behaviour of older people as stepping away from important family roles and positions his sister as an older person who contravenes this norm, as she should now allow the younger generation to lead. Instead, his sister still tries to engage in the household affairs. Contrasting his sister's behaviour with his own, Suandi positions himself as passive and "ready to lose [his] role" of having a say in the household, relinquishing responsibility, and control to the younger generation. He invokes the cultural ideal of disengagement and dependency to describe his own position as one who conforms to culturally expected behaviours.

Participants frequently constructed old age in terms of decline and disengagement, both in terms of physical activity and social roles. They positioned themselves as functionally declining persons and did not expect to be as active and fully contributing as to their earlier lives. Responsibilities were shifted from the older to the younger generation. Disengagement and dependency in late life, which were prominent in the participants' narratives, are supported by Balinese cultural values regarding older people's roles in the family and society.

Successful ageing discourse

Although the decline discourse is dominant, successful ageing discourse is also publicly available for participants to draw on. This section demonstrates how successful ageing discourse was drawn on by some participants, mainly in discussions of health and healthy lifestyles. Most older participants did not position themselves as successful agers. Rather, they were positioned by others as responsible for their own health in older age. We identified two further common positions that are resourced by the successful ageing discourse: (1) compliant patients who participate minimally in successful ageing, and (2) unsuccessful agers.

Compliant patients with limited engagement in successful ageing

Participants drew on the successful ageing discourse when describing medical advice about needing to maintain vitality and social participation when experiencing illness. We provide two extracts that illustrate participants' adherence to medical advice that drew on successful ageing discourse. Although these participants were excluded from successful ageing by their actual physical health decline, they were expected to engage in exercise and social activities.

> Extract 8: "You have to do more exercise, 30 minutes per day, to keep healthy, and maintain your stent, that is my doctor's advice. So now, I go to the rice fields only to maintain my vitality. Maximum one hour, can't do more than that. After that, I immediately go home and take a shower. The goal is only to maintain my vitality. I do not think about revenue and loss. In fact, I lost a lot (Mardika, Family 2).

> Extract 9: I sit down nicely in Banjar and watch my friends do activities. I have never joined the exercise. My doctor told me that the importance of attending the community activity is for refreshing and meeting with friends. If I can do the activity, I do it, if I can't, I just keep quiet and watch. Because if I fall, no one can help me (Luhtu, Family 4).

Mardika describes how he follows the doctor's advice to participate in health promoting activity following surgery. However, emphasising that he engages in work "*only* to maintain vitality" and repeats that 'the goal is *only* to maintain my vitality'. He therefore positions himself as still withdrawing from the world of work and commerce by emphasizing 'I do not think about revenue'. Similarly, Luhtu describes her doctor's advice about maintaining social inclusion in old age, which is part of the successful ageing discourse. Her extract shows how successful ageing discourse has penetrated the community and individual levels via health personnel and the community programs. Like Mardika, Luhtu follows her doctor's advice, while making it clear that she is not able to participate fully because of her physical decline.

For both Mardika and Luhtu, by focusing on the main goals of successful ageing (maintaining vitality and social engagement), they have positioned themselves as older people who obey the advice of their doctors, while at the same time, recognizing and accepting physical decline. These extracts demonstrate how successful ageing discourse is publicly available and provides expected behaviors that are articulated in medical advice and community programs. They show that while medical advice included engagement in successful ageing activities, participants accept their productive or physical limitations.

Unsuccessful agers

Participants sometimes used the successful ageing discourse, particularly its construction of unhealthy lifestyles, to make sense of their illness rather than using the decline discourse and its notion of 'old age'. In this section we demonstrate how successful ageing discourse, especially related to healthy ageing, was drawn on in participants' narratives. The emphasis on personal responsibility for healthy behavior as investments in successful ageing can lead to self-blaming and blame by others when older people are seen as ageing unsuccessfully. Successful ageing discourse emphasises personal responsibility for staying physically fit in later life. and participants drew on these constructions when they referred to being 'naughty', 'snacking too much', or their poor 'eating habits' as reasons for their declining health and drew on health promotion discourse to explain their present health. For example:

> Extract 10: Smoking is the cause. I quit smoking after I got a heart attack. I was hospitalized in the ICU for three days. I was naughty, I smoked, drank too much coffee, gambled, and enjoyed cockfighting. I joined cockfighting everywhere. Because of my illness, I stopped cockfighting, quit smoking, did less travelling. In the past, before my illness, I joined cockfighting in the morning and gambled at night. Non-stop (Mardika, Family 2).

In constructing his illness narrative, Mardika described his previous "naughty" lifestyle and attributes his subsequent heart attack to smoking and other poor ("naughty") health habits. He therefore positions himself as personally responsible for his poor health. Mardika's extract provides an example on how the successful ageing discourse works with health promotion discourse to construct illness as personal failure.

Other family members also drew on the successful ageing discourse positioning their older family members as unsuccessful agers. References to medical professional's advice lent authority to this positioning. Older people were therefore blamed by others for their poor health (becoming "overweight", frail, and diabetic) because of their bad habits (e.g., snacking, unhealthy food consumption) and not monitoring their health practices. Older participants themselves also recounted how others positioned them in this way. For example, Luhtu recalled her conversation with her doctor who drew on past unhealthy lifestyle to make sense of her current chronic illness.

> Extract 11: My doctor asked me, "Grandma you used to be a seller, right?" I was surprised how my doctor knew what my previous job was. My doctor later said that most sellers have diabetes because they snack too much. I used to be like that, I bought whatever I wanted. There were many food sellers around me, and I had money to buy them (Luhtu, Family 4).

Here, Luhtu accepts the doctor's explanation about the cause of her illness and so takes personal responsibility for her 'bad' behaviour and its consequences, saying "I used to be like that".

In contrast, for the younger generation the successful ageing discourse was used to construct healthy ageing as a lifetime investment and result of a healthy lifestyle.

> Extract 12: That's why I always pray, I don't dare to be fat, because I don't want to be like my mother-in-law who can't walk. If possible, I want to be autonomous. If it is possible, I don't want to get sick, that's all. But by staying up late until 12 (midnight) my husband has started to worry because it is not good for health (Ayas, Family 9).

In extract 12 Ayas positions her mother-in-law as a dependent older person because she had failed to maintain a healthy life when she was younger. She draws on the successful ageing discourse to emphasize autonomy (rather than dependence), which counteract traditional Balinese ideals of old age rooted in the decline discourse. She constructs poor health behaviours as a barrier to achieving health and successful ageing, which then compels her toward self-regulation (i.e., monitoring weight).

The co-existence of successful ageing and decline discourses in the participants' accounts provides insights into the multiple subject positions that must be negotiated by older people when they position themselves or are positioned by others within these two discourses.

However, although some older participants did draw on the successful ageing discourse, it did not necessarily change their identity. In fact, successful ageing discourse was often used to reinforce the subject positions provided by the decline discourse. Extracts were used from Mardika and Luhtu as examples of both discourses used at different times for different discursive purposes. Both Mardika and Luhtu used decline and successful ageing discourses in their stories about ageing. Drawing on decline discourse, they positioned themselves as older people who are frail, disengaged, and allowed to be dependent on the younger generations. Drawing on successful ageing discourse, they positioned themselves as compliant patients, while maintaining a declining identity.

Discussion

Participants in this study mainly drew on a decline discourse to construct narratives about ageing and family caregiving. Beyond their own experience of bodily decline, the local culture, family, and medical institutions contributed to the construction of an inevitably declining older person. This construction fits with Balinese local knowledge on family caregiving in which dependency and disengagement is the accepted default position for older people (Lestari et al., 2022). It is also important to note that healthcare provider often use 'old age' to explain older people's health which is an aspect of the medicalisation of ageing (Estes & Binney, 1989; Robertson, 1997). The danger here is that old age is constructed as a process of decremental decline which must be controlled by biomedicine (Estes & Binney, 1989), and structured into social institutions and daily life (Calasanti, 2016).

The findings contradict previous research which described pressure and shame, felt by older people when positioned as a frail and vulnerable old person (Bennett et al., 2017; Caddick et al., 2018; McGrath et al., 2016; Pack et al., 2019; Phoenix & Smith, 2011). From the perspective of Balinese cultural mores of family caregiving, self-positioning or being positioned as a declining older people is not necessarily negative. Drawing on decline discourse legitimates dependency, in which older people's need for help has positive connotations and there are no demands for older people to keep active and productive (Jolanki, 2009). The findings have been supported by many studies which reveal situations in which decline is seen as a meaningful process (Corwin, 2020), old age is associated with privilege (Isopahkala-Bouret, 2017), and disengagement in late life is accepted as a sign of wisdom (Katz, 2008). Seeing illness and decline as part of a natural ageing process has also been found to facilitate older people's acceptance of poor health conditions (Hudson et al., 2015).

At policy level, the decline discourse and its subject positions are supported by regional initiatives that promote the key role of family in providing care for the older generation. The subject positions provided by the decline discourse allow older people to be dependent on their family in meeting their needs. From the family's perspective, the decline discourse strengthens the obligation to care. However, the ageing population in Indonesia does provide challenges, both for family and the government in meeting future care needs which has led Indonesia to include successful ageing ideals in regional ageing policies (Chomik & Piggott, 2015; Do-Le & Raharjo, 2002; Mi et al., 2018; Niehof, 1995). Successful ageing is believed to be a solution for decreasing the burden experienced by the country in financing the Indonesian

older generation (Ananta, 2012). However, despite these potential advantages, successful ageing also has limitations.

The aim of medical advice that draws on successful ageing discourse.is to increase healthy life expectancy and older people's quality of life (Calasanti, 2016). While older people in this study adhere to this advice, they are also aware of their actual physical limitations. Some studies conducted in clinical populations of older people found similar patterns (e.g., Caddick et al., 2018; Hudson et al., 2015). Caddick et al. (2018) highlighted the dangers of 'life-as-normal' successful ageing advice for older people with illness and disabilities where it, provides stress and pressure. They suggested activities that offer less physical demand and focus more on increasing social participation among older people. A focus on personal responsibility for health and financial consequences from a successful ageing perspective also means that physical decline may be regarded as a personal failure (Baars, 2017; van Dyk, 2014). The findings show that illness and incapacity can result in blaming ourselves or others.

Drawing on successful ageing discourse that emphasises preventive health behaviours among the younger generation may be more positive. Certainly, the younger generation in this sample drew on this discourse in constructing their future ageing. A preventive health system is considered by public health proponents to be a good solution to decrease health expenditure in the long run (Agustina et al., 2019; Biggs, 2014). Successful ageing requires adequate financial, social, cultural, and physical resources (Jolanki, 2009) and a life-course approach, which is integrated with several policies (e.g., health, educations, economics, labour) and promoted earlier in the human development stages (Walker, 2013). From a future oriented perspective, a successful ageing approach may provide more Balinese and Indonesians in general with an opportunity to age successfully in the longer term.

Conclusion

For Balinese older people and their families, both 'decline' and 'successful ageing' discourses were used to legitimate a positive identity for an older person who needs care and support. This study has demonstrated ways in which ageing discourses interact with local knowledge to provide valued identities. While a decline discourse is supported by the Balinese culture, family, and medical institutions, successful ageing has been promoted through medical advice and community programs. The two discourses were generally drawn upon to promote a culturally appropriate identity as an older person who is expected to physically decline, should resign from family responsibilities, and deserves care and attention from their children. Successful ageing was drawn upon by the younger generation to resist a future in which they declined physically like their parents and to include health promoting behaviour when they talked about their own future ageing. Rather than focusing on such successful ageing ideals which affects the behaviour of older people who need care now, it will be fruitful to integrate a preventive approach across social policies to lifespan development that facilitates ageing well for future generations.

Limitations

It is important to note that the participants in this study were all older people (and their families) who were recruited from medical centres and accordingly were receiving medical attention for physical illness. Therefore, having a bearing on the kinds of stories participants told. A cohort of healthy older people may have engaged differently with dominant ageing discourses and local narratives. Further study that includes stories from older people who are functioning well, will deepen the understanding of the primacy of decline discourse in the context of Balinese culture and the influence of material and social resources in ageing well. In addition, it could be valuable to consider healthcare worker's perspectives in greater depth too. While some examples were discussed of subject positioning by health personnel these were recounted by the participants and not first hand. Further studies are needed to understand how discourses of decline and successful ageing are integrated into the medical approach and are part of the relationships between patient and doctor and what implications this has for older people to receive family care and live well.

Finally, the data set was limited to individual interviews, which has both advantages and drawbacks. An advantage is that of probing and discussing personal experiences, which participants might be reluctant to do in other forms of data generation, such as focus groups or family interviews. However, other forms of data, such as, focus group discussions and conversations are able to capture everyday interaction between older people and others, so that interactive and reflexive positioning may be examined in more everyday situations.

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Family support related problems of older women living in Below Poverty Line (BPL) families in Lucknow City of Uttar Pradesh, India

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Abstract. The family is considered as the ideal scenario in providing care towards older persons. This is considered as the ideal treatment. It is within Indian ideal where family members are deeply attached towards their older members and leave no stone unturned in catering to their needs. It is the duty of each and every member of the family that they give sufficient time and listen to the needs of their older members. It is quite disturbing to say that because of the disintegration of joint families, a drastic decline in family support has occurred. The objective of the study was to understand the problems of familial support suffered by older women living in Below Poverty Line (BPL) families in Lucknow City of Uttar Pradesh, India. This study is based on primary data, where a diagnostic research approach has been used. Due to the target population being divided into different sub-groups and scattered in various geographical areas, a multi-stage sampling was used. In the first stage, among the 110 wards of the Lucknow, 20 wards were selected, and later in second stage, disproportionate stratified sampling method was used in selecting 10 women. In this manner, a total of 200 older women were selected. The collection of data had been done through the structured interview schedule. Major finding of the study shows that the old women living in BPL families are encountering higher levels of problems related to familial support. They are not receiving the appropriate help and cooperation from their family members.

Keywords: family support, problems, older women, BPL families.

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Introduction

At every stage of their life, older persons feel the need of familial support. However, at present conspicuous absence of such help and support is being witnessed. The older members of the family are facing a lack of sympathy from their kinsmen and their condition is becoming quite pathetic. The first and foremost characteristic of an ideal treatment of older persons in India is that their family members are deeply attached towards them and leave no stone unturned in catering to their needs (Gupta, 1998). This is also one of the positive aspects of the Indian idea of a good family. It is the duty if each and every member of the family that they give sufficient time and listen to the needs of their older members. It is quite disturbing to say that because of the disintegration of joint families, a drastic decline in family support has occurred. It is more prominent in the families who are in the BPL category where there are older members and where there is no proper source of income along with an uncertainty of employment (Lal, 2008).

Current government regulations indicate that the annual income limit for BPL families residing in rural areas is Rs 19884 and for those living in urban areas is Rs 25546. Moreover, if a family does not possess land less than 2 acres, a pukka house, colour T.V., refrigerator and a telephone as well as no proper employment, then such families are placer in BPL category (Ojha & Ojha, 2015). Older people living in BPL families need more family support in old age but at present they get this support negligible due to which their status in the family is of low type. In this regard, many studies have found that they do not get enough family support.

Sigling and Sitopu (2017), conducted an individual study on family support in the independence of older people in daily activities in the Indonesian city of Medan. The study revealed that there was a relationship between family support and daily activities carried out by older people. Most of the older people reported that the family supports them to live their lives with dignity. Thus, in conclusion, it can be said that the better the support of the family to the older member, the more freely they do their daily activities and are happy. Similarly, Sharma (2018) on the status of family support in long-term palliative care of the older persons, further clarified the United Nations survey that 62.1 percent of older people do not get proper care. The survey findings found that 52.4 percent of older people do not get family support. About 65 percent of the older persons reported that their social affiliation with the people is decreasing and their needs are being ignored by the family and society. In the above studies, it has been found that older persons get negligible family support and family members do not give them any importance in the family.

Objectives of the study

(1) To study the problems of familial support suffered by older women living in BPL families and to study the variables that influence these problems.
(2) To suggest solutions related to the problems of familial support faced by older women living in BPL families.

Methodology

This study, conducted a quantitative approach, based on primary data which looks at the problems of familial support faced by older women living in BPL families, and probable social work intervention has been suggested on the basis of the finding occurred. Therefore, in this study a diagnostic research design was used. As the universe was divided into different sub groups and scattered in geographical areas, therefore multi stage sampling were used in the first stage among the 110 wards of the Lucknow 20 wards were selected and then after in second stage using disproportionate stratified sampling method 10 women were selected. In this manner, a total of 200 older women were selected. In each word, Tipped Random Number Table has been used to select the desired sample. In this manner, a total of 200 older women were selected. The collection of data had been done through the structured interview schedule. During this study, 16 major aspects had been identified in relation to the issue of familial support and 16 aspects were given using three Point Scale Responses. Following this, absolute scoring was done and a Specially Consolidated Scale was constructed by the researcher, through which an analysis of the respondents' problems related to total familial support had been examined.

To understand and simplify the collected data, statistical tests such as mean deviation and standard deviation had also been carried out. In order to check the reliability of Specially Developed Consolidated Scale, Split Halves Method and Cronbach's Alpha Formula had been used whose value was found to be 0.959 which recognizes well the Consolidated Scale.

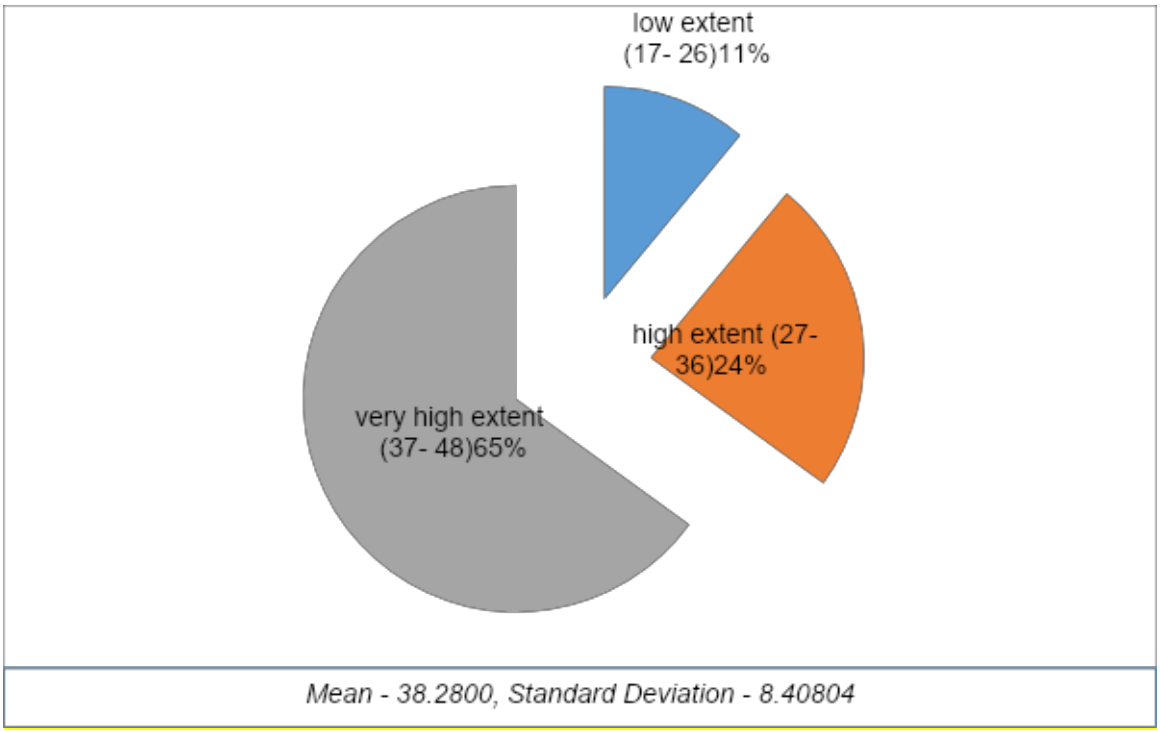
Results and Discussion

Figure 1 clearly reflects approximately two third 65.0 percent respondents were facing problems related to familial support to very high extent whereas, on the other hand, nearly one fourth 24.0 percent of respondents were facing this to high extent and remaining 11.0 percent respondents were facing it to low extent. The statistical test of scores on the scale of family support problems showed that the mean of total family support problems was found to be 38.2800 and the standard deviation was 8.40804. On the basis of the obtained facts, it can be proved that in terms of overall family support problems of the respondents, on an average 38.2800 (± 8.40804) scores received to the measurement scale which also falls in the category of problems in family support to very high extent. This situation creates the concern for the old women as it shows the vulnerable situation of them even in the family.

The better familial support given to older members in their old age is culture of India and also displays a healthy condition of old person in the family as well as in the society. Older persons have been receiving a lot of love and proper attention in joint families since ancient times but in present time, joint families have encountered disintegration and due to the ongoing trend of nuclear families, the older members have been encountering a lot of major changes (Ahuja, 2016). The results of the study show that most of the respondents are facing problems related to familial support at a very high level which signifies their pathetic condition. Because of the poor financial condition of the family, the personal needs of the respondents aren't getting fulfilled. The attitude of the family members towards the respondents is becoming careless.

In this way, the respondents are forced to live a life of contempt and insult in their own family. Because of constant negligence and unsatisfactory familial support, the respondents have become hopeless.

Figure 1: Problems of respondents regarding familial support



If we are to look at the findings as represented in table 1, with the first aspect, titled *"The family does not support me in fulfilling personal needs*, at least 59.0% respondents highly agreed with this statement, whereas only 13% respondents agreed, while more than 1/4th, 28% of the respondents did not agree. It is clear from the data collected that most of the respondents' family members were not helping them in fulfilling their personal needs. The respondents try to fulfil their needs by doing menial jobs.

In relation to the second aspect of table 1, titled *"Due to old age the family members consicder me as burden"*, 50% respondents highly agreed with this statement, whereas 1/3rd 33% respondents agreed, and only 17.0% respondents were found not to agree. From the data collected, it is highlighted that most of the respondents are considered a burden on the family due to their old age and because they are dependent on the family for their personal needs. Moreover, due to the poor financial condition of the family, the family members are not taking proper care of the respondents.

In the third aspect of table 1 *"The family members use indescent language towards me"*, nearly half of 47.0% respondents highly agreed with this statement, approximately 1/4th 22.0% respondents agreed while nearly 1/3rd 31.0% respondents were found not to agree. In this way,

it becomes clear from the results of the study that most of the respondents were of the view that they were subjected to condemnable treatment by their family members which portrays their sorry state in their family.

In the fourth aspect of table 1 titled *"Due to old age family members mistreat me"*, nearly half 47% respondents were agreed to this statement, with 26.0% respondents highly agreeing, while more than 1/4th 27% respondents did not agree. It is clear from the study that most of the respondents are subjected to ill treatment by their respective family members. Under the category of ill treatment neglecting the needs of the family members because of the notion that they are a burden on the family due to their old age has been included; by beating them, abusing them or insulting them.

In context of the fifth aspect of the table, titled *"Not getting the love that was given to me by my family members prior to my old age"*, nearly 2/3rd 62.0% respondents highly agreed with this statement, while 35.0% respondents agreed, and only 3.0% respondents did not agree. From this study, it can be inferred that most of the respondents were not getting the love used to receive from their kinsmen prior to their old age.

In context of the sixth aspect of table 1 titled*"Family members do not give me the same respect that I used to receiveearlier before old age"*, approximately 2/3rd 64% respondents highly agreed with this statement, whilst nearly 1/3rd 32.0% respondents agreed, and only 4.0% were found not to agree. Hence, from the result of the study, it can be inferred that most of the respondents were not getting the desired respect from the family members because of old age and that the family were also humiliating them.

In context of the seventh aspect of table 1, titled "*Due to old age family members are developing a negative attitude towards me*", more than 1/3rd 36.0% respondents agreed with this statement, whilst 33.0% respondents highly agreed and nearly 1/3rd 31.0% respondents did not agree. From the data collected, it was found that most of respondents are of the view that the negativistic attitude of the family members towards them was so because of their old age and that is the cause of their pathetic state in the family. Hence, it can be said that because of increasing age, dependence of the respondents on the family members is also increasing. As a result, the attitude of the family members towards them was worsening.

In context of the eighth aspect of the table 1, titled "*Due to old age my position within the familybecoming inferiror*", nearly half 46% respondents agreed with this statement, whilst approximately 1/3rd 30.0% respondents highly agreed, and 1/4th24% respondents were found not to agree. Hence, from the data collected, it becomes clear that due to the old age of most of respondents, they are unable to perform their necessary tasks and are completely dependent on their family for the fulfilment of their needs.

Table 1: Miscellaneous problems of respondents regarding familial support

S. No.	Statements	No Opinion	Disagree	Agree	Highly Agree	Total
1.	*The family does not support me in fulfilling personal needs.*	00	56	26	118	200
		00.0%	28.0%	13.0%	59.0%	100.0%
2.	*Due to old age the family members consicder me as burden.*	00	34	66	100	200
		00.0%	17.0%	33.0%	50.0%	100.0%
3.	*The family members use indescent language towards me.*	00	62	94	44	200
		00.0%	31.0%	47.0%	22.0%	100.0%
4.	*Due to old age family members mistreat me*	00	54	94	52	200
		00.0%	27.0%	47.0%	26.0%	100.0%
5.	*Not getting the love that was given to me by my family members prior to my old age.*	00	6	70	124	200
		00.0%	3.0%	35.0%	62.0%	100.0%
6.	*Family members do not give me the same respect that I used to receiveearlier before old age.*	00	8	64	128	200
		00.0	4.0	32.0	64.0	100.0
7.	*Due to old age family members are developing a negative attitude towards me.*	00	62	72	66	200
		00.0	31.0	36.0	33.0	100.0
8.	*Due to old age my position within the familybecomining inferiror.*	00	48	92	60	200
		00.0	24.0	46.0	30.0	100.0
9.	*Disobedience shown by family members towards me because of old age*	00	22	50	128	200
		00.0	11.0	25.0	64.0	100.0
10.	*Due to old age, I am not taken care of in the family as before.*	00	4	64	132	200
		00.0	2.0	32.0	66.0	100.0
11.	*Due to old age, the family members donot give proper time.*	00	2	60	138	200
		00.0	1.0	30.0	69.0	100.0
12.	*Due to old age, family members do not share their personal things with me.*	00	00	42	158	200
		00.0	00.0	21.0	79.0	100.0
13.	*Family members do not take proper care of me in case of illness.*	00	14	74	112	200
		00.0	7.0	37.0	56.0	100.0
14.	*In the event of an illness, I do not receive anyfinancial aid for medical treatment.*	00	30	70	100	200
		00.0	15.0	35.0	50.0	100.0
15.	*I am not included in the decisions taken in the family.*	00	20	58	122	200
		00.0	10.0	29.0	61.0	100.0
16.	*they dont consult me for some special work in family.*	00	14	56	130	200
		00.0	7.0	28.0	65.0	100.0

In the Ninth aspect of table 1, titled *"Disobedience shown by family members towards me because of old age"*, nearly 2/3rd 64.0% respondents highly agreed with this statement, whilst nearly 1/4th 25% respondents agree, and only 11.0% respondents did not agree. It is clear from the obtained facts that due to old age, most of the respondents' family members do not listen to them because their rights and duties have also changed along with the decline of physical strength in old age. Before the impact of globalization on families, old aged use to get importance in all the spares of family and household, today most of the family members do not include them in any of their decisions and ignore them.

In the context of the tenth aspect of table 1, titled *"Due to old age, I am not taken care of in the family as before"*, more than 2/3rd 66.0% respondents highly agreed, and 1/3rd 32.0% respondents agreeing with this statement. In this way, from the result of the study it can be inferred that in changing environment, joint families are also changing. Noticeably and at the same time, due to increasing age, respondents feel that they are not being given the same treatment given by family members as they did before.

In the context of the eleventh aspect of table 1, titled *"Due to old age, the family members do not give proper time*", more than 2/3rd 69% of the respondents highly agreed with this statement, whilst nearly 1/3rd 30% respondents agreed, and the number of respondents disagreeing was nearly zero. Hence, through this study, it becomes quite clear that due to the progressing age of the respondents, the family members are not at all taking interest in giving proper care to the respondents and also because of pathetic family conditions, the family members are busy in their own work.

In the context of the twelfth aspect of table 1, *"Due to old age, family members do not share their personal things with me"*, more than 3/4th 79.0% respondents highly agreed, and nearly 1/4th 21.0% agreed with this statement. Hence, from the study it becomes quite clear that the respondents were feeling neglected in the family because their family members were not at all taking interest in sharing their personal thoughts with them.

In context of the thirteenth aspect of table 1, titled *"The Family members do not take proper care of me in case of illness"*, more than half 56.0% of respondents highly agreed with this statement, whilst 1/3rd 37.0% respondents agreed, and only 7.0% respondents did not agree. Generally, due to physical weakness in old age, older persons become vulnerable to a lot of diseases, and because of this, they need special care and love from their family members, which was normally given to older members in joint families (Sharma, 2015). But on looking at the findings of the study, it becomes clear that the respondents are not getting the desired love and support from the family members.

In the context of the fourteenth aspect of table 1, titled *"In the event of an illness, I do not receive any financial aid for medical treatment"*, half 50.0% respondents highly agreed with this statement, whilst more than 1/3rd 35.0% respondents agreed, and only 15.0% respondents did not agree. Hence, it becomes clear from the study that the respondents do not get the desired financial help from the family members for the treatment of their ailments.

In context of the fifteenth aspect of table 1, titled *"I am not included in the decisions taken in the family"*, nearly 2/3rd 61.0% respondents highly agreed with this statement, while more than 1/4th 29.0% respondents agreed, and only 10.0% respondents did not agree. Normally, the senior most member of the family had the privilege of participating in discussions related to family matters and his decision was considered final. His authority was cordially accepted and respected by the other family members. However, fast forward to present time, due to change in societal and familial relationships, this notion is diminishing. Hence, from the study, it becomes clear that older persons are no longer considered important and are excluded from discussions relating to familial matters.

In context of the sixteenth aspect of table 1, titled *"They dont consult me for some special work in family"*, nearly 2/3rd 65.0% respondents highly agreed with this statement, with more than 1/4th 28.0% agreeing, and only 7.0% respondents disagreeing. The opinion/consultation of the older family members in the family has always been given priority from the point of view of family security. Yet findings from this study indicate that, no opinion is taken from most of the respondents for any particular task in the family.

Table 2: Relation between the marital status and total familial support related problems of respondants

Marital status	Total familial support related problems of respondants			Total
	To some extent (17- 26)	To high extent (27- 36)	To very high extent (37- 48)	
Married	16	28	28	72
	22.2%	38.9%	38.9%	100.0%
Widow	6	20	100	126
	4.8%	15.9%	79.4%	100.0%
Abandoned	0	0	2	2
	.0%	.0%	100.0%	100.0%
Total	22	48	130	200
	11.0%	24.0%	65.0%	100.0%

Through Table 3, it becomes clear that 77.8% respondents suffer from problems related to familial support at both high and medium levels whereas 95.3% widow respondents suffer problems related to familial support at both high and medium levels,while in comparision to this, problems related to familial support are at very high level among abandonedrespondents.

It is quite sad to note that abandoned women and widow's have still not got the desired love and care in the family as well as in the society till date. Through the results collected from the study, it can be concluded that widows and abandoned women, face a lot of problems related to familial support and they are looked upon as being inferior in the family.

Conclusion

It can be conclusively said that the old women living in BPL families are encountering higher levels of problems related to familial support. They do not get appropriate help and cooperation from their family members. Their personal needs are not catered for and since they do not have any contribution in the family income, they are considered a burden on the family. They do not get the love they used get earlier from the family members and the members display unfavourable behaviours towards them especially the use foul language. The family members have a negativistic attitude towards them and do not take proper care of them. Even when the older women are unwell, the family members do not bother to help them or bear their medical expenses. They are excluded in discussions and decisions related to family matters. The members do not ask for their advice in family matters.

Proposed social work Intervention and related suggestions:

Welfare of older persons is known as an important filed of social work in which the challenges faced by older persons are studied. The following are the possible suggestions and possible social work intervention:

1. Through social work intervention, problems and adversities faced by old women in BPL families can solved. In this respect, primary methods of social work such as casework and group work can be used for sensitizing people towards the needs of old women living in BPL families and societies. Apart from this, through massive public awareness, misconceptions related to old widows and women can eliminated to a large extent.
2. For solving problems related to familial support, family therapy can be used for some particular families. Family therapy is a type psychological counselling which can help the family members in resolving conflicts arising within the family. This counselling can be given a psychiatrist, solution-oriented social worker or licensed doctor. Family support problems of older women living in BPL families can be solved through family therapy.
3. For solving financial problems related to older women in the BPL families and tackling the issue of negligence of older women, governmental and NGOs should also intervene. For this task, the secondary method of social work i.e., social welfare administration should be used for framing separate policy-based directives and welfare schemes aimed at ameliorating the status of widows and older women.
   The following suggestions have been included on the basis of the results collected:-
   1. Since ancient times, discarded women and widows have been through an eye of contempt. Regretfully this still is present where no serious change has been witnessed in this regard. Today, the mentality of the society and people need to be challenged. For this, issues surrounding gender such as women education, and women empowerment must be emphasized upon. Awareness should also increase about widow-remarriage and the act based on this.
   2. Steps should also be taken at the governmental level to ameliorate the condition of older women living in BPL families and who are facing problems related to familial

support. For this, there is a need to framing policy-based directives separately for older widows living in BPL families who are facing ill-treatment. Welfare schemes should also be made available for the older widows (Insa & Sivach, 2016).

3. To eradicate the problems related to familial support faced by older women living in BPL families, moral values and ideals should and must be inculcated in children at early age, so that they learn to respect older women and treat them with extreme love and care.
4. Self-employment should be arranged for those older women living in BPL families who are desirous of working and who are also physically strong so that they are able to earn some money for bearing their medical expenses instead of depending on other family members for financial assistance and at the same time, contribute in the family income.

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Connective tissue growth factor in very old patients with coronary artery disease

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Abstract. The main objective of this study was to determine the concentration of connective tissue growth factor in the blood of CAD patients in old age and to establish its clinical significance in various pathologies. This cross-sectional study enrolled patients suffering from coronary artery disease (CAD) with mean age of 87.8 years (75-96 years). The control group consisted of 12 healthy young people (mean age-22.9 years). The blood concentration of connective tissue growth factor (CTGF) was determined by enzyme-linked immunosorbent assay. The mean concentration of CTGF in CAD patients was 357.2 pg / ml, in healthy individuals - 1076.7 pg / ml ($p = 0.07$). In patients with congestive heart failure CTGF concentration was significantly higher than in patients without heart failure ($p = 0.001$). Negative correlation was registered between CTGF levels and systolic ($r = -0.25$; $p = 0.1$) and diastolic ($r = -0.36$; $p = 0.02$) blood pressure. In patients with pneumosclerosis median CTGF concentration reached 190.7 pg/l, without it - 34.7 pg/ml ($p = 0.03$). Significant inverse correlation was found between CTGF and glucose ($r = -0.34$; $p = 0.03$), total cholesterol ($r = -0.49$; $p = 0.002$) and LDL cholesterol ($r = -0.40$; $p = 0.01$) concentrations.

Keywords: connective tissue growth factor (CTGF); fibrosis; coronary artery disease; older persons.

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Introduction

Connective tissue growth factor (CTGF, CCN2) is a small, cysteine-rich extracellular matrix protein. CTGF regulates a variety of cellular functions, including proliferation, migration, adhesion, differentiation and synthesis of extracellular matrix proteins in cells of various types, and also participates in more complex biological processes of angiogenesis, chondrogenesis, osteogenesis, wound healing, fibrosis and oncogenesis. Increased expression of CTGF is observed, notably, in pathological conditions associated with fibrosis (Arnott et al., 2011; Ponticos, 2013).

CTGF plays a role in some pathological processes in the cardiovascular system, including heart failure, cardiosclerosis and scarring after myocardial infarction (Ponticos, 2013). Increased vascular CTGF expression is associated with atherogenesis, apoptosis of smooth muscle cells and the formation of vascular aneurysms, as well as aortic dissection or rupture (Cicha et al., 2005; Cicha et al. 2006; Meng et al., 2014; Sachdeva et. al., 2017). CTGF can participate in the development of cerebral microbleeds induced by arterial hypertension due to the violation of the integrity of the vascular wall (Ungvari et al., 2017). CTGF plays a role in regulating the stability of atherosclerotic plaques and can stimulate the migration of monocytes in them (Ponticos, 2013). In one of the largest clinical studies of CTGF involving 1227 patients with cardiovascular pathology, it was found that an increased level of this factor in the blood increases the risk of new cardiovascular diseases and mortality from all causes (Gerritsen et al., 2016).

It was also found that CTGF acts as an important regulator of skeletogenesis. Correct regulation of CTGF expression is necessary for the normal course of the processes of mesenchymal condensation, chondrogenesis and osteogenesis (Arnott et al., 2011). In addition, CTGF is actively involved in the formation of cartilage. CTGF significantly increases the production of cartilage matrix proteins, and also stimulates the proliferation and differentiation of chondrocytes (Kubota & Takigawa, 2014). CTGF increases, in addition, the adhesion of chondrocytes to fibronectin and angiogenesis (Itoh et al., 2013). The results of experimental studies indicate that CTGF is a key regulator of the formation of the extracellular cartilage matrix. The content of CTGF also increases markedly in numerous pathological conditions accompanied by fibrosis, in which excessive collagen production is stimulated. It has been shown that the content of CTGF is significantly reduced in dermal fibroblasts (the main collagen-producing cells) of people over 80 years old. In contrast, CTGF overexpression stimulated the synthesis of type I procollagen (Quan et al., 2010).

Experimental data indicate that aging is associated with increased expression of CTGF both in blood vessels and in the heart, which may contribute to age-related remodeling of the extracellular matrix (Ungvari et al., 2017). By decreasing the expression of some types of microRNA, CTGF is involved in age-related changes in cardiomyocytes and vascular wall cells (Ungvari et al., 2017). An increased expression of CTGF was also found in "aging" fibroblasts (Jun & Lau, 2017). In connection with these data, CTGF is sometimes considered as a possible marker of aging processes. However, there are practically no clinical studies of CTGF in older people and centenarians. The sporadic and conflicting data published in the

medical literature served as the basis for our attempt to study the growth factor of connective tissue in older patients.

The main objective of this study is to determine the concentration of connective tissue growth factor in the blood of CAD patients in old age and to establish its clinical significance in various pathologies in this group of patients.

Methodology

This work was a cross-sectional study performed at the clinical base of the Hospital for War Veterans No. 3 (Moscow). The study enrolled 50 people; 38 of them suffered from coronary artery disease and constituted the main group, and 12 healthy young people (on average 22.9 years) without coronary artery disease entered the control group. Diagnosis of coronary artery disease was based on: history of myocardial infarction, percutaneous coronary interventions or coronary artery bypass grafting in the past, as well as on coronary angiography data. In the absence of the above criteria, the CAD diagnosis was confirmed on the basis of the diagnostic algorithm proposed by the European Society of Cardiology. The pre-test probability of coronary artery disease was assessed.

To assess the condition of patients, standard methods of examination of patients with coronary artery disease, as well as echocardiography, were used. The body weight and height of the patients were determined, and the Body Mass Index (BMI) was calculated using the formula Weight (kg) / Height $(m)^2$. In addition, a comprehensive geriatric assessment was carried out, including the "Age is not a hindrance" questionnaire, the Barthel index for Activities of Daily Living (ADL) and the Lawton Instrumental Activities of daily living (IADL) scale, the Timed Up and Go Test.

The concentration of connective tissue growth factor in the serum was determined by enzyme-linked immunosorbent assay. We used test systems manufactured by BCM Diagnostics, supplier of BioChemMak. The range of normal values for this growth factor has not yet been established; the range of possible measurements ranged from 62.5 to 4000 pg / ml. All samples and standards were run as duplicates and the mean of duplicates was used in the statistical analyses. In addition, standard laboratory parameters of blood and urine tests were assessed. The bone mineral density (BMD) of the lumbar spine and the proximal femur was also measured by dual-energy X-ray absorptiometry on a Lunar Prodigy Advance (GE) apparatus. During the examination, the absolute value of BMD (in g / cm^2) and the T-score (deviation of BMD from the value of peak bone mass at a young age) were determined. For the diagnosis of osteoporosis and osteopenia, the WHO criteria were used, according to which BMD is assessed by the T-score: 1 – normal (BMD values decreased by no more than 1SD); 2 – osteopenia (decrease in BMD by more than 1SD, but not reaching –2.5SD); 3 – osteoporosis (decrease in BMD by -2.5 SD or more).

The data obtained were analyzed using Statistica software (version 13.0). The sample for belonging to the normal distribution was checked using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Descriptive statistics methods were used to describe the data obtained

(mean values, standard deviation, minimum, maximum – for quantitative variables; number and proportion – for qualitative variables). In the case when the distribution of variation series did not meet the criteria of "normality", the methods of nonparametric statistics were used, the median (Me), quartiles (Q1-Q4) and interquartile range (from 25% to 75%) were determined. When comparing groups, nonparametric methods were used (Mann-Whitney or Kruskal-Wallis test, chi-square test or Fisher's exact test); correlation analysis was performed using Spearman's test.

Results

Clinical and demographic characteristics of older patients included in the study are presented in Table 1. As can be seen from this table, 71% of patients were women and 29% were men. On average, the age of patients in the group reached 87.8 ± 5.1 years (varying from 75 to 96 years); more than half of the patients (52.6%) were over 90 years old. In addition to coronary artery disease and arterial hypertension, the patients included in the study had a high level of comorbidity (Table 1).

Table 1: Clinical and demographic characteristics of study patients

Parameters	**Number of patients**	
	n	%
Gender		
Men	11	29.0
Women	27	71.0
Age, *years*		
75-80 years	5	13.2
81-89 years	13	34.2
≥ 90 years	20	52.6
Myocardial infarction (in history)	12	31.6
Congestive heart failure	9	23.7
Atrial fibrillation	15	39.5
Stroke (in history)	6	15.8
Diabetes mellitus type II	15	39.5
Arterial hypertension	38	100

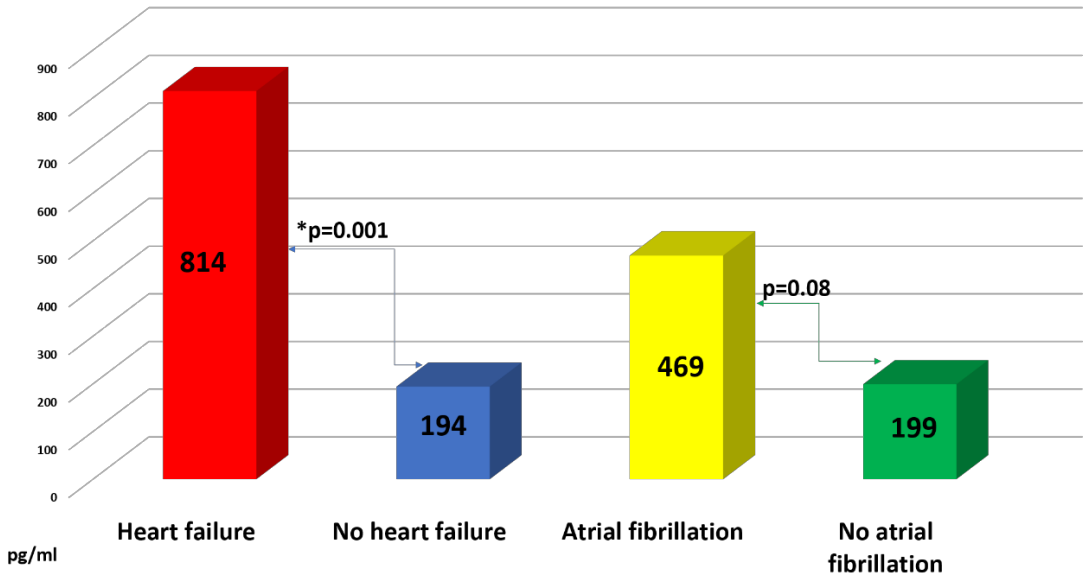
All the patients had signs of frailty. The mean value of the questionnaire "Age is not a hindrance" was 4.2±0.9 points, varying from 3 to 6 points. The mean value of the scale of instrumental activity in everyday life (IADL) was 4.5±2.5 points. The mean value of the scale of basic activity in everyday life (ADL, Bartel's index) reached 79.6±20.9 points.

In the group of older patients with coronary artery disease, the mean concentration of CTGF was 357.2 pg / ml, in the group of healthy individuals - 1076.7 pg / ml (p = 0.07). The median of CTGF in patients with coronary artery disease was 168.3 pg / ml, only 7.9% in this group

had CTGF levels exceeding 1000 pg / ml. In the group of healthy individuals, the content of CTGF exceeded 1000 pg / ml in 25% of cases (p = 0.1 - compared with patients with coronary artery disease). No significant differences in CTGF levels were found between men and women. The median blood concentration of CTGF in women was 154.2 pg / ml, while in men this value was 182.4 pg / ml (p = 0.17). In the course of the correlation analysis, no significant relationships were found between the CTGF levels and the age of patients (r = -0.03; p = 0.86). Among patients with myocardial infarction in history, the median CTGF concentration reached 186.5 pg / ml, while in the group of patients without myocardial infarction, this value was 124.3 pg / ml (p = 0.5). In the group of patients who had myocardial infarction in the past, only 8.3% of patients had the lowest (corresponding to 1 quartile, Q1) values of CTGF, while in patients without myocardial infarction, this indicator was 34.6%.

In the group of patients with clinically significant congestive heart failure (NYHA functional class III-IV), the level of CTGF in the blood was significantly higher than in patients without severe heart failure (p = 0.001) (Figure 1). Among patients without clinically significant signs of heart failure, the highest CTGF values (corresponding to Q4) were recorded in 14.3% of cases, while in patients with severe CHF - in half (50%) of cases. Similar results were obtained with atrial fibrillation, however, the differences between patients with this arrhythmia and without cardiac arrhythmias did not reach the statistical significance (p = 0.08) (Figure 1). In the group of patients with sinus rhythm, the highest CTGF values (corresponding to Q4) were registered in 13.6% of cases, while in patients with atrial fibrillation - in a third (33.3%) of cases.

Figure 1: Connective tissue growth factor & Heart failure and Atrial fibrillation



In our observations, negative correlations were found between CTGF blood levels and values of systoic (r = -0.25; p = 0.1) and diastolic (r = -0.36; p = 0.02) blood pressure. In patients whose CTGF concentration corresponded to 1 quartile (Q1), the mean level of systolic blood pressure was 146.5 mm Hg, while in the 4th quartile (Q4) – 130.5 mm Hg. (p = 0.06). Diastolic blood

pressure reached 85 mm Hg. and 73.3 mm Hg. (Q1 and Q4, respectively; p = 0.007). The blood level of CTGF, depending on the presence of comorbid conditions, is presented in Table 2.

Table 2 Connective tissue growth factors and various diseases

Diseases	**CTGF,** *pg/ml* [Me (Q25; Q75)]*		
	"+" Disease	**"-" Disease**	**p**
Diabetes mellitus type II	69.1 (24.5; 214.9)	206.7 (41.7; 453.4)	0.2
Obesity	69.1 (15.2; 214.9)	206.7 (65.3; 553.6)	*0.05*
Hyperuricemia	215.3 (12.5; 487.1)	186.5 (57.6; 441.4)	0.6
Stroke (in history)	207.1 (69.1; 383.4)	168.3 (34.8; 441.5)	0.9
Pneumosclerosis	190.7 (65.3; 415.4)	34.7 (19.3; 38.9)	**0.03**
Osteoporosis	190.7 (15.2; 429.5)	65.3 (36.2; 406.1)	0.7
Osteoarthritis	172.5 (24.5; 453.4)	182.4 (65.3; 456.1)	0.8

* *Me – median, Q25 and Q75 – 25% and 75% quartiles, respectively.*

As can be seen from the above table, there were no significant differences in the blood concentration of CTGF in the group of patients with diabetes mellitus and without disorders of carbohydrate metabolism. In obese patients, the concentration of CTGF was lower than in patients with normal body weight, however, correlation analysis did not reveal significant relationships between the level of CTGF and body mass index values (r = -0.24; p = 0.15). Among patients with signs of pneumosclerosis (according to computed tomography or chest x-ray), high CTGF values (corresponding to Q3-Q4) were registered in 55% of cases, while in patients without obvious signs of pneumosclerosis, CTGF values in Q3-Q4 did not occur at all. In the group of patients with diagnosed (according to the densitometric study) osteoporosis, high CTGF (Q3-Q4) values were found in 53% of cases, while in patients without osteoporosis, the values of this growth factor corresponding to Q3-Q4 were recorded in 36% of cases. The relationships between the concentration of CTGF and other laboratory parameters are shown in Table 3. The results of the correlation analysis indicate the significant inverse relationship between the level of CTGF and glucose, as well as total cholesterol and LDL cholesterol (Table 4).

During the analysis of relationships between the CTGF concentration and echocardiographic parameters in the total group of patients, no significant correlations were found: for the left ventricle ejection fraction – r = -0.24, p = 0.15; for the diameter of the left atrium – r = 0.14; p = 0.41; for the end-diastolic dimension of the left ventricle – r = -0.14; p = 0.41; for the diameter of the right ventricle – r = 0.18; p = 0.29. However, in the subgroup of patients with congestive heart failure, strong direct correlation was registered between the CTGF level and the diameter of the right ventricle (r = 0.74; p = 0.02), as well as the left atrium (r = 0.51; p = 0.07). In regression analysis the CTGF level turned out to be one of the significant factors associated with the diameter of the right ventricle (β = 0.58; p = 0.004), the calculated pressure in the pulmonary artery (β = 0.62; p = 0.00006) and the diameter of the left atrium (β = 0.46; p = 0.045). Correlation analysis did not reveal any significant relationships between the blood CTGF concentration and all indicators of bone mineral density: r = -0.27, p = 0.17 – for the correlation between CTGF and BMD values in the lumbar spine, r = -0.26, p = 0.19 – for the correlation between CTGF and BMD values in the proximal femur. It should be noted that in women

Table 3: CTGF and other laboratory parameters

Parameters	CTGF			p
	Q1*	Q2-Q3*	Q4*	
Creatinine, *μmol/L*	99.2	105.3	99.2	p=1.0–for differences between group 1 and 3 p=0.6–between group 1 and 2
Urea, *mmol/L*	7.9	7.8	7.4	p=0.7– for differences between group 1 and 3 p=0.9–between group 1 and 2
Glomerular filtration rate, *ml/min*	46.5	47.9	46.3	p=0.9– for differences between group 1 and 3 p=0.8–between group 1 and 2
Uric acid, *μmol/L*	354.2	288.9	300.4	p=0.3– for differences between group 1 and 3 p=0.09–between group 1 and 2
Glucose, *mmol/L*	8.0	6.7	6.8	p=0.3– for differences between group 1 and 3 p=0.2–between group 1 and 2
Total cholesterol, *mmol/L*	5.6	4.7	3.8	**p=0.0009**–for differences between group 1 and 3 **p=0.02**–between group 1 and 2
HDL cholesterol, *mmol/L*	1.2	1.4	1.1	p=0.5– for differences between group 1 and 3 p=0.3–between group 1 and 2
LDL cholesterol, *mmol/L*	3.5	2.7	2.2	**p=0.001**–for differences between group 1 and 3 **p=0.02**–between group 1 and 2
Triglycerides, *mmol/L*	1.7	1.4	1.1	*p=0.05*– for differences between group 1 and 3 p=0.4–between group 1 and 2
Atherogenic index	3.6	2.6	24	**p=0.01**– for differences between group 1 and 3 **p=0.02**–between group 1 and 2

*- *Q1-Q4 – quartiles*

Table 4 : Correlations between CTGF levels and other laboratory parameters

Parameters	r	p
Creatinine	0.17	0.29
Urea	-0.001	0..9
Glomerular filtration rate	-0.14	0,42
Uric acid	-0.03	0.85
Glucose	-0.34	**0.03**
Total cholesterol	-0.49	**0.002**
HDL cholesterol	-0.13	0.4
LDL cholesterol	-0.40	**0.01**
Triglycerides	-0.20	0.23
Atherogenic index	-0.25	0.13
Urine protein	-0.06	0.7
Urine erythrocytes	0.07	0.6

there was the tendency for inverse correlation between BMD values and the CTGF level, which, however, did not reach the statistical significance (r = -0.31; p = 0.1).

Significant relationships between the blood concentration of CTGF and the severity of frailty were not found: r = -0.18, p = 0.3 – for the correlation between CTGF and the values of the questionnaire "Age is not a hindrance." There was also no correlation between the

concentration of CTGF and functional abilities of patients: r = 0.18; p = 0.3 – for the correlation between CTGF and the values of the Activities of Daily Living scale; r = -0.04, p = 0.8 – for the correlation between CTGF and the values of the Instrumental Activities of Daily Living scale.

Conclusion

Within the framework of this pilot study, in older patients with coronary artery disease, significant effect of connective tissue growth factor on echocardiographic indicators of myocardial dysfunction and the course of chronic heart failure was revealed, which indirectly confirms the possible role of this growth factor in the development and progression of heart failure. There was also tendency towards a higher content of CTGF in patients with atrial fibrillation, indicating the possible participation of this factor in the processes of fibrosis and atrial remodeling. At the same time, significantly higher content of CTGF was found in patients with pneumosclerosis, which may indirectly indicate significant role of this factor in the development and progression of pulmonary fibrosis. In addition, significant inverse correlations were revealed between the concentration of CTGF in the blood and indicators of lipid and carbohydrate metabolism, which, however, require additional studies to establish specific pathogenetic relationships between CTGF and various metabolic disorders. A small sample of patients and extremely variable CTGF values do not allow at the moment to draw unambiguous conclusions about the role of this growth factor in various comorbid conditions. Further studies are required to study the role of connective tissue growth factor in aging processes and the development of a number of age-associated diseases in older people.

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Subclinical inflammation in very old patients with coronary artery disease

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Abstract. The main objective of this study was to determine the concentrations of tumor necrosis factor-alpha and interleukin-6 and to analyze the relationships of these cytokines with a number of various disorders in very old patients with CAD. 130 very old patients were enrolled in this cross-sectional study: 102 with CAD – in the study group, 28 without CAD – in the control. Serum TNF-α (N<8.1 pg/ml) and IL-6 (N<7.0 pg/ml) levels were determined by enzyme-linked immunosorbent assay. Increased TNF-α levels were found in 54.6%, IL-6 – in 49% of patients. In patients with CAD mean TNF-α concentration reached 10.0$\pm$4.9 pg/ml, in control group – 6.1$\pm$1.8 pg/ml (p<0.001). In patients with CAD mean IL-6 concentration was 10.9 pg/ml, in control group – 5.9 pg/ml (p=0.02). Higher TNF-α and IL-6 levels were found in patients with heart failure (p=0.002 and p=0.04, respectively). In patients with hyperuricemia mean TNF-α concentration was 10.9$\pm$5.3, with normal uric acid – 7.5$\pm$2.5 pg/ml (p<0.001); mean IL-6 values were 10.5$\pm$3.1 and 7.1+3.1 pg/ml, respectively (p=0.001). Positive correlations were found between TNF-α and uric acid (r=0.45; p<0.001), creatinine (r=0.24; p=0.01), urea (r=0.38; p<0.001), negative correlations – between TNF-α and HDL-cholesterol (r=-0.42; p<0.001). Positive correlations were observed between IL-6 and TNF-α (r=0.34; p=0.01), creatinine (r=0.35; p=0.01) and urea (r=0.28; p=0.05). In patients <90 years old mean TNF-α values reached 10.5 pg/ml, in centenarians – 8.1 pg/ml (p=0.003). In patients < 90 years mean IL-6 level was 6.7$\pm$3.2 pg/ml, in centenarians – 9.1$\pm$6.2 pg/ml (p= 0.09).

Keywords: tumour necrosis factor-alfa (TNF-α), ilnterleukin-6 (IL-6), inflammation, coronary artery disease (CAD).

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Introduction

The term "Inflamm-aging", proposed by Franceschi et al. (2000), refers to the special role of inflammation in the aging processes (Franceshi et al., 2000). This kind of inflammation is described by five main characteristics: mild, controlled, asymptomatic, chronic and systemic. Unlike the usual inflammatory response to any pathological agent, the inflammation does not disappear, but stably persists, leading to various pathological changes: atherosclerosis, coronary artery disease, type 2 diabetes, osteoporosis, sarcopenia, Alzheimer's disease, Parkinson's disease, oncological and other diseases (Xia et al., 2016).

Inflammation is a significant independent risk factor for morbidity and mortality in older persons. The presence of many diseases associated with inflammation leads to a significant decrease in the functional abilities of older persons and is associated with the development of frailty syndrome (Baylis et al., 2013). The correlation between inflammatory processes and age-associated diseases is quite complex and not fully understood (Xia et al., 2016). It is believed that a variety of infectious and non-infectious (smoking, obesity, genetic characteristics and gradually decreasing function of sex hormones) factors contribute to systemic inflammation in older persons (Bruunsgaard et al., 2003). A persistent inflammatory response, tissue damage, and the production of reactive oxygen species lead to an additional release of cytokines, which in turn contributes to the formation of a vicious cycle with further stimulation of immune system remodeling and the development of a chronic pro-inflammatory state (Baylis et al., 2013).

Of particular importance in the processes of age-related inflammation are pro-inflammatory cytokines. Elevated levels of cytokines such as tumor necrosis factor-alpha (TNF-α) and interleukin-6 (IL-6) are associated with various diseases, disability and mortality in old patients (Bruunsgaard & Andersen-Ranberg, 2003; Bruunsgaard & Ladelund, 2003). TNF-α and IL-6 are often considered as multifunctional cytokines that have important regulatory properties in immune processes, metabolism of fats, proteins, carbohydrates and in bone metabolism, as well as in the induction of a procoagulant state (Bruunsgaard & Ladelund, 2003).

Conflicting medical literature data served as the basis for our attempt to study the role of subclinical inflammation in various pathologies in very old patients suffering from coronary artery disease. ***The main objective of this study*** was to determine the concentrations of tumor necrosis factor-alpha and interleukin-6 and to analyze the relationships of these cytokines with a number of various disorders in very old patients with CAD.

Methodology

This present cross-sectional study enrolled hospitalized men and women ≥ 75 years of age. The study group included patients older than 75 years suffering from coronary artery disease, the control group included old patients with arterial hypertension, but without coronary artery disease. The main exclusion criteria were acute coronary syndrome over the past four

weeks, malignant neoplasms in the active phase, any chronic inflammatory diseases, as well as any infectious disease before the enrollment in the study.

To assess the condition of patients, standard clinical examination methods for CAD were used. The serum TNF-α (in 130 patients) and IL-6 concentrations (in 50 patients) were determined by enzyme-linked immunosorbent assay. Reference values of TNF-α levels were less than 8.1 pg/ml, IL-6 – less than 7.0 pg/ml. Routine laboratory parameters of blood tests and urine tests were also evaluated. In addition, a comprehensive geriatric assessment was carried out, including the "Age is not a hindrance" questionnaire, the Barthel index for Activities of Daily Living and the Lawton Instrumental Activities of daily living (IADL) scale.

The data were analyzed using Statistica software (version 13.0). To provide the data, descriptive statistics methods were used (mean value and standard deviation for quantitative variables; number and proportion for qualitative variables). When comparing groups, nonparametric methods were used (Mann-Whitney test, chi-square test or Fisher's exact test); conducted a correlation analysis using the Spearman test.

Results

The study enrolled 130 patients. 102 patients suffered from coronary artery disease and made up the study group, 28 patients without coronary artery disease - the control group. The mean age of study patients reached 89.3±4.6 years, varying from 77 to 101 years. More than half of the patients (56.2%) were 90 years old or older; there were only 5 (3.8%) people aged 75 to 80 years. Most patients (65.4%) were women, men accounted for 34.6%. Comparative characteristics of patients with coronary artery disease and without this pathology are presented in Table 1. All patients enrolled in the study had signs of frailty. The mean value of the "Age is not a hindrance" questionnaire was 5.1±0.7 points, varying from 3 to 7 points. The mean value of the Lawton Instrumental Activities of daily living (IADL) scale was 3.8±2.2 points, with fluctuations from 0 to 8 points. The mean value of the Barthel index for Activities of Daily Living was 74.8±18.3 points.

An increased level of serum tumor necrosis factor-alpha was found in 71 (54.6%) patients (Figure 1). The mean concentration of TNF-α was 9.2±4.7 pg/ml (from 3.9 to 31.9 pg/ml). An elevated serum IL-6 levels were found in 49% of patients. The mean IL-6 concentration was 7.96±5.1 pg/ml, ranging from 1.5 to 30.6 pg/ml.

In patients under 90 years of age, the mean TNF-αconcentration was significantly higher than in centenarians (10.5 vs 8.1 pg/ml; $p = 0.003$). During the correlation analysis, an inverse correlation was found between the level of TNF-α and the age of the patients ($r = -0.24$; $p = 0.006$). In persons younger than 90 years, the mean IL-6 level was 6.7±3.2 pg/ml, while in centenarians – 9.1±6.2 pg/ml ($p = 0.09$) (Figure 2).

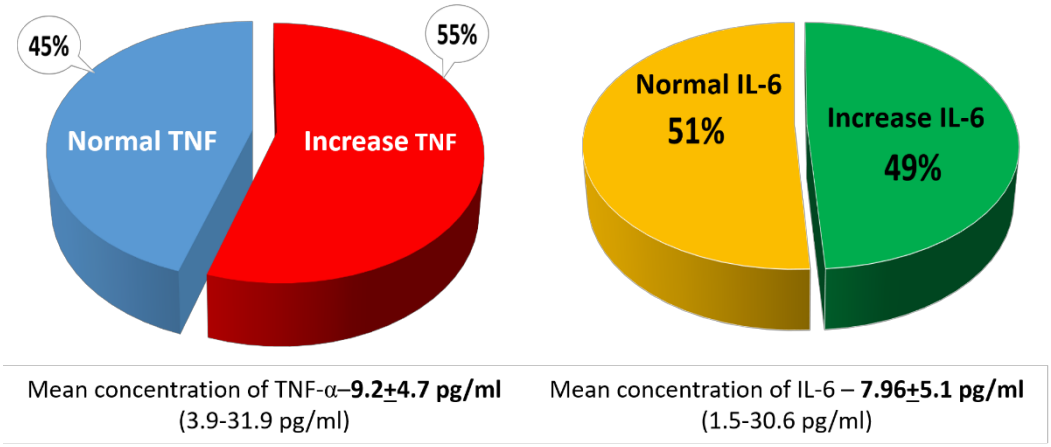
In the group of patients with elevated levels of TNF-α, almost all (95.8%) patients had chronic coronary artery disease, while among patients with normal TNF-α, this disease was registered

in 57.6% of cases (p <0.001) (Figure 3). In the group of patients with an increased IL-6 levels coronary artery disease was diagnosed in 79.2% of cases, while among patients with normal IL-6, this disease was registered in 56% of cases (p = 0.07) (Figure 3).

Table 1: Comparative characteristics of patients with CAD and without CAD

Parameter	Study group (CAD) (n=102)	Control group (without CAD) (n=28)	p
Age, *years*	89.4±4.6	89.0±4.8	0.67
Women	65.7%	64.3%	
Men	34.3%	35.7%	0.9
Arterial hypertension	100%	100%	NS
Myocardial infarction in history	45.1%	0	**<0.00001**
Heart failure	49.0%	0	**<0.00001**
Atrial fibrillation	52.9%	10.7%	**<0.00001**
Stroke in history	21.0%	10.7%	0.17
Diabetes mellitus	27.7%	33.3%	0.36
Hyperuricemia	51.1%	3.7%	**<0.00001**
Body mass index, kg/m^2	29.5±5.1	28.2±4.2	0.21

Figure 1: Increase of tumour necrosis factor-α and interleukin-6



Mean concentration of TNF-α–**9.2±4.7 pg/ml** (3.9-31.9 pg/ml)

Mean concentration of IL-6 – **7.96±5.1 pg/ml** (1.5-30.6 pg/ml)

Figure 2: Tumor necrosis factor-α and interleukin-6 in centenarians

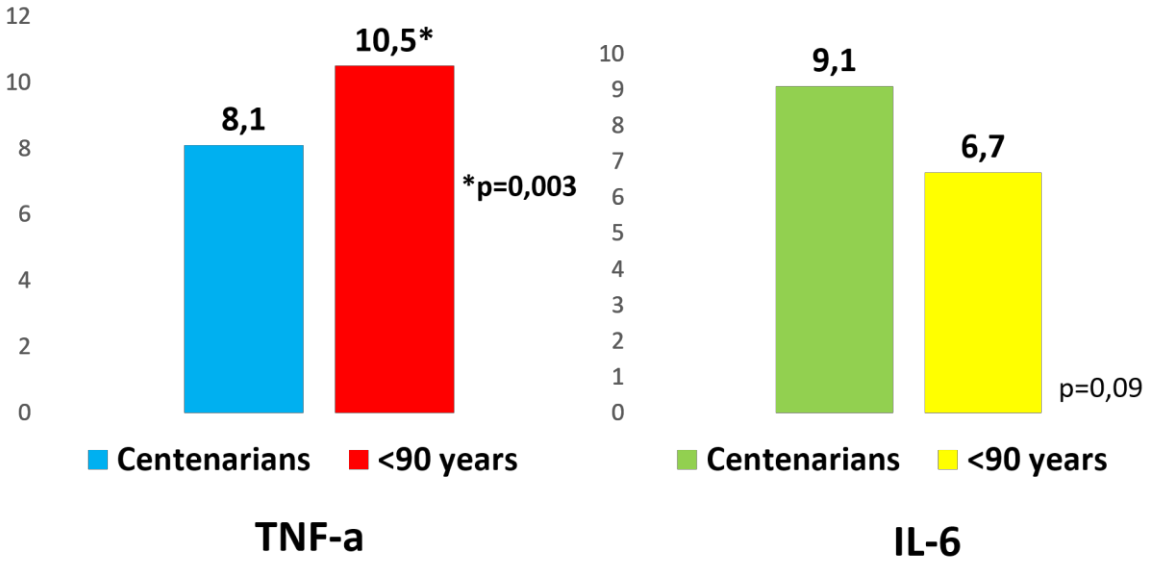
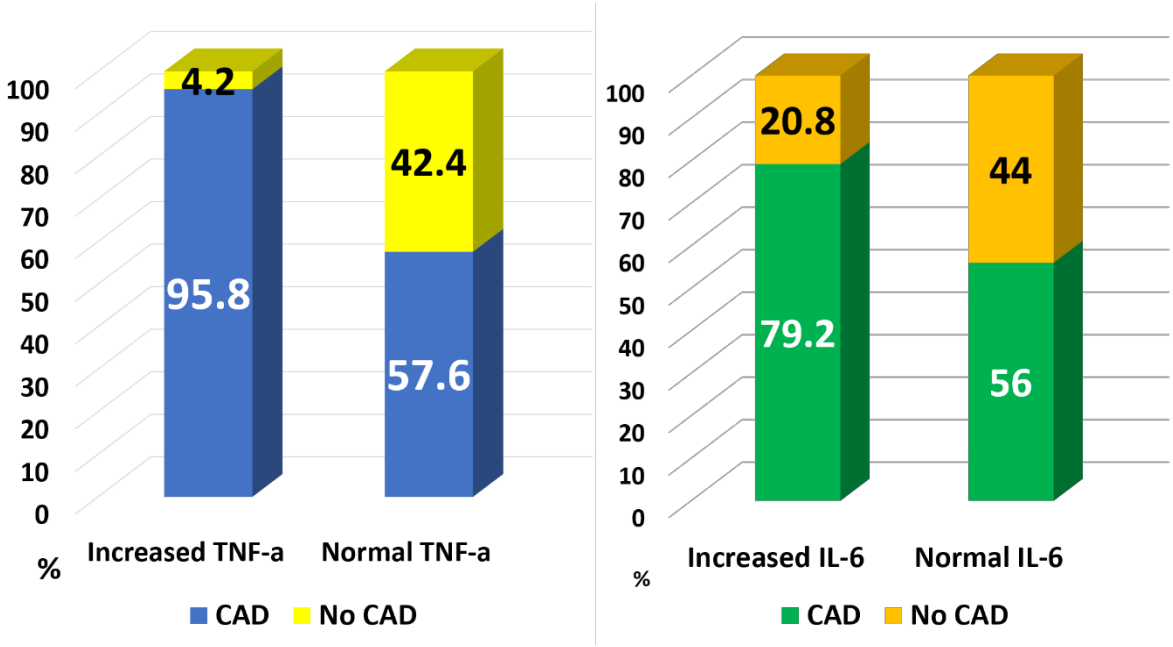


Figure 3: Increase of TNF-α and IL-6 in patients with coronary artery disease

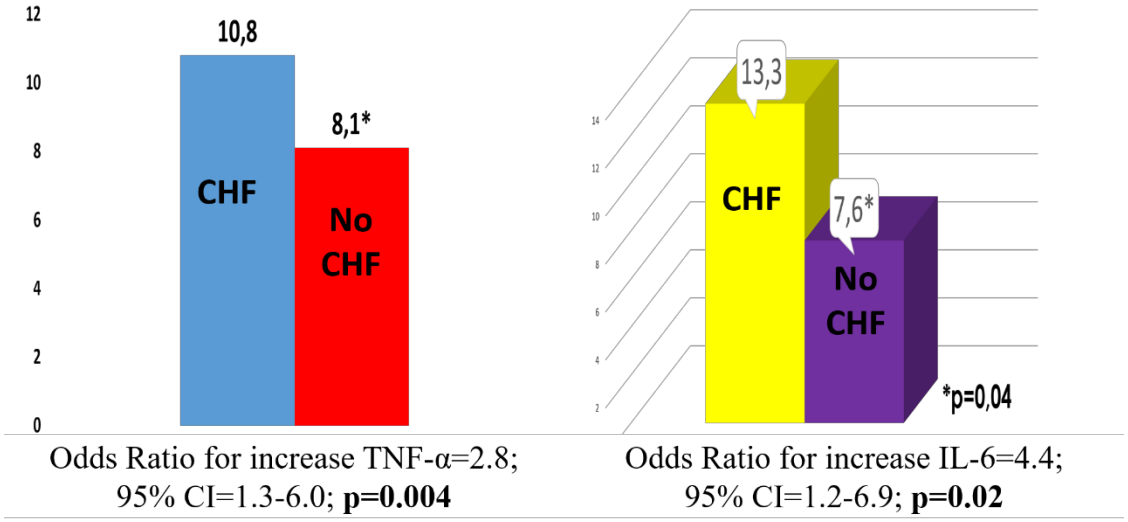


In patients with coronary artery disease, the mean concentration of TNF-α reached 10.0±4.9 pg/ml, while in the group of patients without this disorder, the mean TNF-α was 6.1±1.8 pg/ml ($p < 0.001$). 66.6% of patients suffered from CAD had elevated TNF-α levels, while only 10.7% of patients in the control group had elevated concentration of this cytokine ($p < 0.001$). The probability of detecting elevated levels of TNF-α in patients with coronary artery disease increased by 16.6 times, compared with the corresponding parameters in patients without coronary artery disease (Relative Risk (RR) = 16.6; $p < 0.001$). In patients with coronary artery

disease, the mean interleukin-6 concentration reached 10.9 pg/ml, whereas in the group of patients without coronary artery disease, the mean IL-6 was 5.9 pg/ml (p = 0.02).

Among patients with congestive heart failure, the mean serum TNF-α values were 10.8±5.5 pg / ml, while in patients without clinically significant heart failure – 8.1±3.8 pg/ml (p =0.002) (Figure 4). The probability of detecting an increased concentration of TNF-α in patients with heart failure increased by 2.8 times compared with the corresponding parameters in patients without heart failure (Relative Risk (RR) = 2.8; p = 0.004). Clinically significant chronic heart failure occurred significantly more often among patients with a high serum IL-6 concentration compared with patients who had a normal content of IL-6 (45.8% and 16% of cases, respectively). Significantly higher serum IL-6 levels were registered in the group of patients with heart failure compared with patients without heart failure (Figure 4). The probability of detecting an increased level of IL-6 with clinically significant heart failure increased by 4.4 times, compared with the corresponding indicators in patients without heart failure (Odds ratio (OR) = 4.4; 95% CI = 1.2-16.9; p = 0.02).

Figure 4: Tumor necrosis factor-α and interleukin-6 in patients with heart failure



Among patients with hyperuricemia, the mean serum TNF-α values were 10.9±5.3 pg/ml, while in patients with normal uric acid levels – 7.5±2.5 pg/ml (p <0.001) (Figure 5). During the correlation analysis, a highly significant correlation was established between the serum TNF-α and uric acid levels (p <0.001) (Figure 6). Also, the mean serum values of IL-6 were 10.5±3.1 pg/ml among patients with hyperuricemia, while in patients with normal uric acid levels – 7.1±3.1 pg/ml (p = 0.01) (Figure 5). The probability of detecting an increased level of IL-6 with hyperuricemia increased by 9.7 times, compared with the corresponding parameters in patients with normal uric acid concentration (OR = 9.7; 95% CI = 1.9-20.8; p = 0.003). Correlation analysis revealed a significant positive correlation between the IL-6 and serum uric acid levels (R = 0.31; p = 0.03). In a regression analysis, IL-6 (β = 0.46; p = 0.00001) and creatinine (β = 0.64; p<0.000001) were the most important variables for the uric acid

concentrations. The most important variable for the IL-6 content was hyperuricemia (β = 0.7; p = 0.00003).

In the study group of patients, the TNF-α concentrations increased as azotemia increased. The mean creatinine levels in patients with elevated TNF-α reached 113.6 μmol/L, while in patients with normal TNF-α concentrations – 96.7 μmol/L (p = 0.001). The serum urea concentration in patients with elevated TNF-α was also significantly higher – 8.9 mmol/L, compared with 6.9 mmol/L in the group of patients with normal TNF-α content (p <0.001). Patients with elevated levels of TNF-α showed lower levels of total cholesterol (4.2 compared to 4.8 mmol/L in individuals with normal TNF-α, p = 0.005) and HDL-cholesterol (1.1 and 1.3 mmol/l, respectively, p = 0.004). Correlation analysis revealed significant relationships between the TNF-α and urea (r= 0.38; p <0.001), creatinine (r= 0.24; p= 0.01), HDL-cholesterol (r= -0.42; p <0.001) levels.

No significant correlations were found between TNF-α values and erythrocyte sedimentation rate (19.5 and 18.6 mm/h, respectively, p = 0.7), as well as hemoglobin level (119 and 122 g/l, respectively, p = 0.31). However, in patients younger than 90 years, a significant inverse correlation was found between the TNF-α concentration and the hemoglobin content, while in the centenarians no significant relationship was found (Table 2). Significant differences were established between patients with elevated and normal levels of TNF-α in terms of serum interleukin-6 (12.9 and 7.4 pg/ml, respectively, p = 0.02). A correlation analysis found statistically significant direct correlation between the levels of TNF-α and interleukin-6 (r = 0.34; p = 0.01).

Figure 5: Tumour necrosis factor-α and interleukin-6 in patients with hyperuricemia

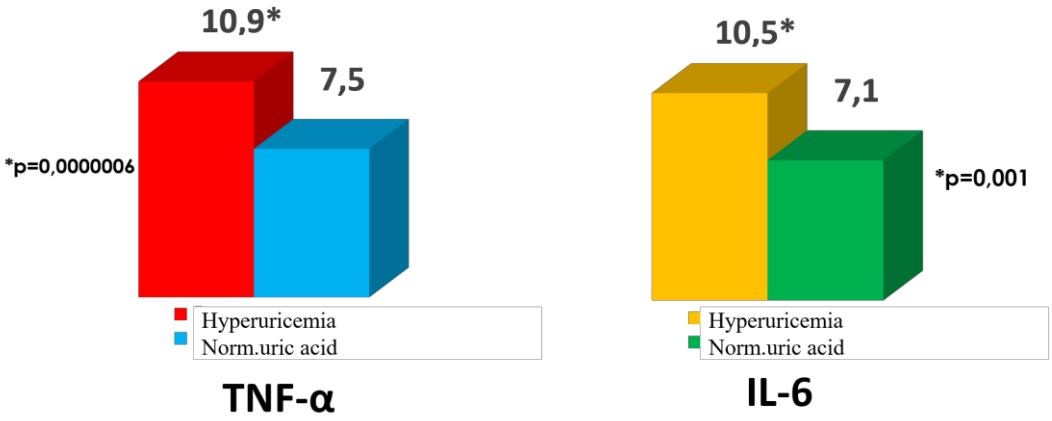


Figure 6: Correlations between tumour necrosis factor-α and serum uric acid

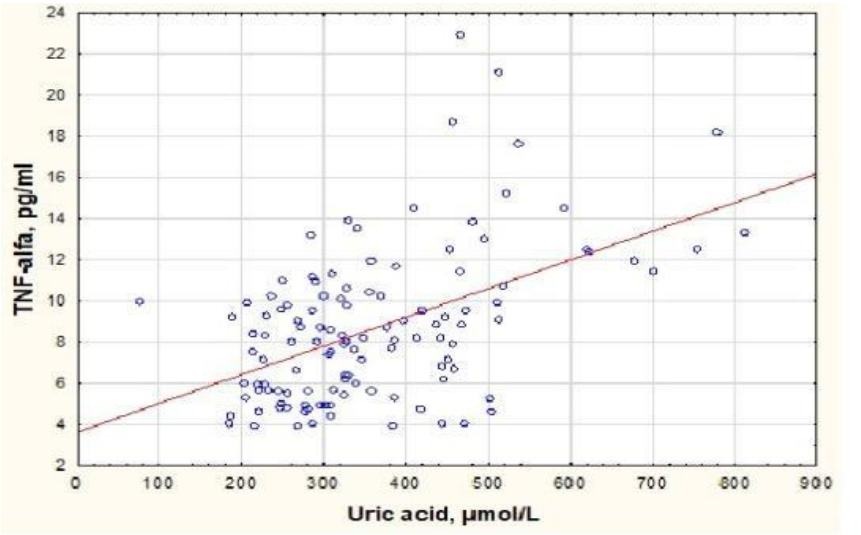


Table 2: Correlations between TNF-α levels and other laboratory parameters in centenarians and in patients <90 years old

Parameters	<90 years (n=57)		Centenarians (n=73)	
	r	p	r	p
Creatinine	0.34	**0.009**	0.24	**0.04**
Urea	0.53	**0.0001**	0.28	**0.02**
Uric acid	0.52	**0.00005**	0.39	**0.001**
Glucose	-0.21	0.11	0.19	0.10
Total cholesterol	-0.29	**0.02**	-0.13	0.29
HDL-cholesterol	-0.51	**0.0003**	-0.22	0.08
LDL-cholesterol	-0.01	0.92	-0.1	0.40
ESR	0.22	0.09	-0.12	0.33
Hemoglobin	-0.31	**0.02**	0.08	0.47
Leukocytes (total)	-0.1	0.41	-0.002	0.98
Neutrophils	-0.12	0.38	-0.06	0.63
Lymphocytes	0.04	0.76	-0.03	0.82
Neutrophil-lymphocyte ratio	-0.21	0.11	-0.04	0.72

In the study group of patients, there was an increase in the IL-6 levels with increasing azotemia: 7.3 pg/ml (with normal renal function) and 14.3 pg/ml in patients with azotemia (p = 0.04). The mean creatinine levels in patients with elevated IL-6 were 105.6 μmol/L, while in patients with normal IL-6 levels – 96.0 μmol/L (p = 0.09). Correlation analysis revealed a significant positive between the levels of IL-6 and creatinine. In women, the relationships between the concentrations of IL-6 and creatinine (r = 0.52; p = 0.002), as well as urea (r = 0.37;

p = 0.03) were much more significant than in men (r = 0,14, p = 0.57 - for creatinine; r = 0.1, p = 0.68 - for urea). Among the centenarians, neither the correlation with creatinine (r = 0.26; p = 0.2), nor with urea (r = 0.1; p = 0.6) were not significant.

There were no significant relationships between the serum levels of IL-6 and lipids, glucose, erythrocyte sedimentation rate, hemoglobin. It should be noted that a significant positive correlation between the IL-6 levels and erythrocytes sedimentation rate (r = 0.75; p = 0.0007) was found in men, as well as a tendency toward an inverse correlation between the content of IL-6 and hemoglobin (r = -0.36; p = 0.1). However, no significant relationships between these parameters were found in women (p = 0.95 and p = 0.71, respectively). Centenarians revealed a positive correlation between IL-6 and ESR (r = 0.51; p = 0.01), along with a tendency to inverse correlation with hemoglobin (r = -0.29; p = 0.1); while in persons under 90 years of age, no significant relationships were found (p = 0.92 and p = 0.58, respectively). There were no significant relationships between the IL-6 levels and leukocyte subpopulations, although a positive correlation was established between IL-6 concentration and the total leukocyte content (r = 0.27; p = 0.05) and a tendency to a similar correlation with the neutrophils content (r = 0.22; p = 0.1). In centenarians, significant positive correlations were found between the IL-6 levels and the total content of leukocytes (r = 0.51; p = 0.008), as well as neutrophils (r = 0.43; p = 0.02); in persons under 90 years of age, no significant relationships were noted (p = 0.67).

The mean left atrium diameter in patients with elevated TNF-α was 46.2 mm, while with a normal TNF-α levels – 43.8 mm (p = 0.02). When dilating the left atrium, the mean TNF-α values were 9.4$\pm$4.5 pg/ml, while among patients with normal left atrium sizes - 7.7$\pm$3.4 pg/ml (p = 0.04). In patients with elevated TNF-α levels a significantly higher the pulmonary artery pressure (44.1 mm Hg) was recorded compared to patients with normal TNF-α concentrations (35.8 mmHg, p = 0.002). With an elevated TNF-α levels, an increase in the right ventricle size was observed (30.9 and 28.9 mm, respectively; p <0.001). Among patients younger than 90 years, the relationships between the TNF-α levels and echocardiographic parameters were much more significant than in centenarians (Table 3).

Table 3: Correlations between TNF-α levels and echocardiographic parameters in centenarians and in patients <90 years old

Parameters	**Patients<90 years (n=57)**		**Centenarians (n=73)**	
	r	**p**	**r**	**p**
Left atrium diameter	0.37	**0.006**	0.14	0.26
Left ventricle end-diastolic dimension	0.41	**0.002**	-0.07	0.55
Left ventricle end-systolic dimension	0.41	**0.002**	-0.14	0.28
Left ventricle end-diastolic volume	0.44	**0.001**	-0.18	0.15
Left ventricle end-systolic volume	0.46	**<0.001**	-0.18	0.15
Right ventricle size	0.34	**0.01**	0.24	*0.05*
Pulmonary artery pressure	0.32	**0.02**	0.23	0.07

No significant relationship was found between the serum TNF-α levels and the severity of frailty ($r = 0.1$; $p = 0.4$). There was also no correlation between the concentration of TNF-α and the functional abilities of patients (for the Barthel index –$r = 0.03$, $p = 0.8$; for the IADL scale – $r = 0.01$, $p = 0.9$). There was no significant correlation between the concentration of TNF-α concentrations and muscle strength (according to hand-held dynamometry) ($r = -0.04$; $p = 0.76$). At the same time in patients younger than 90 years old with a high content of TNF-α, more significant signs of frailty were observed - the mean score for the questionnaire "Age is not a hindrance" was 5.5, and at a normal level of TNF-α– 4.7 points ($p = 0.03$). On the contrary, among centenarians with an increase in the concentration of TNF-α, frailty was less significant than with a normal level of this cytokine – 4.8 and 5.2 points, respectively ($p = 0.07$).

Also, no significant relationship was found between the serum IL-6 concentrations and the severity of frailty. No significant correlations were found between the IL-6 levels and muscle strength ($r = 0.15$; $p = 0.33$), as well as the functional abilities of patients. In centenarians, there is a tendency to a correlation between the IL-6 levels and muscle strength ($r = 0.3$; $p = 0.1$), but in patients younger than 90 years no relationship was found between these parameters ($r = -0.01$; $p = 0.96$). There were also no significant differences in the severity of frailty and functional abilities in patients with elevated and normal serum levels of IL-6.

Conclusion

The study results indicate that in very old patients with chronic coronary artery disease an increased serum TNF-α and L-6 levels are often found. Higher TNF-α and IL-6 concentrations are associated with the chronic heart failure and hyperuricemia. Despite the significant results obtained in this study, there are some limitations to this study. Unlike most similar studies, this study was carried out with the participation of a special population of patients – very old patients, suffering from not only clinically significant cardiovascular diseases, but also multiple comorbid pathology that could affect the results of this study. One of the study limitations could also be related to its cross-sectional rather than prospective nature, and therefore making it impossible to investigate the progression of a number of diseases depending on the level of TNF-α or IL-6 as the patients age. Further studies are needed to investigate the role of TNF-α and IL-6 in subclinical inflammation and the development of various age-related disorders in very old individuals and centenarians.

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Itzigsohn, J. & Brown, K. (Eds.). (2020). *The Sociology of W. E. B. Du Bois: Racialized Modernity and the Global Color Line*. NYU Press, 304 pp. ISBN-978-1479804177

Reviewed by Elaine M. Eliopoulos[1]

In this new and prolific work, Itzigsohn and Brown entice the reader to engage with the depth and breadth of W.E.B. Du Bois (1868-1963), whose scholarly and activist work has rarely been recognized to the extent of his white contemporaries. His place in sociological circles remains marginal when compared to the depth of his contribution. European scholars rarely recognize his work, and he is only now beginning to have a presence in American sociology curriculums. As the first Black person to achieve a doctorate at Harvard, Du Bois struggled for recognition much of his life. The book presents a clear and navigable account (even for the non-sociologist) of his contribution to global sociological thinking and the concept of a sociology despite his being denied that status throughout his career. The book ends with a challenge for the future of sociology and proposes a new and contemporary Du Boisian sociology, raising the prospect of a public sociology going forward.

Itzigsohn and Brown detail DuBois development as a scholar over ninety years as a voice for an end to the marginalization of Black people. His approach to understanding the contemporary position of Black people in society integrated a critical analysis of the historical and systemic forces influencing individual subjective processes (racialized subjectivity) and thereby leading to macro-systems forming the structures of modernity (racialized social systems) - all of which resulted in a landscape which not only did not honour the work and contributions of Black people, but further marginalized their position in community.

In summarizing the books contents, in Chapter One, the authors explicate Du Bois concept of double consciousness in understanding the lived experience of Black people in historical and cultural context. The authors make a compelling case that Du Bois' analysis of subjectivity extends beyond the work of other classical theorists whose "ontological myopia" does not adequately address the 'color line' as a dominant social reality. Du Bois asked the question,

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"What does it mean to be a problem?"-an analytic lens intriguing in its possible application to other areas where the needs and interests of other marginalized populations may be ignored. The position of the oldest old immediately comes to mind. A discussion of Du Bois ideas about agency raises import and complex questions about its exercise facilitated by structural conditions which transcend the 'color line'.

In Chapter Two, Itzigsohn and Brown chronicle Du Bois involvement in a global arena and Marx influence on his thinking. With particularity, they distinguish the two in a number of ways. First, the role of colonialism and racism as a precondition for capitalism versus being constitutive of it. Secondly, the way in which subjectivity shapes the possibilities for agentic action and the implications for collective mobilization as a result of those possibilities. Lastly, the characterization of political power residing with the state and how that power is represented by different groups.

Chapter Three details Du Bois community and empirical studies placing his work in a global context, contrasting with what was happening at major thought centres of the time at Chicago and Columbia. His work highlighted the irony of the American ethos of "life, liberty and pursuit of happiness" as a society which systematically and legally excluded Black people in substantial economic and social ways. The authors engage with the possibilities for sociological education today and how a Du Boisian approach would necessarily build upon his earlier work but with increased examination of the role of agency, its constraints, and forms.

In Chapter 4, the authors chronicle 'Du Bois evolution' in the arena of public sociology and his focus on the harsh realities which persisted for Black people. His work for the National Association for the Advancement of Colored People (NAACP) marked a shift in his approach to research with a clear activist, reformist agenda designed to liberate. His involvement with the Harlem Renaissance shaped intellectual thought through the Great Depression. This chapter evokes a sense of the emerging consciousness of the time and his vision for a more radical approach.

In the books final chapter, Itzigsohn and Brown advocate for a more inclusive sociology which necessitates a reflexive stance on how practice ought to be examining the ideals of a contemporary sociology. They argue that expanding the sociological imagination in knowledge production requires a position that all forms of oppression must be the object of investigation. An activist orientation results from such an approach that relies upon a systematic and empirical investigation of practices that exclude, and as well as taps into institutional and structural forces. They characterize a contemporary Du Bosian sociology as one guided by four pillars, namely contextualization, relationality, historicity, and subaltern standpoint.

There is no more apt time to consider the applicability of a Du Bosian orientation to the complex racial issues depicting current times globally, as well as their possible application to other contemporary social issues. Whilst admittedly, race and agedness does not present identical social ills, the problem of agedness and its growing complexity and nuance may benefit from a Du Boisian analytic in which fundamental values of humanity are at stake.

Itzigsohn and Brown have provided an invaluable work upon which sociologists and anyone interested in an inclusive society should be critically engaged. DuBois was a scholar and an activist. His unique contributions to melding his empirical work with advocacy presents fodder for sociologists and social gerontologists to consider as we navigate the emerging complexities of an ageing population. There is much to his work upon which sociologists and gerontologists may build upon for a fairer, more inclusive society.

Walsh K, Scharf T, Van Regenmortel S, & Wanka A. (Eds.). (2021). *Social Exclusion in Later Life: Interdisciplinary and Policy Perspectives*. Springer Nature, 450 pp. ISBN 9783030514068

Reviewed by Eniola Cadmus [1]

This new book, edited by Walsh and colleagues, reviewed social exclusion among older persons and variants in selected European countries. Ageing is a global phenomenon, with inequalities resulting from social, political, and economic issues, leading to marginalisation. The book presents perspectives on the social exclusion of older adults across countries and disciplines and is structured into an initial summary, seven sections and a conclusion. Although the book was written in the pre-covid era, each chapter has a postscript section that discusses the pandemic's effect on the type of exclusion described. Limited research on exclusion results in a lack of consensus and development in the field. The book provides evidence from an interdisciplinary and policy perspective on social exclusion. The aim is to advance research and policy on social exclusion among older persons from a multidisciplinary and cross-national perspective.

Section I-The intersection of ageing and social exclusion

This section introduces the entire book and what each section hopes to help the readers understand. The concept of social exclusion in later life and its key attributes are examined through policy structure and systems. This book sought to bring to light the concept of social exclusion in later life under six domains: economic, social relations, services, community and spatial, civic participation and socio-cultural aspects. Understanding social exclusion provides insight into processes of risk accumulation across the life course and distinguishes crucial points for early intervention. Although research and policy debate regarding social exclusion has been deficient in recent years, a growing body of evidence points to how it can affect different aspects of daily life. The lack of advancement in social exclusion research and policy debate could be due to political and conceptual factors as well as a lack of clarity about the concept. Recent events of the COVID-19 pandemic have further exposed the need to attend to the multi-level interaction between policy and exclusionary experiences in older age.

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Section II -Economic exclusion

The three chapters in this section presented original research that focused specifically on the dimensions of economic exclusion. Economic exclusion arises from a failure to sustain an adequate income in old age and protection against the poverty trap. y Ogg and Myck identified factors that affect the individual's material well-being and ability to respond to expected and unexpected changes. These include unemployment, poor remuneration, working conditions and health. Thus, an inability to build up material wealth across the life course may lead to a failure to escape the poverty trap. On the other hand, unexpected shocks from life events may lead to a sharp decline in income or depleted savings and economic exclusion in later life. These life events include divorce, widowhood, illness and redundancy. These events may lead to a permanent reduction in material assets and an inability to build up assets. Another contributory factor to depleted resources is a failure to plan for needs in old age, including age-related health decline and increased long-term care costs. The authors emphasised that economic exclusion goes beyond focusing on income-based finances and material well-being measures but encompasses non-financial subjective measures. The subjective measures strongly correlate with the individuals' quality of life and well-being. Largely, governments and policymakers face challenges sustaining adequate income in old age, mostly through pension systems and welfare policies for older citizens. Efforts made by countries to reduce economic exclusion have been nullified in recent times by the ongoing COVID-19 pandemic.

In chapter three, Sumil-Laanemaa and colleagues examine individual, social and demographic risk factors related to material deprivation among older persons in four countries participating in the Survey of Health, Ageing and Retirement in Europe (SHARE). Further, the authors describe two social inclusion indicators, the material deprivation rate (MDR) and the severe material deprivation rate (SMDR), based on the individual affordability of nine selected items. Also, interregional differences suspected to reflect the protective role of welfare regimes across the countries studied were discussed. In chapter four, Murdock and colleagues focus on the economic and psychosocial consequences of unemployment in later life. The authors provided a synopsis of the process of ageing and work and the experience of unemployment, coping strategies and its effects on psychological well-being. Using data from a study of sixty-seven older unemployed persons in Luxembourg, the authors show that the length of time in unemployment is associated with lower life satisfaction and strongly related to economic exclusion. In chapter five, Barlin and colleagues focus on the vulnerability of older women. Aside from the usual challenges of ageing, such as declining health, women face a high level of inequality and are more prone to social exclusion. The chapter catalogues the coping strategies that selected older women in Turkey and Serbia who are divorced, separated or widowed employed to compensate for low incomes. Resilience was observed among the women as they managed through hardships, including separation and financial challenges. The study also emphasised the role of the family in coping with economic exclusion.

Section III- Exclusion from social relations

This section focuses on exclusion from social relations as part of the spectrum of social exclusion. Social relations comprise social resources, social connections and social networks, as well as civic inclusion. Therefore, exclusion in this regard infringes on the fundamental human right. In the introduction to the section, the authors emphasise that social exclusion is different from loneliness though the terms are used interchangeably. Loneliness is most likely a possible outcome of exclusion from social relations. Risks for exclusions from social relations include demographic characteristics such as age, gender, education, income, marital status and sexual orientation. The life course perspective in understanding social exclusion implies that the level of social exclusion in older age is shaped early in life by decisions related to studying/education, marriage, raising a family and separations, including divorce and bereavement. These attributes are interconnected with the lives of other individuals. Vulnerable groups include ethnic minorities, migrants, LGBTQ+ groups and older women. The strategies to mitigate the risk of infection during the COVID pandemic complicate an already compromised state for older persons and contribute to the normalisation of ageism.
Three contributions within the section frame the conversation on the topic. Van Regenmortel et al. explored cross-national similarities and differences in the experiences of exclusion from social relations between older people living in rural Britain and Belgium. Recommendations based on the study findings include the need for a multi-level approach to mitigate the factors influencing the likelihood of exclusion. Also, the need to promote an age-friendly environment and encourage ageing in place was highlighted. In the second chapter of the section, Morgan et al. focused on loneliness as an important outcome of social exclusion. The authors distinguished between micro and macro-level drivers of loneliness in old age and explored the changes over time in 11 European countries. Loneliness was measured using the Revised-University of California Los Angeles (R-UCLA scale). The significant drivers of loneliness include ill-health, gender and the presence of a disability. In the last chapter of the section, Waldegrave et al. discussed conflicting relations, abuse and discrimination faced by older persons in five countries (Norway, Finland, New Zealand, Israel and Italy). The authors filled a critical research gap as, notably, the three dimensions of social relations have harmful effects on health and well-being and have hitherto not been brought together in one study.

Section IV- Exclusion from services

This section presents social exclusion from service provision regarding care, transformation, information and communication technology (ICT) based services. Mechanisms contributing to exclusion in old age include geographical location, poverty, insensitivity to older persons' specific needs, and profit-oriented care models. Other factors include barriers due to cost and the environment and infrastructural deficits. The section examined access to services from the macro and micro levels. In Chapter 11, Cholat and Daconto describe space and mobility as predisposing factors to exclusion from services among individuals living in remote areas in France and Belgium. The concept of 'reversed mobility' was examined to understand better the exclusion of older persons from services and social relations. Széman and colleagues explored exclusion from home care services in two Central and Eastern European (CEE) countries, Hungary and the Russian Federation. The authors describe the care spectrum,

emphasising home and community-based care provisions. Lastly, Poli, Kostakis and Barbabella explored digital health technology as a possible solution to prevent digital health exclusion in old age.

Section V-Community and spatial exclusion

This section focuses on the community and spatial aspects of social exclusion. Each chapter in the section examined how community and space impact older adult lives and influence their overall experiences of exclusion in later life. The community aspect is the unintended reduction of participation in local life. The spatial aspect is the unintended reduction of mobility in and out of a person's home. The section emphasises the concept of ageing in place whereby individuals are supported to live safely, independently and comfortably in their home or community. Lack of necessary support to age in place or the inability of older persons to adapt to their environment may lead to spatial exclusion. The authors emphasised the need to qualify 'ageing in a good place'. Additionally, community and spatial exclusion were aggravated by the "stay at home" strategy for infection control during the COVID pandemic leading to a disruption of care, social relationships and mental health implications.
Drilling and colleagues presented a model of "Age, Space and Exclusion - ASE-Triangle" as a multifaceted concept to analyse the situations of social exclusion and their causes. The authors utilise two case studies from Ireland and Cyprus to illustrate how their ASE triangle is supported by empirical work and can help explain real-world interactions. Urbaniak et al. described the impact of place on social exclusion and its relatedness across the life course with emphasis on bereavement. The work was based on data collected in Poland, Germany and Ireland to illustrate how place, social exclusion and life transitions are closely interrelated. Vidovićová et al. explored the frequently neglected aspect of ageing in a rural environment. Through the examples of three neighbouring countries (Czech Republic, Germany and Poland), the authors address how social exclusion in later life is linked to the organisation of care in rural areas.

Section VI-Civic exclusion

Civic exclusion in this section is presented in three chapters that focus on civic participation and socio-cultural aspects of exclusion in later life. Civic exclusion is described as the inability of older people to engage in informal and formal activities. The socio-cultural part of exclusion emphasises the societal discourses leading to exclusion. Civic participation includes involvement in civic activities for the benefit of others, such as volunteering and exercising civil rights through voting. Serrat and colleagues investigated civic engagement and the research agenda in the area. The authors describe the causes and consequences of civic participation and propose areas to be addressed by future research. These include the dimensionality of the concept, the diversity of the older population and dynamic processes across the life course.

Gallistl described cultural exclusion in older age through the initial development of a theoretical framework based on a literature review. Subsequently, survey data from a three-year project addressing older Austrians' cultural participation were examined. Generally,

cultural participation declines with age and the authors show how socio-economic determinants, and changes over the life course, affect cultural activities with policy implications. Lastly, Gallassi and Harrysson described the intersection of human rights and the implications for older migrants using Sweden as a prototype.

Section VII- Interrelationships between different domains of exclusion

This section further examined the interrelationships across social exclusion domains. It focused on four areas: older people living in long-term care institutions, the relationship between economic deprivation and social relation, the influence of the transport system on older people's inclusion and homelessness among older adults. The section considers quantitative studies examining the multidimensional nature of social exclusion. This was done by reviewing the domains older adults are excluded from and the clusters of various forms of exclusion. Also, the interrelationships across the different social exclusion domains over time were highlighted as the necessity for longitudinal studies.

Villar et al. focused on exclusion among older adults living in long-term care institutions. Myck and colleagues examined the link between economic exclusion (material resources) and exclusion from social relations (loneliness) based on longitudinal data from SHARE. Siren focused on how the transport system influences social exclusion/inclusion in later life and cuts across most of the domains of exclusion. Korkmaz-Yaylagul and Bas focused on homelessness among older adults and described the conditions relatedness to all domains of social exclusion.

Section VIII-Policy and social exclusion in later life

The six chapters in this section discuss possible policies to reduce social exclusion in later life. The authors emphasise the effect of the COVID pandemic and how stricter rules to ensure infection prevention and control, such as social isolation and lockdown, further pushed policy. Also, global and regional aspirations, as well as proposed legislation and regulatory actions, were highlighted. Several issues plague the global discussion regarding policies targeted at population ageing. First is the ageist view of older persons as a dependent and unproductive population segment. Also, exclusionary policies like mandatory retirement were shown to increase vulnerability. The authors critiqued available policies and the global agenda by reviewing highly referenced policy documents like the United Nations Sustainable Development Goals and the 2030 Agenda for sustainable development. As their themes reflect, these policies are intended to 'leave no one behind' while providing 'an inclusive society for all ages'. Other issues that have sparked policy debates on social exclusion were addressed. These include pension reforms, institutional care, digital health technology, ageism, symbolic and identity exclusion.

In Chapter 28, Conboy discusses the relationship between exclusion in old age and the 2030 Agenda for Sustainable development. The most important recommendation by the author to mainstream ageing and older persons is to bridge the gap between knowledge and policy/decision-making. Ogg, in Chapter 29, examined the role of the European pension

systems and policies in preventing social exclusion in old age. Grigoryeva et al. reviewed the influence of pension systems and social services on social exclusion in post-Soviet Russia and Ukraine. In the case of Russia, the authors linked the review of the laws passed for pension reforms and how the actual payments fell below minimum wage. Other challenges faced include short post-retirement survival, especially among men, making arguments for increasing the retirement age untenable. In Ukraine, the dependency ratio increases with more withdrawals from pension allocations than payments. Ideally, pensions are meant to extend the periods of paid employment and increase social inclusion. However, the reality is that the reforms have led to a reduction in real incomes in both countries with attendant risks such as living alone, limitations of mobility and disability.

Andersen and colleagues in Chapter 31 examined how urban design and architecture can support inclusion for nursing home residents. The authors expanded on the concept of ageing in place in the home and community and how the concept may be expanded to include ageing in a new place or local area for residents in institutional care. In Chapter 32, Leppiman and colleagues discuss the policy challenges of digital exclusion in two European Union member states experiencing population ageing, Estonia and Finland. Substantial risks contributing to the digital divide include socio-demographic and psychological factors, fear of fraud and anxiety. The authors conclude that more needs to be done to reduce digital exclusion in old age and urge policymakers to balance services and rethink user-centred understanding and implementation. In the last chapter of the section, Kucharczyk focused on the impact of the European Pillar of Social Rights EPSR) in addressing the social exclusion of older persons. The EPSR is a set of social rights and principles designed to improve the lives of Europeans through more equality, inclusion and well-being. However, the authors emphasised the need for increased political commitment and accountability for the tool's success.

Section IX -Conclusion

The book charts the direction for advancing search and policy discussion regarding social exclusion in later life. The concluding section draws together the discussions, debates, recommendations and research agenda on social exclusion. This book considered five interrelated domains of old-age social exclusion: economic, social relations, services, community and spatial, and civic exclusion. The domains are influenced by individual, societal, political and geographical factors. The multidisciplinary approach is encouraged for targeted intervention due to the multidimensionality of the concept. There is a need to engage further relevant stakeholders, including policymakers, civil society, service providers, and the scientific community, in developing targeted policies and implementing practicable responses to the issues of social exclusion. The research documented across the book has exposed a knowledge gap in social exclusion and implications for future research. As a matter of urgency, the focus should be on identifying the causes and drivers of social exclusion and their interconnectedness and interactions. Older persons are vital in ensuring holistic, person-centred and equitably distributed solutions.