Scandinavian Journal of Occupational Therapy

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/iocc20

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To cite this article: Eric Asaba, Aileen Bergström, Ann-Helen Patomella & Susanne Guidetti (2020): Engaging occupations among persons at risk for stroke: A health paradox, Scandinavian Journal of Occupational Therapy, DOI: 10.1080/11038128.2020.1829036

To link to this article: https://doi.org/10.1080/11038128.2020.1829036

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Published online: 06 Oct 2020.

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SCANDINAVIAN JOURNAL OF OCCUPATIONAL THERAPY
https://doi.org/10.1080/11038128.2020.1829036

ORIGINAL ARTICLE

OPEN ACCESS

Engaging occupations among persons at risk for stroke: A health paradox

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ABSTRACT

Background: An occupational perspective in stroke prevention could support sustainable changes in habits and routines that could contribute to reduce modifiable risk factors.
Aim: To explore engaging occupation in relation to risk for stroke by drawing on experiences from everyday life among persons with a heightened risk for stroke.
Material and methods: Interviews from 14 persons with an increased risk for stroke were analysed by a constant comparative approach.
Findings: The analysis resulted in the core category; *the paradox of engaging occupations and health*. The paradox involved aspects of engaging occupations that could provide well-being and at the same time were compromising considering stroke health.
Conclusions and significance: The paradox conceptually challenges some of the core values inherent in occupational therapy regarding the relationship between engaging occupations, health and well-being. Gaining a deeper understanding of experiences of occupations and studying this in relation to health promoting or compromising characteristics of occupations, can facilitate lifestyle programs that support changes in everyday life. Moreover, programs need to be designed to offer personal relevance and to facilitate a positive balance between health compromising occupations and health promoting occupations in everyday life.

ARTICLE HISTORY
Received 12 February 2019
Revised 18 September 2020
Accepted 20 September 2020

KEYWORDS
Everyday life; prevention; primary care; occupational science; qualitative method

Introduction

The time is right for an occupational perspective in stroke prevention. Stroke continues to be the second most common cause of death globally, and when including stroke in the cardiovascular disease spectrum it is the most common cause of death [1,2]. Subsequently, as a concept of relevance in stroke research, prevention has in recent years received more attention [3–5]. Research suggests that many of the risk factors for stroke such as physical inactivity, dietary intake leading to high cholesterol and/or obesity, tobacco use, and excessive alcohol consumption are modifiable. By modifiable, the intention is to differentiate between risk factors that can be impacted by changing behaviours or routines for example, and risk factors that cannot be impacted by the person, such as stroke in the family history [2]. Despite knowledge about the classification of risk factors as modifiable and non-modifiable, there continues to be a lack of knowledge about how to support sustainable lifestyle changes that can contribute to reducing modifiable risk factors among people at risk for stroke [6]. An occupational perspective incorporating habits and routines should be considered a relevant complement to pharmacological and surgical approaches to stroke prevention, and furthermore have potential in promoting and sustaining healthy lifestyle changes.

The impact of stroke is indisputable. Although reduced mortality rates have been reported during the past 2 decades, the total number of people living with stroke appear to be increasing, as well as the consequences of stroke in everyday life for both the individual and his/her caregiver [1,7,8]. The residual effects of stroke have a detrimental impact on physical health, psychosocial well-being, and social participation for many [1], and the economic impact of stroke, if a person survives, is said to be 76,000 Euro

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for the first 2 years not including indirect costs such as loss of income and family burden [2,9]. The potential role for impacting on modifiable risk factors has been emphasised in recent guidelines for both primary and secondary stroke prevention [5,10]. Intervention programs focussing on lifestyle modification have shown promising results [11], including after stroke [12,13]. However, to the best of our knowledge, lifestyle intervention programs with the aim of reducing risk factors for stroke are rare, and evidence for the degree to which stroke can be reduced by changes in lifestyle therefore is unclear. In this paper, the term lifestyle is used to denote ideas of routine, habits, and everyday agency.

Engaging occupation can be a concept of relevance in non-pharmacologic interventions aiming to reduce modifiable risk factors of a first stroke [4]. The concept of engaging occupation refers to an intense sense of participation in things that make life worth living, and that can contribute to a sense of meaning and purpose [14]. Although not using the term *engaging*, the *Do-live-well* framework illustrates important links between everyday doing and sense of well-being. Doing in this framework reflects a wide range of activities in the context of everyday doing coupled with 'living well' [15]. Promoting engaging occupations has been previously used in an intervention program with an ethnically diverse group of older adults and demonstrated positive health consequences as well as being cost-effective [16,17]. However, these programs have not been used for persons at risk for stroke. Moreover, it is important to keep a critical perspective regarding the potential for engaging occupation in preventive work since this has not yet been sufficiently investigated [4].

Studies addressing stroke prevention often focus on single factors such as blood pressure, physical activity, or cholesterol even though persons at risk for stroke usually have more than one risk factor [18,19]. The effects vary depending on what factors have been explored as well as in what contexts [18]. Revising everyday habits and routines, despite wishing to, often requires a reshuffling of several aspects of everyday life. For persons with an early heightened risk for stroke, the urgency of making a change in occupations related to stroke risk is often vague. Modifiable risk factors for stroke such as physical inactivity and diet could potentially be targeted through patient education and multimodal lifestyle interventions. Moreover, in order to improve feasibility, stroke preventative measures led by professions other than general practitioners may offer an alternative [19]. Even though everyday occupations stimulating moderate physical activity and a healthy diet are strongly related to well-being and longevity [20], little is known about persons at risk for stroke and their reflections about occupations they consider engaging. A greater understanding of how persons at risk for stroke characterise their engaging occupations, and how these may contribute to their health or ill-health, could facilitate designing interventions with sustainable outcomes. The aim of this study is to explore engaging occupation in relation to risk for stroke by drawing on experiences from everyday life among persons with a heightened risk for stroke.

Methods

This study draws on semi-structured interviews with persons who have a heightened risk for stroke. A qualitative design and data analysis [21] were chosen to systematically explore engaging occupations grounded in individual experiences, allowing for nuances in reasoning and understanding of choices in everyday life. From the analysis, potential outcomes of interest will be identified and used to inform the development of a complex intervention [22] focussed on stroke prevention. This study was approved by the Swedish Ethical Review Authority 2015/834-31/2.

Participants

Fourteen participants were recruited through three Primary Health Care Centres (PHCC) in the greater Stockholm area. Convenience and purposive sampling were utilised. Researchers stationed in the waiting room of the PHCC, approached and informed potential participants of the study. Information about those who declined was not gathered. If the person agreed to an initial screening, the assessment was carried out in a separate room at the PHCC and the National Stroke Associations Stroke Riskscore Card (NSASRC) [23] and the Swedish National Board of Health and Welfare (Socialstyrelsen) questionnaire regarding lifestyle were administered [24]. Based on this screening, inclusion criteria were, 1) three or more risk factors on the NSASRC, including modifiable behavioural factors, and 2) consented to the conditions of the study. Exclusion criteria were: 1) if there were two or less modifiable risk factors for stroke, and 2) if the person declined. Time and place for the interview was

Table 1. Participants.

Person	Age	Sex	Living situation	Stroke Risk Factor (high = ≥ combination of 3)
1	71	male	alone	3
2	69	female	together	4
3	71	male	alone	3
4	66	female	alone	3
5	47	female	together	3
6	63	male	alone	4
7	71	female	together	4
8	66	female	together	3
9	75	male	together	3
10	61	female	together	3
11	54	female	alone	3
12	78	male	alone	3
13	73	male	together	4
14	84	female	alone	3

*Stroke risk factors consist of: Blood pressure (>120–139/80–89), Smoking (smoker or trying to quit), Cholesterol (>200), Exercise (<150 min per week), Diet (self-reported overweight), and Alcohol (>7 glasses of wine or spirits per week).

then decided upon. Data regarding the participants is presented in Table 1.

Data collection

A total of 14 in-depth interviews were conducted (8 females, 6 males, ages 47–84), each lasting between 35–75 min. The interviews were performed in Swedish (mutual language for researchers and participants) and collected by three authors (EA, SG and AHP) as well as one research assistant. The first 10 interviews were conducted at the PHCC or in a room at the university between October 2015 and April 2016. The PHCC setting was located centrally in an urban city environment easily accessible by bus, subway, and commuter train. The PHCC setting had a reception area in which to wait, a café, as well as quite meeting rooms for the interview. The university setting was located south of the city and had comparable facilities such as quiet meeting rooms and café as well as good accessibility by commuter train and busses within the southern suburbs. In order to deepen analysis and reach qualitative saturation, 4 more interviews were conducted between May - August 2016. A semi-structured interview guide, based on previous research within the research group, was used with questions concerning the participants' occupations in their everyday life they were especially engaged in. The authors, EA or AHP, reviewed the interview guide with the other interviewers in order to assure conformity in interviewing technique and questions. The interview included questions such as, 'Can you tell me a bit about what engages you in your everyday life,' 'What is engaging for you?' and' What activities are most important for you during a week?' To gain a deeper understanding of the individual experience as well as to capture thoughts and events not included in the interview guide, follow up questions such as, 'can you tell me more' or 'can you describe a situation related to this,' were added. All interviews were recorded digitally and transcribed verbatim.

Data analysis

The transcribed interviews were analysed by the first two authors (EA and AB) with a constant comparative approach [21] using a computer-based software, ATLAS.ti 7 [25]. The first authors thoroughly read and re-read the transcripts to gain a general sense of the content at large. Excerpts of text were marked, constituting data that was deemed as relevant. For example, text describing the participant's engaging occupation as well as details pertaining to the engaging occupation were identified, such as engaging occupations that were considered social. Initial coding was performed to create an understanding of the data and the initial codes were kept close to the text, aiming to create as many codes as possible to be used in the continued analysis. These codes were regularly discussed between the authors during the coding process. The next phase in the analysis was to move to focussed coding using a constant comparative method, moving back and forth in the text, to analyse and categorise [21]. For example, characteristics of engaging occupations were broadly identified, such as if an engaging occupation was not only social but also involved taking responsibility. In this phase of the analysis, it was deemed that further interviews were needed, and thus data analysis and further interviewing continued (4 interviews). Memos were written during the whole process, describing reflections, the properties of the categories that emerged, and how they were linked together [21]. To ensure trustworthiness in the analysis, the authors in the final stage, discussed and reviewed the findings, further applying the framework of health promoting or compromising aspects, until coming to a consensus which resulted in the core category. In order to retain context, the findings are presented thematically but with integrated interpretation in line with analysis of narrative data. The interview data was preserved in the original language (Swedish) for the purpose of analysis. Citations were translated from Swedish to English for publication and in the translation the preserving of meaning has been prioritised over a word-for-word translation [26]. Citations were indepedently translated from Swedish to English by AB and EA, and

compared for discrepancies. Where discrepancies arose, the authors discussed to reach consensus about choice of words and preservation of meaning.

Findings

Three categories were identified from the analysis with regards to health promoting and health compromising aspects of engaging everyday occupations: 1) Engaging occupations facilitated by optimal conditions, routines, and habits, 2) Engaging occupations characterised by doing for others and contributing to something greater, and 3) Engaging occupations in a continuum - past, present and future. From these categories, one core category was identified: ***The paradox of engaging occupations and health,*** which frame the complexity of engaging occupations as an important factor in shaping everyday habits that could be both positive and negative with regard to stroke health. The framing of the core category illustrates a multidimensional complexity inherent in engaging occupations, which does not translate to only necessarily positive aspects for health (Figure 1).

Engaging occupations facilitated by optimal conditions, routines, and habits

Engaging occupations were for participants often easy to incorporate, given the right conditions. The meaning of having the right condition varied among participants, and their routines and habits were seen as opportunities for the optimal condition. One participant talked about the occupation of interacting with others in a virtual world. The participant's engagement in, what for some could be called a computer game, was deep, continual, and with purpose. The participant described engagement in this virtual world as something in which to be engaged through the computer and as something that engrossed the participant every evening after work. The engaging occupation, in this case, involved sharing photos, planning exhibitions, and interacting with others, through an avatar, in a virtual world. In this world, everything was as-if [27] and in addition to sharing photos and having an identity as photographer, involved shopping for clothes, attending events, chatting, sort of like a repertoire of occupations in a non-virtual world.

1. Engaging occupations facilitated by optimal conditions, routines, and habits
2. Engaging occupations characterized by doing for others and contributing to something greater
3. Engaging occupations in a continuum - past, present and future.

Formulated the Core Category: ***The paradox of engaging occupations and health***

Figure 1. The categories and the core category.

The participant explained that coming home from work and having dinner by the computer while entering this virtual world had become part of a routine. As the participant recalled the inauguration into the virtual world, this routine had become possible a number of years ago when the participant was able to get the needed computer equipment set-up at home. Moreover, the occupation of using the computer regularly, fit comfortably with other occupations in daily life, offering social contacts and a chance to be creative. The participant expressed the need to keep occupied and to be involved with others through the computer, which was for this person interesting. However, the participant reflected over the choice of the occupation, suggesting that the conditions of the occupation were valued greatly. The participant expressed,

> I think I would do that in any case … .because it is so easy to sit there and be there but if I didn't have a computer and compelled to do something else, yes, but then I would have gotten involved with that instead.

Engaging in the virtual world meant approximately 2 h of physical inactivity, although the participant also felt mentally and socially inspired. Even though this was an engaging occupation that on the one hand contributed to mental wellbeing, it on the other hand contributed to perpetuating risk factors such as physical inactivity and overweight. Overweight was one of the stroke risk factors the participant presented with when recruited for this study.

This category characterised several stories. For another person, lying in bed reading the newspaper every day before getting up was important. When asked about other engaging occupations the participant said, 'No well, it's that morning routine and I get to read the newspaper'. In both scenarios, interacting in the virtual world and reading the newspaper in the morning, were established routines representing regular periods of time of physical inactivity, a modifiable factor with regards to stroke risk. However, at the same time a health promoting dimension of feeling relaxed, included, and socially competent was present.

When speaking about engaging occupations, participants began to give words to the paradox of pleasurable experiences despite knowing the health compromising factors. For instance, centrally inherent in stories about drinking a daily cup of coffee together, was eating something sweet. Despite

knowing the health trap of sweets and fatty foods, changing eating habits were perceived as difficult. This was not only about a habit but about preferences and taste. As one participant described, '… it just tastes so unbelievably good with coffee and cakes… .have a lot of difficulties with vegetables in my diet, which the dietician said I had to. I am fighting with that still'.

Another participant described evening dinners together with a partner at home as part of a routine that was important. In light of prioritising evening mealtimes at home, the participant skipped breakfast and lunch at times, saying, 'I don't eat any breakfast… .coffee, work. I don't eat hardly any lunch either'. However, the routine of reducing food intake during most of the day and instead eating, what the participant described as a large meal of 'hearty food' in the evening poses a heightened risk for stroke in combination with other parts of the daily routine. The participant said, 'All our dinners are a joy… I know… I sit still a lot. At work, and at home, so I don't need so much food, so that dinner, it covers all my needs.'

Another participant had received a bike as remuneration for being involved in a research project. Having a new bike had for this person contributed to feeling encouraged to start biking on a regular basis. Attending meetings with other participants in the research project and receiving positive feedback regarding improved blood sugar levels and physical health were all aspects that contributed to favourable conditions. Being part of the group meant more to the participant, than the actual biking. Getting on the bike and biking somewhere was rather part of an implicit expectation that was felt. When asked to reflect on the new process of change, the participant expressed faith in a newfound ability, however with reservations regarding the sustainability of the change. 'Yes, I believe that actually. One can probably accomplish the actual change, it's just that you have to keep at it when it isn't new and fun anymore, it is so easy to return to old habits.'

Moreover, another person expressed the conditionality of having the right weather when going for bike rides in the summer. When the roads were slippery, the person willingly opted out of the active lifestyle,

> Yes, on a winter day, then I don't do much. I mean, I don't bike when it is slippery. Instead, during the winter I hibernate, then there is no sport activities, not at all. Yes, it is those longer walks on the weekends, that's all.

When asked about what the participant engaged in instead: 'TV'. While for some people the right conditions had to do with access to resources or environmental conditions, for others it had to do with needing a trigger in the form of a social contact. One participant described it as, '… . Sometimes… to play golf on the weekends, sometimes. It depends on if my brother calls… yes, otherwise there isn't that much that happens. It is pretty calm.' The individual and contextual conditions for engaging occupations cannot be seen as singular, but as part of a regular repertoire of routines and habits, and at times sensory experiences, that need to be taken into account.

Engaging occupations characterised as doing for others or contributing to something greater

An important aspect of engaging occupations had to do with feeling like one was contributing to a greater good. Participants described situations in which they were deeply invested, particularly in occupations that were primarily for others. Doing for others contributed to feeling engaged, but as the examples will illustrate, engaging occupation from this perspective also led to both positive and negative impacts on stroke health.

Feeling a sense of responsibility, for a pet or a garden for instance, was coupled with a sense of agency in engaging occupations. Participants expressed this responsibility in instances such as needing to go out with the dog. For one of the participants in this case, having a responsibility for the dog also provided the benefit of getting exercise, '… then to go out with the dog is important in order to move about… .'. The participant continued to explain that they were two persons who shared the responsibility for taking care of the dog, '… .Sometimes I'll tell my partner, 'no, I won't go out today, you take the dog'… so it shifts there a bit, but every week in any case, shall we say 3 days, I am out a lot getting exercise.'

Having someone with whom to share responsibility enabled this participant to at times forego taking a walk. However, an awareness of responsibility for the dog was communicated, which for this participant meant taking a walk at least 3 times per week. The illustration is one with which the urgency of doing something for another also involves physical activity. The potential burden of always having to take the dog for a walk was levied by sharing responsibility with a partner. Even this shared responsibility can be seen as part of the category continuum of being accountable.

Another participant ran a small family business for which there was a strong feeling of accountability.

The participant attributed much of the businesses success to the participant having been engrossed in work. The participant chose to work long days as well as weekends, for the good of the company. Although the person felt that work was exciting, a sense of wanting to contribute to a greater good through the business took precedence over a sense of personal health when there was an urgency to get work related goals accomplished. Feelings of urgency to accomplish goals combined with the excitement for the job led the participant to also take on more tasks. In the daily work context, this person would often prioritise a work goal that involved mentally challenging tasks but physically sedentary behaviour, i.e. financial reporting. The paradox of being engaged whole heartedly in the business was juxtaposed against the backdrop of lifestyle routines encompassing a high degree of stress and non-salubrious engagement (from the perspective of stroke risk).

Engaging occupation in a continuum - past, present and future

Engaging occupations were connected to what persons had done in the past and visions for the future. The temporal trajectories from past to future had real bearing on health promoting or compromising aspects in relation to risk for stroke. For one of the participants, a middle aged man, the importance of engaging occupations had been reimagined to meet his present situation although it also had implications for an anticipated future. His narrative presented a paradox between earlier identities of being active and present identities of being too tired after work to be active in the same way. He worked as a painter and after work he would prepare dinner. For him, dinner was nowadays something he did in front of the T.V. or computer. He considered his weekends his leisure time. Earlier in his life he had been active in competitive sports, but now this interest was often replaced with being a spectator of sports. He expressed,

> Yes, I have always … played soccer until … perhaps about 10 years ago. I quit. I felt I was too fat … .but towards the end, mostly aches and my weight, above all, didn't make it fun anymore. Strange enough, I don't miss it … .You don't have the condition anymore like you did when you were younger … to run.

During the winters he engaged in a hobby of building models. This was also a leisure pastime that he had from an earlier age. He describes his involvement in building models as also being of a different character today compared with in the past. At present he chooses projects that do not require the same type of physical challenge. One sport that he had a new-found interest for was golf. During the summers he played golf and finds that this contributes to being social, where it is often his brother who initiates the golf round. For him, golf has a future horizon in his expectations to be physically active, although not always easily integrated in a feeling of flow,

> … sometimes it's just bad and one goes crazy but sometimes one gets a good swing and that, feels like there is hope … it is a challenge for oneself like to get better so it gets more fun to play. Because when it is going good it is really fun to play, but when it is going bad it is awful … and then it's a bonus that one gets exercise.

Golf for this participant was imbued with a sense of hope, something in which he could improve through practice. Yet, even though he expressed a future horizon, there was an element of fragility because he expressed a need for encouragement from his brother.

For another participant engaging in painting at her summer house located in another country was part of a continuum of experiences. She expressed the inspiration that she gleaned from her being at the summer house, and how she used this inspiration in her paintings.

> We go for walks, visit places and I like to paint, so I take pictures of places that I want to do something with later. There is a lot to see there. And I like the area, so you go for walks, you feel good there.

She expressed a sense of renewal and belonging in the environment. 'Since it is such a nice feeling to be there, we are out and experience things, go to the markets and explore different places, go into different churches. It is like it is another life.' Before participating in this study, the woman had been diagnosed with atrial fibrillation (AF), which had meant for her that she felt stressed about travelling, hampering her spending time at the summer house and the possibility to partake in her painting. She describes,

> … my husband has had to travel many times alone, because I don't dare, I don't feel good now, later, later. It is that thing with later, when I get better. But now when I am noticing that it isn't getting better, then I think, no, I am soon 70, so then I said, "no, now I am just going to go, take it or leave it.

Her everyday life wasn't always conducive to her being creative, which for her was important. The mundane tasks of her everyday life got in the way, creating a frustration and stress in realisation for not

choosing to do an enjoyable activity. The eventual positive, relaxing aspects of expressing herself in her paintings were hindered by the practical fixings to get it done. For another participant, photography was a way of 'slowing down', to notice the small details in nature, to then use in her photographs and she expressed,

> I think it is lots of fun when I am out walking with my camera, and notice small details, you know, when you see things that you don't usually because you are too stressed. I like to slow down and stop and look. Photograph a little part of a flower on a tree maybe and things like that, I think are fun. Things that you usually just run by in a hurry.

The continuum of past, present, and future occupations for participants in this study were expressions for something both positive and negative in relation to stroke risk. On the one hand having the possibility to engage in personally meaningful (and for one participant creative) occupations allowed for feelings for creativity, but it could also be a source of frustration and stress when bodily health conditions created barriers. For participants the sensory experience of being in another environment and taking in visually and viscerally the scenery was vital to creating. Not being able to travel became a barrier for possibilities to experience engaging occupation as earlier.

Discussion

The core category, the paradox of engaging occupations and health, illustrates a complexity when using occupation as a means to change habits. To show this, one could place engaging occupation on a vertical axis showing a continuum of a higher or lower degree of engagement in occupation, and on a horizontal axis, a higher or lower degree of stroke health in relation to risk factors. Engaging occupations that are subjectively meaningful and engaging for the person, and also health promoting, are arguably positive. However, participants in this study illustrate occupations that are for them subjectively engaging but less optimal from the perspective of stroke health. This is arguably negative in some respect. This is also a phenomenon that in a way introduces a paradox and challenges some of the core values inherent in occupational therapy. For instance, the experiences shared by participants in this study suggest that engaging occupations can be both health promoting and detrimental to health. The degree an occupation could contribute to positive health (in relation to risk for stroke) is likely be related to the complex whole, where a number of factors needs to be taken into consideration. Departing from an assumption of occupation as healthy is problematic in the context of reducing risk factors for stroke through occupation.

Another dimension that is interesting is the temporal dimension of doing, being, becoming [28,29] in which one and the same occupation can change over time, with respect to health or engagement. It is not uncommon in occupational therapy to draw on a person's past occupations and to identify occupations that are for that person of personal relevance. Participants in this study show how this type of praxis could lead to misinformed interventions, either drawing on occupations that no longer are engaging for the person or successfully drawing on engagement in occupation but with the undesired side effect of aspects unfavourable from the perspective of stroke risk.

Traditional categorisation of occupations into self-care, work and leisure have been under critical scrutiny within the past decade and a move towards experience-based conceptualizations of occupations has been suggested [14,30]. Thus, the analysis of the interviews explored the experiences of the occupations in the everyday lives of persons who have a risk for stroke arriving at the main finding that engaging occupations did not necessarily promote health considering stroke risks. This resulted in a paradoxical relation between occupation and health. Furthermore, discourses within occupational therapy have inferred connections between occupation with health as well as well-being [31]. Frameworks such as *Do-Live-Well* [15], describing the connection, do not explore the potential differences between health and well-being, but treat these together as positive outcomes of occupation. Findings from the present study suggest a complex picture of occupations, showing that engaging occupations that provide well-being are not necessarily conducive to stroke health. This must be seen in context of a number of other factors as well as the dynamic nature of engaging occupations. Jonsson (2008) suggests that an experience-based categorisation of occupation makes it possible to discuss the relationship between occupation and well-being in a new way, but questions arise regarding the relationship between well-being and health. The paradox that the study's findings supports shows that persons experienced well-being, or a sense of harmony with for example one's mental health or sense of belonging while being engaged in occupations that were considered health compromising in terms of stroke risk. Even though scholars have proposed that occupations

are directly related to health and well-being [32], this study calls for a new look as to what constitutes the relationship between health and well-being. This stance however is not new. The concept of dark side of occupations, which refers to dimensions of occupations that may not lead to good health or well-being, have been named but yet not fully explored within occupational science [33] and more exploration is needed to gain a better understanding of the complex nature of occupations in relation to health and well-being.

The findings of the present study also illuminate issues relevant for practice, on the one hand, being client-centred, supporting the occupations the person wants and needs to do, juxtaposed with being a 'moral police' [34]. The situation may be compounded with the persons' perception of a lack of urgency in being pro-active in preventing a stroke. This could be rectified by working with informed persons that are convinced of the necessity to change their lifestyle to positively impact their own health. The way forward may be complex. Individuals are in a context where community and social supports must be acknowledged and utilised in the process of making lifestyle changes. Gaining a deeper understanding of experiences of occupations and studying this in relation to health promoting or compromising characteristics of occupations can facilitate lifestyle intervention programs designed to support occupational literacy for persons in order to be able to make sustainable modifications in daily life. An important aspect of sustainability in this context can be reorganising the balance between health compromising occupations and health promoting occupations that offer personal relevance and an impetus for long-term viability.

Methodological and ethical considerations

Despite a time commitment for participants in this study, the data was deemed relevant for the analyses conducted. However, there are some limitations that can be raised here. People were approached at the PHCC's and could decline screening for stroke risk, which means that the authors did not have access to information about how many persons with a heightened risk for stroke accepted versus declined. This can be seen as a limitation because we do not know to what degree participants were inclined to participate or not. It can also be seen as a limitation that multiple interviews were not conducted, in order to have a temporal dimension to the qualitative data. Moreover, employment history was not gathered, which can be seen as a limitation because work stress and work background could have been interesting background information. Overall, however the authors believe that the gains in this study outweighed the limitations because the results are juxtaposed against a backdrop of theoretical assumptions in occupational therapy research that can be further explored.

Although the research process and procedures outlined in this paper have been approved by a regional ethics board and follow general principles in conducting research in occupational therapy [35,36], one dimension that can be of particular interest to reflect on further is the ethics of conducting explorative qualitative research in a context of primary prevention of stroke. The research team behind this study, in dialog with the primary healthcare centres, deemed that it was inappropriate to discuss potential diagnoses, disease, or illness with participants, In this project, potential participants were approached and invited to participate in a project focussing on engaging occupation and lifestyle (or life habits as a direct translation from Swedish), particularly for persons older than 40 years of age and who had sought healthcare for conditions such as elevated blood pressure, arrhythmia, weight issues, or lack of physical activity to name a few. The interviewing researcher was careful to focus on engaging occupations in everyday life and to facilitate information about how this related to various choices, habits, and routines. Although disease such as cardiovascular disease sometimes came up in discussions, research team members were careful to be explorative in inquiring in the interviews. Upon completion of the study, the team had the impression that many participants had appreciated the opportunity to discuss living habits and discuss this in relation to tentative changes they were contemplating.

Acknowledgements

We would like to extend our sincere appreciation to the participants who shared their experiences, which contributed to this study as well as the development of a preventive intervention program. We express thank you to professors Kerstin Tham and Anders Kottorp as well as project assistants, Christina Eriksson, Erika Johansson, and Kristin Norefors, and Gustav Mickols for valuable contributions. Furthermore, we are grateful to Stockholms Sjukhem Foundation, Akademiska Vårdcentraler in Huddinge, Flemingsberg, St.Erik, Danderyd, and Akademic Primary Care Center for valuable input. Finally, we extend a gratitude to Vårdal Foundation (grant 2014-0108) and National Society for Research on Aging (grant 2015, Asaba) for financial support.

Disclosure statement

The authors report no conflict of interest.

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