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Exploring contextual barriers and enablers for the potential involvement of voluntary sports clubs in social prescribing: a qualitative case study in Denmark

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Abstract

Background Social prescribing necessitates not only effective referral processes from general practices and a linking mechanism to community service options but also a vibrant community and voluntary sector. Besides ensuring stakeholder buy-in from voluntary organisations, such as voluntary sports clubs, social prescribing also seems to require supportive contextual factors, including competencies and organisational resources necessary to promote patients' sustained engagement. This study aims to explore contextual barriers and enablers for the involvement of voluntary sports clubs in social prescribing, which may be essential in illuminating the potential role of Danish voluntary sports clubs in future social prescribing initiatives.

Methods The study utilised a collective case design, focusing on five Danish voluntary sports clubs selected for maximal variation. Data collection involved approximately 55 h of ethnographic observations of varied physical activity options geared towards adult participants (above 18 years) as well as those aged above 60 years, along with focus groups with stakeholders such as club members, instructors, and board members. A thematic analysis was conducted for each case to explore contextual features of voluntary sports clubs, followed by a cross-case analysis.

Results Our findings suggest that Danish voluntary sports clubs can facilitate access to community connections beyond merely promoting physical activity options. Flexible participation may enable referred individuals to engage in physical activity options or take on community roles, allowing engagement based on individual needs and promoting social ties. However, some sports clubs appear to have the same individuals participating across multiple programmes within the club, which may limit outreach to underrepresented target groups unless this is strategically prioritised.

Conclusion While outreach to underrepresented target groups can be administratively challenging for volunteers in sports clubs, intersectoral collaborations, such as social prescribing, may enhance visibility, referral, and engagement for these groups in voluntary sports clubs. Nevertheless, prioritising capacity building and supportive structures that

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align with voluntary sports clubs' organisational culture may be essential to alleviate volunteer strain and broaden access to community-based physical activity options, potentially contributing to a more sustainable involvement of voluntary sports clubs in social prescribing initiatives.

Keywords Case study, Social prescribing, Primary care, Physical activity, Health promotion

Background

Social prescribing is a referral mechanism that connects patients, mainly in primary care, to non-medical, community-based services aimed at addressing broader determinants of health and empowering patients to take control of and manage their health and well-being [1, 2]. In this paper, we understand social prescribing as a connector scheme which can take multiple forms, ranging from basic signposting by leaflets or active signposting by health professionals in primary care to more holistic models including a link worker and feedback from community providers [2, 3]. The referral from primary care, usually from general practice, is often assisted by a link worker, who offers patient-centred, flexible support to co-produce an action plan tailored to individual needs, strengths, and interests, to identify and access relevant community services. These community services are often already available, but link workers have dedicated time to support patients in identifying and tackling potential barriers of accessibility and participation [1, 4]. Services are typically delivered in the community and voluntary sector and could involve art and nature therapy, support addressing social isolation, volunteer opportunities and exercise programmes [5]. The latter is one of the commonly utilised models of social prescribing, likely due to the longer history of exercise referral schemes [2, 6]. While exercise referral schemes aim to connect patients with physical activity programmes, they may represent a distinct mechanism compared to more holistic models of social prescribing. Typically, exercise referral schemes involve direct referrals from healthcare professionals to a structured exercise programme [7, 8], often without the involvement of a link worker. Yet, social prescribing towards community-based physical activity options may offer healthcare professionals in general practice opportunities to promote physical activity and social interaction, for instance among patients who are sedentary and with, or at a risk of developing, long-term conditions/multimorbidity [5].

Various models of social prescribing have spread internationally in recent years [9], with the UK at the forefront of investment and implementation. This includes commitments in the NHS Long Term Plan to fund employment of link workers in primary care networks, aiming to support referrals to social prescribing schemes for more than 900,000 people by 2023/24 [10]. Yet, there remains a lack of robust evidence capturing how, when, for whom, and at what costs social prescribing is effective. This is

challenged by the considerable variation across social prescribing models in the range of prescribed activities and the heterogeneity of potential target populations [11, 12], along with inconsistent use of the term [13]. Despite methodological shortcomings, Chatterjee et al. (2017) found potential benefits of social prescribing in terms of increased self-esteem and confidence and improvements of mental wellbeing among service users [14]. Other studies indicate that social prescribing could reduce loneliness [15], and evaluations of local social prescribing schemes from the UK show promise in social prescribing having the potential to alleviate pressure on healthcare services by reducing consultations in general practice and the use of secondary care services [16]. Regarding social prescribing and its role in promoting physical activity, Pescheny et al. (2019) evaluated an uncontrolled before-and-after study of the Luton social prescribing programme, which linked individuals to a wide range of non-medical support mainly in third-sector organisations. The results suggested that social prescribing may increase physical activity levels among service users of the programme. Working with the link worker (the so called 'navigator' in the Luton social prescribing programme) appeared to be a key component in promoting the uptake and adherence to the referred activities [17, 18]. Furthermore, Htun et al. (2023) conducted a systematic review to assess social prescribing interventions aimed at preventing chronic diseases among community-dwelling adults. These findings suggest that social prescribing programmes may encourage and slightly increase physical activity levels, at least up to 12 months post-intervention [6]. Despite possible methodological limitations, both studies imply that social prescribing may hold promise for promoting physical activity.

Regardless of the applied model of social prescribing, such initiatives typically require a vibrant community and voluntary sector to facilitate appropriate patient referrals [19]. Ebrahimoghli and colleagues' (2023) systematic review of qualitative evidence identifies several structural factors in the community and voluntary sector, influencing social prescribing initiatives, including limited availability of community services, accessibility challenges for patients, and capacity constraints within services. At the interpersonal level, the capability of community stakeholders to provide tailored social support seemed to be valued by social prescribing service users as a means to enhance motivation [20]. Complementing this perspective, Husk et al. (2020) demonstrate that skilled and

knowledgeable activity leaders seem to influence service users' adherence to social prescribing programmes [2]. From an organisational perspective, Southby et al. (2017) highlight that a perceived or actual lack of continuity of services within voluntary community organisations creates a barrier for General Practitioners (GPs), also known as Family Physicians, to consider investing in intersectoral collaborations, such as social prescribing initiatives [21]. Specifically, in the context of physical activity, Pescheny et al. (2018) found that ongoing support from community providers was a promoting factor for service users' adherence to social prescribing programmes [18]. Similarly, in our scoping review (2024) examining social prescribing initiatives connecting general practice patients with community-based physical activity options, we identified the importance of patients receiving social support from peers in the community setting, as well as having instructors who are 'demand-driven' and aware of participants' skills and capacity to participate. Conversely, we identified contextual barriers, including a lack of time among both healthcare providers and community providers to engage in social prescribing collaboration, as well as potential insufficient competencies among community instructors to appropriately include and support referred participants [22]. Hence, besides ensuring the buy-in of stakeholders in voluntary community organisations [19], social prescribing initiatives also seem to require supportive contextual features related to community services, including instructor competencies and adequate organisational resources of voluntary community organisations to welcome referred patients and enhance sustained engagement, as well as the capacity to establish and maintain sustainable intersectoral collaborations with general practice.

Social prescribing initiatives represent complex interventions characterised by multiple components (including skilled activity leaders in community services); diverse stakeholders (healthcare professionals in general practice, patients, link workers, and volunteers in community services); and varied outcomes at different levels (patient and community) [19]. The UK Medical Research Council (MRC) Framework for developing and evaluating complex interventions emphasises that understanding key dimensions of the context in which interventions are implemented, including physical, organisational, social and cultural features [23], is key for developing and delivering effective interventions. While social prescribing has expanded globally [9], it has yet to achieve widespread adoption in Danish primary care.

Danish general practice serves as both first-line healthcare provider and gatekeeper to secondary care, functioning as the primary point of contact for most patients within the Danish tax-funded healthcare system. Operating as independent contractors, GPs have responsibility

for the economy, equipment, and organisation of their practice. As long as GPs adhere to the collective agreement - formulated through negotiations between the Danish regions and the Danish Organisation of General Practitioners (PLO) and stating the financing and obligations of general practice - GPs can freely decide how to structure their daily clinical work [24]. Practice nurses are commonly employed in Danish general practice settings and conduct independent consultations, including chronic disease management, under GP supervision [25]. Thus, both GPs and practice nurses represent potential referrers of social prescriptions within the context of Danish general practice. Furthermore, voluntary sports clubs could be obvious providers of social prescribing community services in Denmark by offering multiple options of recreational physical activity with roots in a local community setting. However, survey data suggest that a minority of Danish voluntary sports clubs work strategically with health-enhancing programmes or offer targeted initiatives for socially vulnerable groups, such as people with disabilities or those from a migrant background [26]. Hence, using qualitative methods to gain detailed knowledge on physical, organisational, social and cultural aspects of Danish voluntary sports clubs is essential for understanding their potential role in social prescribing initiatives. By examining the specific Danish setting, the findings will inform the development of contextually appropriate social prescribing initiatives targeting community-based exercise in Danish voluntary sports clubs, while also contributing to the broader international understanding of how social prescribing can be adapted and integrated within community and voluntary sector organisations - an area where peer-reviewed studies, to our knowledge, remain limited. Accordingly, this study aims to explore contextual barriers and enablers for the potential involvement of voluntary sports clubs in social prescribing initiatives.

Research methods

Research design

The present study constitutes a component of the broader 'Move More' Denmark research initiative, aiming to develop a contextually appropriate social prescribing intervention to promote physical activity among physically inactive Danes; details of the overall project design and rationale are described elsewhere [27]. Hence, the current study served to explore the implementation context and the potential of voluntary sports club engagement in social prescribing as a part of developing a context-sensitive intervention. The 'Move More' Denmark project employs a comprehensive approach to intervention development guided by the MRC Framework for developing and evaluating complex interventions [23], which emphasises that considering the

implementation context is a core element of intervention development. For our specific research focus, comprehending contextual features including social and cultural norms and organisational resources within voluntary sports clubs is essential for developing sustainable social prescribing interventions promoting community-based physical activity. To address this, we employed a collective case study methodology as conceptualised by Stake (1995), incorporating multiple qualitative research methods. This approach enables investigators to examine several cases concurrently or sequentially to develop a comprehensive understanding of issues relevant across all cases by identifying patterns and themes through a cross-case analysis [28, 29]. Five Danish voluntary sports clubs served as cases to explore contextual features of Danish voluntary sports clubs and their potential role in future social prescribing initiatives. The focus of our data collection and analysis centred on the voluntary sports clubs as collective units potentially serving as key providers of community-based physical activity options within social prescribing programmes. Consequently, our attention concentrated on social interactions, norms (before, during, and after training sessions), values, and the use of various organisational and physical resources (e.g., staff, network, facilities) within these cases, rather than on following and studying specific individual stakeholders. Statements and experiences from individual stakeholders were used to collect knowledge about collective norms and values embedded in the cases. Notably, the selected voluntary sports clubs were not currently engaged in social prescribing initiatives, as social prescribing has not yet achieved widespread implementation within Danish primary care. Therefore, these cases were specifically chosen to examine the existing contextual barriers and enablers, with the explicit aim of incorporating these insights into the development of contextually appropriate future social prescribing initiatives.

Setting

In Denmark, there are estimated to be around 11,300 sports clubs with around 2,734,000 members [30]. These clubs operate primarily as democratically structured, non-profit community entities promoting both physical activity and social engagement through volunteer-managed programmes with roots in a local community setting. The term 'voluntary sports club' used in this paper reflects their predominantly volunteer-based organisation, although approximately 8% of Danish voluntary sports clubs employ professional managers or similar paid staff [26]. Danish voluntary sports clubs operate with non-profit objectives aligned with member interests based on a governance structure that enables members to shape direction through democratic processes and voluntarism. Danish voluntary sports clubs are often ascribed

many functions, and there is a political interest in their possible instrumental value for facilitating social integration, civic participation, and health promotion [31, 32]. In recognition of these societal contributions, Danish voluntary sports clubs receive public support, including free access to public facilities, with most clubs relying on municipal venues rather than owning dedicated premises. They also receive public-funded subsidies for each participant under 25 years of age and, in certain municipalities, for those above 60 years [26]. Participation in Danish voluntary sports clubs typically requires the payment of a membership fee. The size of this fee varies depending on factors such as the type of activity, the cost of instructors, access to facilities, the need for specialised equipment etc. An annual membership fee in Danish voluntary sports clubs typically ranges between 1,000 and 1,500 DKK (approximately £115–£170), depending on the activity and associated costs [33]. In many cases, prospective members are allowed to participate in a number of trial sessions before committing to a membership.

Selection of cases

Cases of voluntary sports clubs were selected using a maximum variation sampling approach to optimise learning opportunities through diverse organisational characteristics [28]. Research indicates that specific club characteristics could be relevant to their capacity to engage in health promotion and, presumably, also relevant regarding social prescribing initiatives. These characteristics include membership size, geographical context, variety of physical activity options, organisational structure (e.g., volunteer-only versus combined volunteer and paid staff) [34]; whether they provide targeted programmes for specific populations, such as people with disabilities [26]; and attitudes towards or extensions of collaboration with the public sector in health promotion [35]. Yet, given the constraints of in-depth qualitative investigation, our case study design could only include a few selected combinations of these characteristics [28]. This selection was informed by data from a 2021 electronic survey conducted by DGI (a national umbrella organisation for Danish voluntary sports clubs) among chairpersons participating in their "Association Panel". This panel comprised a representative sample of voluntary sports clubs stratified by geographic distribution and organisational size. In the survey responses, we were able to identify potential cases by screening for variation across five primary dimensions: geographic context (rural, suburban, or urban), variety of physical activity options (single-sport versus multi-sports clubs), organisational structure (volunteer-only versus combined volunteer-paid staff), membership size; and apparent willingness to engage in collaboration with public healthcare focused on a specific group of diseases.

Table 1 Case characteristics and data collection

Case names ¹	Midland	Riverside	Hilltop	Northbrook	Greenfield
Type of voluntary sports club ²	Multi- sports	Multi-sports	Multi-sports	Single-sport	Single-sport
Organisation type ³	Volunteers	Volunteers One employee	Volunteers	Volunteers	Volunteers
Geographic location	Rural	Suburban	Rural	Urban	Suburban
Size ⁴	+ 5500	+ 1500	+ 1000	+ 100	+ 300
Willingness ⁵	Disagree	Agree	Totally agree	Totally agree	Neither nor
Participants in observed activities ⁶	- adults above 60 - adults - mixed men and women	- adults above 60 - adults - only women - only men - mixed men and women	- adults above 60 - adults - only women - only men - mixed men and women	- adults above 60 - adults - only women - only men	- adults above 60 - adults - only men - mixed men and women
Participants per Focus Group	5 participants (all members)	4 participants (1 treasurer; 1 employee; 2 instructors)	2 participants (2 board members)	3 participants (1 chairperson; 2 instructors)	4 participants (3 board members; 1 member)

¹Cases are pseudonymised, and names are fictional²Offering multiple disciplines of sports or single sports³Based on volunteers only and/or employees⁴Rounded off number of members in 2023⁵Willingness to initiate a collaboration with public healthcare targeting citizens who have been through a course of a disease. Agreement of statement based on response on a 6-point Likert scale⁶Activities observed across cases included: badminton; 'krolf'; outdoor training; volleyball; pickleball; neck, shoulder, and back-exercises; cross-fit training; multi sports training; floorball; table tennis; a variation of dodgeball; training for mums on maternity leave; yoga; pétanque; pilates; zumba; football

This initial screening of survey responses was conducted by the first author (LGR) and last author (KR). A preliminary list of potential cases was then refined through consultation with co-author LHB and DGI collaborators, who have regular contact with voluntary sports clubs and possess detailed knowledge regarding the potential cases. The selection process considered several factors including geographic accessibility, feasibility for conducting fieldwork and focus groups, and timing compatibility with our data collection period. When clubs offered multi-sports activities, we focused on specific subdivisions and physical activity options that individuals

could presumably participate in without extensive prior experience or specialised knowledge, as these options were deemed most relevant for social prescribing programmes. Furthermore, the selection prioritised physical activity options targeting adults aged 18 and above, aligning with the defined target population of the 'Move More' Denmark study [27]. Hereby, our process of selecting the cases combined maximum variation sampling principles – prioritising diversity in club characteristics based on survey responses - with convenience sampling considerations related to practical feasibility of data collection among potential cases. Through this process we identified five voluntary sports clubs within the Central Denmark Region. The recruitment process began with initial contact facilitated by DGI representatives, who introduced the study to the chairpersons of the initially selected voluntary sports clubs. Upon receiving preliminary interest, the first author established direct communication with each chairperson, providing detailed study information materials for distribution to volunteers and instructors. Subsequently, individual arrangements were negotiated with instructors regarding observation sessions and focus group participation. Prior to each observation session, the first author verbally presented the study objectives to all members present and obtained oral consent. Written informed consent was secured from all focus group participants. All cases were pseudonymised, with fictional names used throughout this paper. Case characteristics and participants involved in data collection are summarised in Table 1.

Data collection

Consistent with established case study methodology, we employed multiple data collection techniques to develop a comprehensive understanding of each case within its unique context [28]. Our data collection strategy incorporated ethnographic fieldwork and informal conversations spanning across 17 days (approximately 55 h) complemented by five focus groups - one conducted within each case. Ethnographic observation is a research approach designed to offer a deep understanding of a group or social environment by engaging in active participation and observation of the context. While traditional ethnography often involves prolonged immersion [36], our approach utilised shorter, targeted observation periods aligned with a more pragmatic intervention development approach exploring voluntary sports clubs' potential roles in social prescribing initiatives. Focus groups were selected as particularly appropriate for studying each case as a collective unit, as they illuminate collective norms and shared values based on discussions among individual stakeholders [37, 38]. The interactive nature of focus groups revealed how differing perspectives regarding their club and social prescribing

were articulated, challenged, and negotiated among participants, providing insight into the social and cultural aspects of the context in each club.

LGR conducted all observational fieldwork [39]. Observations encompassed sessions of physical activity options offered for adults (18+ years) and older adults (60+ years), participation in associated social activities, and informal conversations with instructors and members before, during, and after training sessions. The ethnographic observations functioned to ‘open the field’ and equipped the first author with local knowledge prior to conducting the focus groups. Field notes from observations were taken on-site. These were subsequently revisited and transcribed digitally later or the next day. The intensity of data collection activities varied according to each voluntary sports club’s differing characteristics [29] with multi-sport voluntary sports clubs typically requiring more observation hours than single-sport clubs. Likewise, LGR conducted all focus group interviews, with one session per case. The participants recruited for the focus groups varied across cases (see details in Table 1), as local gatekeepers in each case recruited participants based on their network and accessibility to various stakeholders. In one case (Hilltop), only two participants were ultimately recruited. The interview guide was designed for this project (See supplementary file). The interviews totalled 222 minutes (averaging 44 minutes per session). The ‘Move More’ Denmark research initiative was introduced to the participants, along with our understanding of social prescribing as a connector scheme with multiple forms, to ensure a common conceptual foundation for discussions. Our understanding of the intervention was intentionally described in broad terms to participants, which enabled us to explore their own interpretations and expectations of barriers and enablers of such initiatives. This approach was balanced with our co-creation framework, emphasising the development of interventions based on stakeholders’ input and perspectives, rather than imposing predetermined ideas about specific intervention components. To stimulate discussion, we employed open-ended questions such as: “*What characterises your sports club?*”. Additionally, we utilised an interactive exercise [40], where participants were presented with case-specific statements on post-it notes reflecting themes identified during the ethnographic observations, such as “*communities with outreach*”, “*members participate according to their capacity*” or “*volunteers with multiple roles/responsibilities*”. Participants selected statements they deemed representative of their club and explained their rationale, with options to create additional statements if needed. This approach helped validate and elaborate themes emerging from initial field note analysis. All focus groups were audio-recorded and transcribed verbatim.

Data analysis

Data coding and analysis were performed using NVivo 13 software (Lumivero). LGR led the analytical process with methodological supervision from KR, while the entire author team participated in analytical discussions and validation of findings. Our analytical approach proceeded through two distinct phases. In the initial phase, we conducted an inductive thematic analysis [41] for each case individually, following a systematic six-stage protocol: (a) developing familiarity with data content through repeated readings and preliminary pattern identification; (b) generating initial codes by organising data into meaningful categorical units; (c) consolidating codes into potential themes; (d) reviewing and refining themes into a ‘thematic map’; (e) defining and naming each theme; and (f) synthesising the overall findings. Voluntary sports club stakeholders expressed interest in their case-specific findings throughout the data collection process. Responding to this interest, we prepared five-page reports summarising preliminary findings for each case. These reports were shared with key stakeholders from each voluntary sports club, including chairpersons, instructors, and active volunteers who had served as primary contacts during data collection. Stakeholders were invited to review these summaries, pose questions, and provide their feedback if they were interested. The sharing of these case-specific findings did not form part of a co-creation approach, and feedback was neither expected nor received. The second analytical phase involved cross-case analysis, where we systematically examined themes identified within individual cases to detect patterns, commonalities, and variations across the five voluntary sports clubs [28].

Results

Based on a thematic analysis of the qualitative data sources, three overarching themes were identified, capturing contextual features that may act as barriers and enablers for voluntary sports clubs’ potential involvement in social prescribing.

Theme 1: flexible participation to accommodate different needs

The cases demonstrate that flexible participation made activities more accessible by allowing members to engage according to individual needs, capabilities and preferences. For example, across cases, several participants faced various health challenges, such as visual impairments, back pain, or age-related health issues, and their participation was adjusted accordingly. In both Hilltop and Riverside, there were examples of members who could join the first half of training sessions and then took on the responsibility of preparing coffee for fellow participants during the last part of the training session. Thus,

they participated in the activities according to their physical capacity but after stopping, instead of going home, they stayed, contributed, and participated in the social gathering after the training sessions. On the other hand, during training sessions for adults above 60 years in Greenfield, members take pauses as needed, and everyone comes and goes as they wish. As a female member expressed, *"I would rather come and play for 45 minutes than stay at home"* (Field notes, 30-05-2023). In other instances, activity equipment was tailored to meet various needs. For example, in Riverside and Midland, members were provided with lightweight balls when playing pétanque and 'krolf' (a combination of croquet and golf), which, compared to heavier balls, made participation more accessible, especially for the elderly and frail. Thus, the way the physical activity options were organised appeared to promote flexible participation, accommodating individual needs. Furthermore, there are examples of members showing awareness of their fellow participants' different abilities. For instance, in Midland, a member naturally picked up and carried the balls for an older fellow participant during 'krolf'. Similarly, in Northbrook, a member mentioned that he was mindful of whom to avoid tackling during the game. There seemed to be a sense of awareness and respect for different abilities and level of participation among members, where consideration for others is shown as a natural part of engagement. In general, both members and instructors showed an ability to adjust participation to individual needs, as shown in the following field note from Midland:

Papers in plastic pockets were placed around the floor in the sports hall, with headings like "aerobics" with a picture of an exercise, e.g., illustrating lifting knees high. At other papers the heading was "strength" and the exercises included push-ups, squats or plank exercise in 1 minute. Some of the participants tried to "copy" the picture, while others discussed whether the picture made sense and adjusted the exercise, finding their own version (...). The instructor moved around and made small adjustments. A woman, who was corrected in her plank exercise looked up at me, almost surprised, and said, "Wow, I could really feel it when I just hit the right height". The instructor also offered encouragement along the way to motivate participants to push themselves just a little bit more" (Fieldnotes, 20-04-2023).

As seen in the quotation, exercises are being adjusted to individual needs in different ways – either independently by the members themselves, following discussions with fellow participants, or by instructors. In addition, instructions were often open to being questioned by

members, which made individual adaptation more accessible and a natural possibility. Overall, flexible participation that accommodates individual needs and physical capabilities seems to be facilitated in the organisation of physical activity options and how members engage in diverse community activities.

Theme 2: the voluntary sports club as an entrance to a broader local community

Especially among members aged over 60 years, the voluntary sports clubs can be a place where individuals hear about other local initiatives – both within the club and in their local community in general. For instance, during a gathering for members partaking in physical activity options for seniors in Riverside just before the summer break, different initiatives were shared in plenum:

The sports club employee had been asked several times about when registration for the next season would open, so she explained that the current members would receive an email about it. Then, a female member took the word and mentioned a bike initiative to let the others know that this activity group was ongoing during the summer break. Everyone could join – both on a regular bike or an electric one. They plan to bike about 15 km around the area. Someone asked, 'Should we bring coffee?' and yes, the plan was to find a picnic table or roadside where they could enjoy that too. Then another female took the word and asked if anyone else was going to the town fair, as they could potentially meet up and dance?"(Field notes, 25-04-2023).

Thus, their engagement in the voluntary sports club seems to open the door to local community participation in a broader sense. Also, among members above 60 years in Greenfield, they naturally mentioned activities by the local chapter of the DaneAge Association, which also organises various activities and networking options, regarding the potential of social prescribing in their community setting. This suggests that the voluntary sports club may also provide links to other local organisations offering a sense of community, thus enhancing the benefits. This was also the case in Midland and Riverside, where arrangements in parish community centres were mentioned. This was not the case in Northbrook, where members mostly seemed to come for the physical activity option itself without the same degree of network linking to other local communities. However, during an informal interview during field work with a board member in Greenfield, it became clear that it tends to be the same members participating across the different local organisations: *"Perhaps 80% are the same people participating in the various activities* (across Greenfield and the

DaneAge Association) – *it is difficult to reach those who we never see*” (Field notes, 30-05-2023). This indicates that it is often the same group of individuals who participate in the various physical activity options in the local area. Having the same group of individuals across different physical activity options also seems to be the case within Riverside:

Instructor: “Yes. But it’s probably the same in other activities, where the same people are attending different activities. For example, at our ‘Playtime’ well, what is it? Half of them are also attending ‘Multi sports’. And I have at least one person in my class who is also in ‘Multi sports’, right? (...) They participate in several things. We have active seniors out here”.

Treasurer: “They also get a discount if they join another activity. For every activity they participate in” (Focus group Riverside).

Thus, recruitment among existing members is not necessarily seen as a challenge; rather, it is seen as proof that they have an active senior community group. Overall, in some cases, the voluntary sports club could serve as a gateway to access a broader local community, which can promote a wider and locally-based social network and a sense of community. However, for those not part of these established communities, it may be challenging to discover available community options, as most participants learn about other activities and receive invitations to join through their existing connections.

Theme 3: supportive structures to ease strain on volunteers

Across cases, it was observed that it takes additional resources for the voluntary sports clubs to engage in initiatives that require more than the regular running of physical activity options, such as social prescribing. For instance, before the Covid-19 pandemic, Northbrook had an activity option exclusively for people with a specific disease in collaboration with a local care home and another local voluntary association. However, this has not been re-launched as it demands too many resources and volunteer efforts have been hampered post-pandemic. As one instructor explained during the focus group:

“So, my contact with the local care home was suddenly gone (...). Erm... then we needed volunteers from the other association. It also required a longer dialogue about how we could involve them in this. And that was great because they really wanted to help. But there are just a lot of preparations for it.

You must realise that you need to have some important key persons in place” (Focus group Northbrook).

Although this instructor was very passionate about running physical activity options targeting this particular group of individuals, the initiative required a significant number of hours from them as a volunteer to set up and manage. Besides having the necessary funding, sports equipment, and facilities, time must be invested in building relationships with various stakeholders who share the same goals. As this case illustrates, voluntary sports clubs’ engagement in initiatives, such as social prescribing, can end up becoming a very time-consuming task. Also, if not sustainably structured, such initiatives tend to rely on the enthusiasm of passionate volunteers and stakeholders. Still, the cases also highlighted potential resources to accommodate the voluntary strain. In Riverside, they have an employed an ‘association developer’ to enhance the activities of the voluntary sports club as a whole and create inclusive options for physical activity within the local community. The association developer’s value was emphasised among both members and volunteers by referencing the improvements observed. Furthermore, the broad and cross-disciplinary focus of the association developer was recognised as a benefit:

“If they join the handball board as volunteers, it’s because they are passionate about handball. Whereas our association developer is passionate about getting as many people as possible to become active” (Focus group, Riverside, 10-09-2023).

The role of the association developer was also evident in daily management and activity coordination. For instance, members of the men’s team were consulted face-to-face by the association developer about rescheduling their last training session due to the children’s holiday gymnastics school. In this way, the association developer kept an overview of the broader community in Riverside and opportunities within the club without favouring one physical activity option over another. Similarly, in Greenfield, the manager of the sports centre was mentioned as an important resource to promote the use of facilities in an informal way. For instance, even though the centre is officially closed during summer vacation, the managers open the facilities to make summer training a possibility for those who are interested. Likewise, the centre café accommodates post-activity socialising by providing beverages after closing hours. In Northbrook, a contact person from the municipality is frequently referenced as providing supportive funding or networking opportunities, which are considered important for alleviating the administrative tasks involved in initiating initiatives, such as start-up activities for new target

groups. In contrast, in Hilltop, diverse contact persons at the municipality are referred to by volunteers as an extra burden to administrative tasks.

Discussion

Overall, our findings suggest that Danish voluntary sports clubs may have potential in engaging with social prescribing initiatives by providing flexible participation options that could cater to the varied needs and abilities of their members. Additionally, some clubs appeared to act as gateways to additional local community networks, which could be beneficial for social prescribing implementation and service users. However, there may be barriers regarding the voluntary sports clubs' ability to reach individuals not currently involved in their community activities. Yet, such targeted outreach initiatives seem to depend on sustained resources that may be limited due to their volunteer-based structure. Our analysis also highlights the possible need for supportive structures to ease administrative tasks and prevent strain on volunteers, which otherwise could be a barrier for social prescribing implementation.

Our findings on the importance of supportive structures within voluntary sports clubs are in accordance with previous research [34], suggesting that the organisational resources of sports clubs and especially paid staff seem to be positively correlated with the propensity of voluntary sports clubs to offer targeted physical activity options for underrepresented groups. This underscores the importance of building capacity and prioritising the community end of social prescribing, e.g. to help ease administrative tasks of volunteers, act as internal navigators for new members and maintain a holistic and inclusive perspective on the voluntary sports club, for instance, as the paid employee (the association developer), does in the case of Riverside. However, there may also be potential unintended consequences for introducing paid staff and increasing professionalisation within primarily volunteer-driven organisations. More professionalisation may place voluntary sports clubs in a dilemma. While it may initially free up time and ease volunteer participation, it may also risk compromising what makes these organisations unique and valuable in health promotion contexts. These include their relational-based, less bureaucratic structure [42] and environments where members naturally support each other's participation, as our findings to some extent indicate. The mutual support and social connectedness that may characterise volunteer-driven organisations might be altered as clubs adopt more formalised approaches [43]. More professionalised organisations might adopt a more commercial or functional approach to service delivery, viewing participants as customers rather than members of a joint community. Additionally, tensions may arise between paid

and voluntary staff in primarily volunteer-driven sports organisations with differing approaches and opinions [44]. Hence, suggestions for increasing professional support and paid staff within voluntary sports clubs may also necessitate careful selection of individuals who understand and can operate within the existing organisational culture and volunteer-driven logic. As our findings also indicate, support appeared to be particularly valued by stakeholders in voluntary sports clubs when it was delivered through informal approaches that did not detract from their core task of running activities.

Still, social prescribing literature emphasises that community services require dedicated support and funding rather than relying solely on existing resources [20, 45, 46]. Strengthening community capacity may also be essential for establishing sustainable community services [47, 48], to support wider community engagement and accommodate both those connected by referral routes in social prescribing from primary care and citizens accessing services via other routes e.g., the underrepresented groups in healthcare [49]. Finally, enhancing resources in voluntary community services can be especially vital in deprived areas, as these areas may lack diverse community services for social prescribing referrals, risking fluctuating quality of social prescribing services depending on where you live [50]. Also, citizens in these areas are more likely to be in vulnerable situations, facing complex health challenges, reduced health literacy, and may be reluctant or unable to access services unless these are nearby [21]. Without addressing such structural barriers of social prescribing services, implementation risks exacerbating health inequalities due to a narrow focus on individual-level change [51].

Our findings suggest that Danish voluntary sports clubs could function not merely as providers of physical activity options but possibly as gateways to broader local community networks. This aspect of potential community connection by voluntary sports clubs could represent an asset for comprehensive social prescribing implementation that can address both physical inactivity and social isolation simultaneously. This may be particularly relevant in the aftermath of the Covid-19 pandemic, which has intensified experiences of loneliness and social isolation across populations [52, 53]. Additionally, our findings regarding members' participation imply a certain degree of flexibility, where there appears to be awareness and respect for varied ability and participation among members. This flexibility extends beyond accommodating diverse physical abilities to enabling various forms of community engagement outside structured training sessions. Members can contribute through roles such as preparing refreshments for social gatherings, maintaining their sense of belonging and purpose [54] even when not actively participating in physical

activity options. Consequently, as in the cases enrolled in our study, voluntary sports clubs may provide multiple pathways for meaningful participation according to individual needs and capabilities. This could be particularly valuable in the context of social prescribing as a form of seeking patient-centred interventions within a community setting. However, our findings rely on activities observed among current members in voluntary sports clubs, who may represent a biased group of participants not necessarily comparable to patients who could be connected through social prescribing. Therefore, these findings should be interpreted with this limitation in mind. Despite the promising aspects of the findings, our results indicate potential barriers in Danish voluntary sports clubs' capacity to reach outside their existing community networks. While members in some voluntary sports clubs seemed to be linked up with other local community groups, our findings also suggest that the same individuals tend to circulate among these existing networks. Thus, voluntary sports clubs may have limited ability, awareness, or motivation to reach individuals beyond existing networks or from underrepresented groups, particularly when membership is high or facilities are at capacity. As our findings revealed, outreach towards underrepresented groups can be administratively demanding and relies on passionate volunteers rather than sustainable organisational structures. Here, inter-sectoral initiatives such as social prescribing could potentially address these limitations by creating a pathway that could enhance voluntary sports clubs' visibility to underrepresented groups. Simultaneously, a social prescribing infrastructure e.g., by link workers, may also alleviate administrative barriers to outreach by establishing formal and more sustainable connections between healthcare providers and voluntary sports clubs. Regarding the role of link workers in our proposed social prescribing model, our co-creation approach deliberately maintained flexibility around this component. While we recognise that link workers are often considered vital in holistic models of social prescribing, our scheduled co-creation workshops for the Move More Denmark study will further determine whether and how link workers could be organised and in what capacity within a Danish context [27]. Nevertheless, even with improved recruitment pathways and outreach by link workers, this alone is not necessarily sufficient to enhance the potential role of voluntary sports clubs in social prescribing initiatives. Successful implementation may also require organisational capacity within voluntary sports clubs to engage in inter-sectoral collaborations and to act as inclusive, welcoming communities [22, 55, 56] e.g., by having the capacity to promote adherence to social prescribing by offering tailored social support [20] and skilled activity leaders [2].

Limitations

Our data collection was conducted in voluntary sports clubs that were not engaged in social prescribing initiatives, as the study was used to inform a comprehensive intervention development of social prescribing targeting physical inactivity [27]. Consequently, our exploration of the potential of voluntary sports clubs in relation to social prescribing has been based on existing practices, activities, and members within the selected voluntary sports club cases. This selection of cases influences how the contextual barriers and enablers in Danish voluntary sports clubs is interpreted, as we did not observe activities involving individuals connected through social prescribing initiatives and the activities observed were conducted with existing members who already participated in the physical activity options. This may limit the study's ability to describe voluntary sports clubs' capabilities in implementing social prescribing and, in practice, accommodate the different needs of connected patients. However, we intended to explore the context in voluntary sports clubs in relation to social prescribing in a 'typical' case of Danish voluntary sports clubs, which also informed our recruitment strategy, rather than examining special cases with existing initiatives similar to social prescribing. In addition, we chose to focus on more general activities within voluntary sports clubs targeting adults, rather than specialised programmes, as the latter often target smaller groups and may be difficult for individual voluntary sports clubs to sustain over time, affecting the sustainability of social prescribing interventions. Furthermore, the selection of cases did not include a voluntary sports club located in a deprived area, which could have been a relevant characteristic of selection given the widespread presentation of social prescribing as a tool to address wider determinants of health and social inequalities [51]. Here, other contextual features might have been more evident during data collection, such as the importance of reduced membership fees. While we had originally planned to include a case from a more deprived area, unforeseen circumstances during the data collection period prevented this inclusion. Finally, the participants in the focus group varied across cases (See Table 1) due to recruitment by local gatekeepers [38] affiliated with the voluntary sports clubs. This may pose a risk of convenience sampling, as participants were likely chosen for their accessibility and relationship with the gatekeeper. In Hillside, relying on gatekeeper recruitment resulted in only two participants, limiting the exploration of diverse perspectives and interactions.

Conclusion

Our findings indicate that Danish voluntary sports clubs can facilitate access to the broader local community, extending beyond promoting physical activity to include

a variety of activities and social connections. Additionally, flexible participation allows members to engage in both physical activity options and take on community roles, underscoring the potential for voluntary sports clubs to accommodate individual needs and foster social connectedness. However, in some cases, the voluntary sports clubs seemed to reach the same group of individuals, limiting outreach to underrepresented target groups, unless this was strategically prioritised. While outreach can be administratively demanding, social prescribing could potentially enhance the visibility and engagement options in voluntary sports clubs for these underrepresented groups. Still, prioritising capacity building and supportive structures that align with voluntary sports clubs' organisational culture may be essential for alleviating voluntary strain, broadening access to community resources and ensuring sustained involvement of voluntary sports clubs in future social prescribing initiatives aimed at promoting community-based physical activity.

Abbreviations

DGI	Danske Gymnastik- og Idrætsforeninger (Danish Gymnastics and Sports Associations)
DECIPHer	Centre for Development, Evaluation, Complexity and Implementation in Public Health Improvement
NHS	National Health Service, UK

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12875-025-03000-y>.

Supplementary Material 1.

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Authors' contributions

All authors contributed to the conception of the study as a part of the Move More Denmark project. LGR, KR, and LHB selected and recruited cases. LGR conducted the data collection, analysis, and interpretation in collaboration with KR. All authors iteratively reviewed and refined the manuscript. JH critically reviewed the manuscript for language and clarity.

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Data availability

The datasets generated and/or analysed during the current study are not publicly available due to ensuring anonymity of sports clubs and participants involved but are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

In accordance with the Danish Research Ethics Committees, authority approval for non-invasive medical research is not required [57]

Consent for publication

Not Applicable.

Competing interests

One of the authors, LHB, is affiliated with DGI, an umbrella organisation for Danish Gymnastics and Sports Associations. DGI aims to strengthen voluntary associations as a framework for sport and exercise. Using the voluntary associations as its foundation, DGI works to engage as many Danes as possible in sport and exercise. The authors declare no other competing interests.

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