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Supporting patients with venous leg ulcers in self-care monitoring: an interview study with primary health care professionals

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ABSTRACT

Objective: This study described the experiences and perceptions of how primary health care professionals (PHCPs) support patients with venous leg ulcers (VLUs) in self-care monitoring.

Design: A qualitative approach with reflexive thematic analysis was used, with 24 individual qualitative open interviews.

Setting: Primary health care clinics and community health care in four southern regions in Sweden.

Subjects: Registered nurses, district nurses and nurse assistants who had experience of caring for patients with VLUs. In total, 24 interviews were conducted with PHCPs in Sweden.

Results: PHCPs have a vital role in promoting patient independence and responsibility, identifying needs and adapting care strategies, while also recognising unmet needs in patients with VLUs.

Conclusion: PHCPs actively monitor patients' self-care and establish caring relationships. They see a need for a structured primary health care work routine for ulcer management.

KEY POINTS

- PHCPs described encouraging patients by identifying needs, adapting care and promoting self-care monitoring using various skills and strategies.
- PHCPs described unmet needs and insufficient care practices for patients with VLUs.
- PHCPs pointed out the importance of establishing caring relationships in order to involve patients in their VLU treatment.

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KEYWORDS

Health care professionals; interviews; prevention; primary health care; self-care monitoring; thematic analysis; venous leg ulcers

Introduction

Venous leg ulcers (VLUs) are a common condition, with recovery times that range from months to years [1]. VLUs are expected to increase in frequency in the older population. They are costly and harmful to quality of life, underscoring the importance of preventing recurrence [2]. Self-care can be important in preventing recurrence of VLUs [3]. Primary health care professionals (PHCPs) have the opportunity to encourage, engage and support patients with VLUs in self-care monitoring during and after VLU treatment [3]. Patients should be actively engaged in self-care, monitoring their legs and identifying abnormal changes or symptoms [4]. Self-care monitoring involves establishing routines for tracking symptoms and signs and taking necessary self-care actions, which requires the person to be attentive and confident in self-care [5]. PHCPs could instruct and prepare patients with VLUs to

perform self-care monitoring in order to prevent VLU recurrence and promote ulcer healing [6]. Patients with VLUs should be encouraged and motivated to adopt a healthy lifestyle by PHCPs, even if the patients do not consistently adhere to this lifestyle [7]. This study focuses on PHCPs' perceptions and experiences of supporting self-care monitoring for patients with VLUs during treatment and after healing, which may provide valuable knowledge to improve ulcer management.

Background

VLUs affect 1% of the population in the world and more than 3% of the older population [8]. VLUs are defined as open lesions between the knee and ankle and tend to occur on both lateral and medial parts of the leg in the presence of venous disease [1,9,10]. VLU

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healing is difficult, and recurrence occurs despite therapy, with the recurrence rate estimated as ranging from 57–78% up to a year after healing [9,11]. The older population has a higher prevalence and risk of recurrence [12]. Living with a VLU creates a heavy burden, with reduced quality of life and a broad socio-economic impact related to the cost of care and long healing time [13]. Health care systems face an increased demand of services and an economic burden related to VLUs [14]. Patients with VLUs are usually cared for in primary health care clinics or community health care [15]. VLU management and the quality of support regarding self-care monitoring varies between different countries and clinics. Patients may get assistance and specialist treatment in primary health care and/or at home [16,17]. Furthermore, they are often expected and encouraged to be active and use self-care to improve healing and prevent ulcer recurrence.

Self-care could be described as a patient's ability to promote health, prevent disease, maintain health and cope with illness and disability, with or without the support of PHCPs [18,19]. Physical activities and lifestyle changes are often suggested in VLU treatment guidelines, as they contribute to improved VLU management and improved quality of life [20]. However, no programmes of this type are offered in Sweden. PHCPs often have an important role in motivating and encouraging patients with VLUs. During VLU treatment and after healing, examples of important self-care activities include inspecting the skin, performing skin care, elevating the legs, wearing compression stockings, maintaining appropriate nutrition, and engaging in physical activities. After healing, venous hypertension compression treatment may be given, which requires continuous monitoring [10,21]. PHCPs are responsible for prescribing patients' self-care activities, and for follow-up [22].

Self-management, self-management support, symptom management, self-efficacy, self-care agency and self-monitoring are similar terms used in the same context as self-care [23]. Self-care monitoring is a relatively new concept, with limited descriptions in previous studies on ulcer management [5]. A study suggests the following descriptive definition: '*Self-care monitoring is an activity that means a person has to pay attention and be confident and need routines for tracking symptoms, signs, and action*' (p. 6) [5]. The study states that self-care monitoring should be performed by the patient, with assistance from health care professionals, in order to achieve tailored health plan goals [5]. Self-monitoring through self-reported documentation of adherence has been used to prevent VLU recurrence. The patients can be encouraged to self-monitor

skin temperature when using topical skin cooling interventions and record their daily outcomes for documentation of adherence [4].

A patient may need support and follow-up during VLU management to adopt self-care activities [24,25]. Previous studies have for example found that patients living with VLUs need support to enhance their knowledge and empowerment in self-care activities [19]. PHCPs have an important role in educating and introducing patients to self-care monitoring [26–28] and compression treatment for VLUs, but often face challenges in preventing recurrence, as patients may discontinue treatment [22]. To achieve better treatment compliance, PHCPs should encourage maintenance of patients' self-care monitoring after VLU healing [3].

However, evidence of self-care monitoring in ulcer management is limited. To the best of the authors' knowledge, no studies are available of PHCPs' support and follow-up of patients' self-care monitoring of VLUs. Therefore, the aim of this study was to describe PHCPs' experiences and perceptions of how they support patients with VLUs in self-care monitoring.

Method

Study design

A qualitative interview design with open-ended questions was chosen to get a deeper understanding of PHCPs' experiences and perceptions of supporting patients with VLUs in self-care monitoring. Qualitative description is particularly relevant when the aim of a study is to get a direct understanding of individuals' experiences [29]. The study had an inductive and descriptive qualitative approach [30] using reflexive thematic analysis as described by Braun and Clarke [31] to unveil the participants' experiences and the associated meanings.

Settings

The study was conducted at primary health care units in four regions in southern Sweden. Primary health care in Sweden includes both primary health care clinics and community health care. VLU care is often provided by nursing assistants, registered nurses, district nurses and physicians who collaborate in wound management teams [32]. District nurses are specialised nurses who work alongside registered nurses and nursing assistants in treatment of patients with VLUs [32]. They offer support to patients both prior to and after a diagnosis, as well as throughout VLU treatment. In primary health care, registered nurses and district

nurses have a consultative role with overall responsibility and are partially responsible for planning, organising and providing nursing care [32].

Recruitment and participants

A total of 20 primary health care units were informed about the aim of the study and 15 chose to participate. The participants were informed and recruited through managers. Those who were interested in participating contacted the researcher in charge of the data collection. Those who consented to participate were asked to return a signed consent form and provide contact details. The inclusion criteria were being a PHCP (registered nurse, district nurse or nursing assistant) in primary health care who had experience of VLU care. In total, 24 PHCPs participated: 23 women and 1 man. They had a mean age of 49.6 years and a mean of 11.2 years of experience in VLU care. Full participant characteristics are shown in Table 1.

Data collection

Data collection was performed from September to November 2020. Due to the COVID-19 pandemic, nine interviews were performed face-to-face, and fifteen were held by phone. The face-to-face interviews were conducted either at a primary health care office ($n=7$), in the participant's home ($n=1$) or in a private room at a public place ($n=1$), as chosen by the participant. The interviews commenced with the following open-ended question: 'Could you tell me about your experiences and perceptions regarding self-care monitoring in patients with VLU?' (Appendix). The interviews lasted 19–74 min (mean = 40.3) and were audio recorded. The first author (NJ) was responsible for data collection and performed all interviews.

Table 1. Participant characteristics.

Primary health care professionals	$n=24$
Work setting	
Community health care	14
Primary health care clinics	10
Profession	
Nursing assistant	4
Registered nurse	7
District nurse	13
Gender	
Woman	23
Man	1
Mean age in years (range)	49.6 (27–64)
Mean years of experience in VLU ^a care (range)	11.2 (3–32)

^aVLU: venous leg ulcer.

Data analysis

This study used a reflexive thematic analysis approach to describe PHCPs' experiences and perceptions of how they supported patients in self-care monitoring. According to Braun and Clark, thematic analysis is a useful and flexible method for qualitative research that searches for themes or patterns [33]. First, the transcribed text from each interview was imported into the software programme NVivo [34], to create a data structure. After organising data, the reflexive thematic analysis was conducted manually and data were analysed, organised and interpreted using the steps in the reflexive thematic analysis method [33]. The first author (NJ) read each interview to become familiar with the data. Interview data were organised through generation of initial codes and identification of potential themes. The extracted data were discussed with the last author (HT) to ensure transparency. Different codes were organised into potential themes, and all relevant coded data extracts were sorted into these themes. Thematic maps were built to identify coded themes, and the retrieved data were refined to uncover the core of each theme. Then, a report was produced with examples of significant and persuasive fragments and an analysis of the selected fragments. The analysis was carried out by the first author (NJ) in consultation with the last author (HT). Meaningful patterns (themes) were discussed in the research group throughout the analysis process, and the first and last author went back and forth between the data and categories, in accordance with the methodological description of Braun and Clarke [33]. Hence, the analysis was conducted both individually and in a group, reducing the risk of bias resulting from the researchers' preconceived notions and potential overinterpretation during the coding process. Quotes from the interviews are presented to illustrate the themes.

To enhance methodological rigour, the authors followed the process described by Lincoln and Guba [35] to comply with the evaluative criteria of credibility, dependability, transferability and confirmability. The research process, led by HT and CF, was systematic, structured and transparent. The initial inductive analysis was conducted by the first author, NJ, who also conducted the interviews, to ensure dependability. The first author had previous experience as a district nurse. Therefore, during the data collection phase, the author kept a reflective diary for reflection and to maintain awareness of personal biases. The research group (NJ, CF, CL and HT) discussed the subsequent emerging analysis. Lastly, to avoid jeopardising the study's confirmability, the researchers

discussed their preunderstanding throughout the analysis process.

Ethical consideration

The study was approved by the Swedish Ethical Review Authority (Reg. No. 2020-00965). Decisions have been made in accordance with the Declaration of Helsinki [36]. The participants were informed in writing prior to the interview, and verbally at the time of the interview, about the aim of the study, that they could withdraw at any time without explanation, and that confidentiality was maintained throughout the research process. Participation was voluntary.

Results

The data analysis resulted in two main themes: *Promoting patient independence and responsibility* and *Becoming aware of unmet needs*, with associated sub-themes (Table 2).

The PHCPs stated that they encouraged patients with VLUs by following up on their self-care monitoring, providing information and employing skills to encourage the patients' use of their own capabilities and resources for ulcer management. They also described challenges and reasons for not continuing to support patients' self-care monitoring after VLU healing, and gave recommendations for continued care and support.

Promoting patient independence and responsibility

This theme described the PHCPs' ambitions and activities, focusing on helping the patients become independent and responsible in self-care monitoring. This was promoted by identifying patients' needs and adapting care support and follow-up to them. The PHCPs tried to encourage patients by helping them recognise and boost their own capabilities and resources. They also repeated information and reminded patients about self-care monitoring to help them adopt a routine. These activities required the use of different skills and strategies by the PHCPs, to customise care and communicate purposefully regarding self-care monitoring.

Encouraging patients' capabilities and resources

The PHCPs encouraged patients to actively participate in self-care monitoring activities for their VLUs at home. Follow-ups through phone calls and home visits were necessary to support patients' capabilities and boost confidence in self-care monitoring.

I always tell them to...//ask for help before it gets too big, so that we can make a plan...I think...the biggest difference is really...the patient's own commitment, like motivating and helping them, finding solutions together, I think that works best... (20)

The PHCPs supported patients' self-care monitoring at home by assisting them in developing a plan and structure, tailored to each patient's strengths and abilities to deal with challenges that might arise along the way.

We planned and wrote it down over time, I did that when it was time for the patient to take over, but we talked all the time about how the wound changed and what to expect and if it hurt...//... (2)

To prevent VLU recurrence, PHCPs recommend patients to perform self-care monitoring activities at home. The PHCPs acknowledged patients' commitment and capabilities as crucial in striving to improve self-care monitoring and to enhance their health outcomes.

That they actually feel better, that they feel that they themselves can make a difference in their ulcers...I think you can sense that in them, that they are so happy, they say 'oh, that helped, that's great, I'll do that' and 'now I've been cycling 30 minutes a day' and 'now I've been using the compression stockings', they brag a bit and it's so great to hear, so they do take it onboard (11)

The PHCPs stated that a patient's belief in their own ability to take responsibility for self-care monitoring could be used to empower the patient to become active and independent.

Giving reminders and repeating information

The PHCPs emphasised the need for patient education and self-care monitoring during VLU treatment. They described providing updated information, reminding patients about monitoring and emphasising the need

Table 2. Main themes and subthemes.

Promoting patient independence and responsibility			Becoming aware of unmet needs	
Encouraging patients' capabilities and resources	Giving reminders and repeating information	Using necessary strategies and skills	Believed reasons for not following up after a healed VLU	Wishes and suggestions for continued follow-up after VLU healing

VLU: venous leg ulcer.

for action and follow-up. This helped patients build habits, become independent and prevent new ulcers after the VLU had healed.

...when the patient has finished their treatment here, when the wound has healed...//then we've talked and you've tried to build it in plateaus, with diet and exercise and health (3).

The PHCPs also provided patients with information on how to monitor bodily changes such as fever, limb oedema and skin changes, to prevent VLU recurrence. They believed that they needed to instruct patients to be aware of signs and abnormal symptoms, by providing continuous teaching and advising patients how to act in the event of a relapse and to seek health care preventively.

Reacting if there is a sudden change or deterioration, being observant of that...//Or if you get a fever...then I want you to contact me (4).

Using necessary strategies and skills

The PHCPs used different strategies to support patients with self-care monitoring and make them more independent and responsible for their own health and self-care. They believed that professional skills and work experience were necessary for establishing a sound relationship with a patient and getting the patient to disclose their needs and problems. This included the abilities to focus on more than the actual ulcer and to use their skills to educate patients. The PHCPs' professional approach meant that they had a patient focus, and tried to understand each patient's experiences and consider the whole life situation.

No, I think that's part of my education, my profession: thinking about the entire person, because...//a wound isn't just a wound. Everything is linked (6).

Regular visits from a PHCP during VLU treatment were considered fundamental. During visits, PHCPs provided motivational input, identified new needs and addressed resource limitations, ensuring effective VLU treatment and promoting self-care monitoring among patients.

Sometimes there are patients who have trouble seeing or feeling new wounds...//then it can be good to check that every now and then afterwards (24)

Self-care monitoring was planned with the patient, and the PHCPs conducted home visits to enhance patient safety and give reassurance. Follow-up conversations ensured that continuous support was provided. The PHCPs sought to encourage the patients without passing judgment.

And those are good occasions...at follow-ups, to mention that too, like...well, not being judgmental... but, yeah, 'this looks good and you have done that well', or 'what made it so you couldn't do that?' and... when it's gone well...you encourage the patient and yourself as well. (5)

The PHCPs emphasised the importance of using appropriate communication skills when informing patients about self-care monitoring, to empower the patients to follow guidelines and perform self-care monitoring at home. They used a strategy of giving feedback on patients' self-care monitoring via phone calls, to improve patient safety.

Becoming aware of unmet needs

This theme described the PHCPs' experiences and perceptions regarding largely non-existent care practices for patients after VLU healing and revealed unmet needs regarding their own practices and support of patients, as well as patients' unmet needs. The responsibilities of the PHCPs and the patients' unmet needs were aspects that not everyone had reflected upon. When reflecting on the assumed reasons for not following up on self-care monitoring, a flood of wishes and suggestions emerged for improved practices.

Believed reasons for not following up after a healed VLU

The PHCPs highlighted the lack of routines in their organisations as one of the main reasons for not following up on patients' self-care monitoring after VLU healing. They stated that the organisations were unprepared to conduct follow-ups on how patients used self-care monitoring at home and that it was difficult to demonstrate a cost-effective strategy to prevent VLU recurrences.

We don't have those routines in our workplace currently, we don't work like that, and we don't have the resource for that, or they aren't prioritised for making return visits (19)

Other reasons for not following up on self-care monitoring were a lack of workforce continuity, knowledge and understanding of monitoring requirements. Some PHCPs also questioned if self-care monitoring could help prevent VLU recurrence. Patients' lack of motivation was attributed to factors like family, societal and age-related issues, multimorbidity and dementia. The PHCPs suggested that home visits and phone calls could improve motivation. They were not accustomed to continuing to support self-care after VLU healing; some had not reflected upon the need to do so.

I don't know, you think 'Well, the wound has healed, so my job is done...//...you maybe don't have that preventive thought, you just see that the wound has healed and then we move on... (13).

Frequent follow-up home visits for self-care monitoring were seen as stressful for patients, but phone calls were seen as insufficient due to the lack of face-to-face contact. Further reasons for not following up included limited workforce, time constraints and high workloads. After VLU healing, support and follow-up were not routine or a designated responsibility, and the PHCPs had neither the time nor the ability to prioritise this.

Wishes and suggestions for continued follow-up after VLU healing

Although support and follow-up after healing were common practice for the PHCPs, they expressed many ideas and a desire for improved follow-up in patients with complicated ulcers, recurring ulcers or therapeutic evaluations. The analysis showed that the PHCPs wanted structure, improved work processes and an established routine for follow-up and support. They also expressed a desire for more structured follow-up procedures.

Yeah, I think that if there were a structured template, because you have that when you work with assertive treatment, then you don't just sit there and invent things, you have a concept to apply (17).

The PHCPs believed that follow-ups after VLU healing could reduce recurrences and promote purposeful, life-long self-care monitoring. They also believed that routine follow-ups were an effective method to educate patients about ulcer prevention. This could ensure that patients knew how to monitor their legs and adopt preventive self-care strategies such as using compression stockings and performing skin inspection and skin care. The PHCPs recommended standardising home-based visits or phone calls and support to encourage patients to discuss their situation and needs regarding VLUs.

Of course, you would have wanted, in the best of worlds, with long-term ulcer patients, that maybe you could have a phone follow-up, for instance (3)

Various ideas and proposals for improving support for patients after VLU healing were presented, such as patient networks and activities for sharing experiences, learning and involving family members.

Discussion

The study highlighted the PHCPs' experiences and perceptions of how they supported patients in self-care monitoring at home through *Promoting independence*

and *responsibility* and *Becoming aware of unmet needs*. The PHCPs built caring relationships with patients, used communication skills and implemented strategies, but felt a need for support from primary health care systems to improve work routines and structure follow-up after VLU healing.

In the present study, PHCPs stated that they supported patients with self-care monitoring by reminding them of specific VLU symptoms to be observant of and by encouraging them to seek care to prevent recurrence. This is in line with Riegel et al. suggestion that self-care monitoring involves patients' tracking of bodily changes through signs and symptoms [37]. Furthermore, Riegel et al. [38] demonstrated that being able to recognise symptoms increased autonomy and commitment to self-care. Previous studies underline that PHCPs' encouragement of patients to participate in self-care monitoring during and after VLU treatment significantly increases self-care awareness [39,40].

The findings showed that engaging patients in self-care monitoring was believed to foster solid relationships between PHCPs and patients, and thus being able to give support that could reduce the risk of VLU recurrence. Studies suggest that establishing relationships between patients and PHCPs is necessary as a starting point for introducing patients to treatment and self-care monitoring activities [40,41]. This is supported by a study which found that increased interaction between patients and PHCPs was a consequence of practicing self-care monitoring and enhanced patients' well-being [5]. Another study revealed that a stronger relationship between PHCPs and patients increased and strengthened patient engagement [42].

Additionally, the findings showed that the PHCPs felt that certain strategies and skills were needed to support self-care monitoring. Prior research has mentioned the need for PHCPs to be educated and trained in relevant skills to assist patients with self-care monitoring of VLUs [22,39,43,44]. PHCPs were found to use communication strategies to interact with patients in a way that made patients feel secure and comforted. Atkin [45] underlined that patients' trust and respect were significantly enhanced through efficient communication, which is a necessary aspect of the relationship between patients and PHCPs. PHCPs also used motivational inputs. In Sweden, district nurses are trained in motivational interviewing and give guidance to the rest of their teams regarding motivational interviewing skills. The effectiveness of motivational interviewing to engage patients in self-care activities and monitoring, such as compression therapy, was underlined in a study on supporting patients with VLU [26]. Another study revealed that interaction between

PHCPs and patients was necessary for engaging patients in self-care monitoring and encouraging them to continue with such monitoring [43].

The findings showed a lack of awareness of the need for continued support of patients in self-care monitoring after VLU healing. The PHCPs highlighted that the organisations often overlooked the need for support after healing due to a lack of readiness for follow-ups. It was perceived as hard to demonstrate the cost-effectiveness of self-care monitoring to prevent VLU recurrence. This is in line with previous research revealing organisational barriers that could hinder the follow-up of self-care monitoring when PHCPs lacked support, routines and structure [46,47]. The findings also showed that the PHCPs suggested routine home visits and phone calls after healing to prevent recurrence and encourage self-care monitoring. This is supported by the results of Batas [44], showing that implementation of self-care monitoring by PHCPs after VLU healing helped prevent recurrences.

Furthermore, the present study showed that experiences of support in self-care monitoring could vary depending on which perspective was applied. For example, the PHCPs in our study believed that they supported patients in a personalised and encouraging way that enabled them to be active and independent. This contradicts other studies focusing on patients' perspectives. For example, one study showed that patients with VLU felt that PHCPs did not provide enough time for treatment and follow-up, preventing the development of a caring relationship [48]. Nevertheless, the impact of VLUs on patients' daily activities, overall well-being and overall quality of life after healing was shown to be significant [49], underscoring the need for continued support after healing. This may indicate the importance of asking about patients' experiences and making sure the support is clearly focusing on each unique patient and their situation.

Our study found that PHCPs' support to patients with VLUs was needed during treatment and after a VLU had healed. Kesterton et al. has shown that support and education about healthy physical self-care activities are feasible and acceptable to patients with VLUs [50]. The present study highlighted the importance of providing information to patients so they gained an understanding of their condition and of self-care monitoring strategies, to improve health and prevent recurrence of VLUs. This is supported by O'Brien et al. showing that patients with VLUs could improve their health through physical activities, and emphasising the importance of support and educating

patients so they gain an understanding of their condition [51].

Providing VLU patients with information about self-care monitoring requires strategies and skills on the part of PHCPs. PHCPs have an informational and educational role in reminding patients of how to prevent VLU recurrences. A review emphasised the importance of PHCPs in educating patients and actively involving them in self-management activities [52]. This is essential for sustaining a healthy lifestyle and preventing the recurrence of VLUs. The PHCPs' focus remains on promoting and involving patients in self-care monitoring during and after VLU healing. Previous research has stressed the importance of adhering to routines and structured care after VLU healing, to prevent ulcer recurrence [52]. This study demonstrated the potential importance of PHCPs' support to patients with VLU regarding self-care monitoring and the need for implementation of such support in primary health care settings.

Strengths and limitations

The research process was conducted in accordance with the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines, to promote transparency [53]. The researchers aimed to achieve methodological rigour by following Lincoln's and Guba's [35] evaluative criteria of credibility, dependability, transferability and confirmability. The strength of the study resides in its broad representation of regional variety. This was achieved by the inclusion of 24 interviews conducted with PHCPs from four different regions in southern Sweden. All participants had experience of treating VLUs in primary care, which strengthens transferability.

One study limitation may have been imposed by the pandemic restrictions, which led to most interviews being conducted through phone calls instead of face-to-face, as planned. However, research has shown that telephone interviews create a relaxed atmosphere, giving participants space and encouraging them to express themselves [54], which could be perceived as a strength. Only one man participated in this study, which is a limitation, but also reflects the prevailing gender dynamics inside the primary care organisation.

The study was conducted systematically, comparing results with the original interview data and coding scheme to ensure compliance, credibility and dependability [55]. The researchers continuously reflected throughout the analysis to prevent preconceptions from influencing them; this was done both individually

and in groups to ensure dependability. Quotes from participants were presented to illustrate the themes identified in the data analysis and enhance the confirmability of the study.

Conclusion

The study revealed that it could be beneficial to encourage patients' capabilities and resources to support VLU self-care monitoring. When PHCPs established caring relationships, actively involving patients in VLU treatment, they perceived their work as meaningful. PHCPs faced unmet needs, including for a more structured primary health care work routine for VLUs. Structuring and enhancing the support of patients' self-care monitoring could have the potential to enhance PHCP practices, thus contributing to the prevention of VLU recurrences. We suggest that the implementation and assessment of self-care monitoring in VLU care could be an important focus of future research, to inform and guide the development of new strategies and guidelines in ulcer management.

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Ethical approval

Approval was granted by the Swedish Ethical Review Authority (Reg. No. 2020-00965).

Author contributions

CF and HT designed the study. NJ conducted the interviews, conducted the analysis of data, with contributions from HT, and prepared the manuscript. CF, CL and HT contributed to critical manuscript revision. All authors have approved the final article.

Disclosure statement

No conflict of interest has been declared by the authors.

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Appendix A. Interview topic guide

Open-ended question

Could you tell me about your experiences and perceptions regarding self-care monitoring in patients with VLU?

Topics

- **Planning self-care monitoring**
- **Supporting self-care monitoring**
- **Follow-up of self-care monitoring**

Follow-up questions

Could you tell me more?

How do you mean?

Could you give an example?