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How midwives' perceptions of work empowerment have changed over time: A Swedish comparative study

Ingegerd Hildingsson[a,*], Hanna Fahlbeck[a], Birgitta Larsson[b], Margareta Johansson[a]

[a] Department of Women's and Children's Health, Uppsala University, Akademiska sjukhuset ing 95/96, Uppsala 75385, Sweden
[b] Sophiahemmet University College, Stockholm, Sweden

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ABSTRACT

Objective: The aim of this paper was to compare current perceptions of empowerment in their work with results from a sample of midwives recruited 2012.
Design: A comparative cross-sectional cohort study of national samples of midwives in Sweden from 2012 to 2022.
Participants: 475 midwives recruited from the Swedish midwifery association in 2012 and 1782 through two midwifery unions in 2022.
Methods: Data were collected using a questionnaire with background information and the revised version of the Perception of Empowerment Scale (PEMS). Mean scores and domains of the PEMS were compared between the years.
Findings: Midwives' perceptions of empowerment changed over time, in both directions. Their perception of their skills and education, advocating for and empowering women as well as support from the team and manager increased over the years. Midwives in 2022 were less likely to perceive that they were involved in a midwifery-led practice, and the communication with managers was rated lower. Midwives sensed a lack of professional recognition from the medical profession and their contribution to the care of birthing women. Access to resources for birthing women was perceived lower in 2022 compared to 2012. Younger age, shorter work experience and working in labour wards or postnatal wards were associated with lower perceptions of empowerment.
Conclusions: Midwives need to have the authority and reality to practice midwife-led care, to receive control over their work. Good communication and recognition from the medical profession is essential to be empowered. This is important in order to maintain a healthy workforce.

Introduction

In recent years there has been a tendency for midwives to leave the profession worldwide. The changes in professional identity and factors that limit midwives' autonomy in practice are important to acknowledge in order to understand why midwives leave the profession.

Some reported reasons include stressful work environments, extreme workloads, and lack of professional recognition, as shown in a literature review comprising 22 quantitative studies, 17 qualitative studies and 5 studies with a mixed method design (Cramer and Hunter, 2019).

A contemporary meta-ethnographic review based on 11 scientific paper with a total of 1068 participants showed that many midwives questioned their professional career, due to witnessing and being involved in a complicated or adverse labour and birth event (Elmir et al., 2017). Another important issue is the risk of burnout as shown in a systematic review and meta-analysis of 14 scientific papers with 8959 midwives (Suleiman et al., 2020). Important factors contributing to burnout were younger age, shorter work experience, unfavourable work environment, and lack of resources. Working in continuity models of care indicated protection against burnout (Suleiman et al., 2020).

Thinking about leaving the profession is not a new phenomenon in Sweden. In a sample of 475 Swedish midwives recruited in 2012, Hildingsson et al. (2013) found that approximately 30% of Swedish midwives considered leaving the profession. The reasons given for these inclinations were the lack of staff and resources, high levels of stress, conflicts at work, low salary and a concern for their personal health (Hildingsson et al., 2013). In a Swedish qualitative study with 20 midwives conducted a few years

* Corresponding author.
E-mail address: Ingegerd.hildingsson@kbh.uu.se (I. Hildingsson).

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earlier (Larsson et al., 2009), midwives perceived that their professional role had decreased, and other professionals were favoured. Midwives felt a strong professional identity based on their long work experience, despite the feeling that their skills and clinical experience had become less valued (Larsson et al., 2009). A more recent study from Sweden also indicates similar findings (Hansson, 2021), and showed that midwives viewed their work meaningful when they had the possibilities to work grounded in the midwifery profession, with a distinct professional role that was based on evidence-based care. If these prerequisites were facilitated by the organization, midwives were motivated and satisfied with their work. Working in a factory-like environment with an over-medicalized context, with high work demands and lack of support created a strained context that negatively affected job satisfaction.

In addition, studies have also shown that some midwifery skills have been taken over by the medical profession (Shaban et al., 2012; Hadjigeorgiou and Coxon, 2014).

To the contrary, in an integrative review based on six studies, (4 qualitative, 2 quantitative and 3 mixed method studies) Bloxome et al. (2019) investigated reasons why midwives remain in the profession. The results showed seven synthetised themes. The first theme described how midwives valued the working relationships with their colleagues and felt supported. The relationship with women was also highly valued and midwives felt proud of their ability to promote normality in birthing and they felt effective when caring for mothers and babies. In addition, the salary, autonomy and passion for midwifery were other factors that explained why midwives chose to stay. Another reason that could influence or may be a prerequisite for midwives to remain in the profession might be their perception of empowerment and their sense of being able to support women. Perception of empowerment is a concept described by Fawcett et al. (1994) as 'the process of gaining influence over events and outcomes of importance to an individual or group.' In maternity care empowerment has mainly been used from the perspective of midwives empowering women (Halldorsdottir and Karldottir, 1996).

To address empowerment in midwifery, Matthews et al. (2009) conducted a cross-sectional study with 244 midwives. The Perception of Empowerment in Midwifery scaled was developed and evaluated psychometrically within this sample. Three subscales were found; autonomous practice, effective management and women-centred practice.

The scale has been further revised, resulting in four subscales by Pallant et al. (2015), in a cross-sectional survey of 600 midwives from New Zealand, and thereafter used in an international comparison of 2585 midwives from Sweden, Australia and New Zealand, where the Swedish sample showed higher empowerment in all but one subscale. Swedish midwives were more likely to score lower in the subscale *Skills and Resources* (Hildingsson et al., 2016). The sample was collected in 2011, and since 2015, the Swedish government has allocated substantial resources to develop maternity services, mainly employing more midwives and extending midwifery education (Myndigheten för vård-och omsorgsanalys, 2022), making it important to once more investigate midwives' perception of their work.

Problem area

The growing international literature of midwives leaving the profession might be due to lack of empowerment. In the last ten years, major changes have occurred in the Swedish workforce of midwives, with many leaving the profession. In order to fill the knowledge gap of how midwives perceive their work and factors influencing their perception of empowerment in the profession, the aim of this paper is to compare current perceptions of empowerment in their work with results from a sample of midwives recruited in 2012.

Methods

Study context

Midwifery in Sweden has a long tradition, with more than 300 years of educated midwives entering the profession (Högberg, 2004). Currently the one and one-half year midwifery education builds upon a three-year bachelor of nursing. It is common that midwifery students have had to work as nurses for some years before they are accepted in the midwifery program. After completing the midwifery program of 18 months, with the required 50 births, midwives also get a one-year master exam in reproductive health. The scope of midwifery in Sweden is broader compared to many other countries and midwives work in a variety of areas. Most commonly, they are employed in antenatal, intrapartum and postpartum care, but midwives also work in areas, such as youth health clinics, ultrasound wards, sexual health and gynecology. In large hospitals it is common that midwives work in only one area, and in smaller hospitals they might rotate between labour wards, postnatal wards and/or gynecological wards. Continuity with the same midwife is rather good during pregnancy where women usually meet the same midwife during the recommended 8-9 antenatal visits, but continuity between episodes of care (e.g. antenatal, intrapartum and postpartum care is rare). Only some few initiatives (mostly designed as projects) of caseload or similar models are found in Sweden.

Swedish maternity services are organised within two different management systems. Usually Swedish midwives work either in community-based antenatal care in outpatient clinics or in hospital-based intrapartum/postpartum care. These two areas are managed by different organisations. Antenatal care could be publicly or privately run, often situated in a health centre. Private antenatal clinics are contracted by regions and all maternity care is financed through taxes, with no fees for the women. Intrapartum and postpartum care are usually hospital based. Midwives are responsible for normal labour, births and the postpartum period, but work in teams with obstetricians and enrolled nurses (Thomas et al., 2015).

Design and data collection

A cross-sectional comparative study of two national samples of midwives in Sweden was conducted, one historical sample from 2012 and one sample from 2022. The purpose of the 2012 sample was to investigate Swedish midwives' emotional health and well-being, e.g. levels of burnout (Hildingsson et al., 2013), depression, anxiety and stress (Båtsman et al., 2020), and some work-related instruments such as the Perceptions of Empowerment in Midwifery Scale (PEMS) (Hildingsson et al., 2016). That sample was part of studies performed by members of the research network Work, Health and Emotional Lives of Midwives (WHELM). The network consisted of researchers from Australia, New Zealand, Sweden, Norway, Germany, the UK and Canada (Hildingsson et al., 2013; Dixon et al., 2015; Hildingsson et al., 2016; Creedy et al., 2017; Båtsman et al., 2020; Cramer and Hunter, 2019; Harvie et al., 2019; Hunter et al., 2019; Cull et al., 2020).

The 2012 sample consisted of 475 midwives who completed a variety of questions included in the survey (Hildingsson et al., 2013). The survey was sent, together with a pre-paid envelope, to a random sample of midwives who were members of the Swedish Midwifery Association. Details of that study are presented elsewhere (Hildingsson et al., 2013).

In November 2021, Swedish midwives were invited by the two unions that organise midwives (the Swedish Midwifery Association/SRAT and the Swedish Association of Health Professionals) to participate in an online survey with the main focus of investigating midwives' interest in continuity models. The link to the online survey was also distributed through social media and emails. The online survey was available for three months, and closed thereafter. The revised version of the Perception of Environment of Midwifery Scale (PEMS-R) was included in the survey and the scale was completed by 1782 midwives. For purposes of this paper, the focus was on midwives' perceptions of empowerment between the two years as measured by a revised version of the Perceptions of Empowerment in Midwifery Scale (PEMS) (Pallant et al., 2015).

Measurement

The Perceptions of Empowerment in Midwifery Scale (PEMS) was originally developed in Ireland and focused on circumstances that enable midwives to feel empowered (Matthews et al., 2009). The original PEMS contained 3 subscales with 22 items (Matthews et al., 2009). After psychometric testing and validation of the PEMS, based on a sample of 600 midwives who worked in hospitals in New Zealand, Pallant et al. (2015) suggested a revised version of the PEMS with 19 items grouped into four subscales: *Autonomy/Empowerment*, *Manager Support, Professional Recognition*, and *Skills and Resources*. The modified version with 19-items and four subscales (PEMS- Revised) was used in the current study. A 5-point response scale (1=strongly disagree, 5=strongly agree) was used, with high scores representing high levels of empowerment.

Data analyses

Descriptive statistics and Chi-square tests were used to present the background of the participants. Responses on the PEMS were analysed according to the PEMS-Revised version (Pallant et al., 2015). T-tests were performed to compare mean scale items and domains between the years. Cronbach alpha values and effect size statistics were calculated, and Cohen's (1988) guidelines were used to judge the size of the effect (small=0.01, medium=0.06, large=0.138). Crude and adjusted odds ratios (OR) with a 95% confidence interval (CI) were thereafter calculated between midwives who 'strongly agree' vs 'not strongly agree' in order to assess which items differed between the years, the main area of work, and the length of working experience. The study was approved by the Swedish Ethical Review Authority, dnr 2021-01941. All midwives gave their consent to participate in before filling out the survey.

Results

In all, 475 midwives completed the 2012 version of the survey and a total of 2337 midwives filled out the survey from 2022 with almost complete background information. The majority of the 2012 sample also completed the PEMS, while only 1782 completed it in the sample from 2022.

Differences between the two samples of midwives 2012 and 2022

Table 1 shows that there were differences between the samples in the distribution of age, main area of practice and length of work experience. No differences were found in working hours, with 61/62% in both samples working full time. There were no differences in work organisation in terms of rotation or in distribution of work (daytime shiftwork).

The majority of midwives with the shortest length of working experience (0–3 years) worked with intrapartum care in a labour ward (59%). Somewhat similar proportions of midwives with 3–10 years of experience worked in outpatient clinics (39%) or intrapartum care (38%). In the group with 10–20 years of work experience the majority (40%) worked in outpatient clinics as did the majority of midwives with more than 20 years of work experience (37%) (not shown in table).

Table 2 presents differences in mean item scoring of the four domains between the two samples. Some items did not show any statistically significant changes over time. These included midwives' perception of autonomy in practice, how they perceived being valued and supported by the manager and their colleagues, and their perception of being adequately educated.

Increased perception of empowerment

Items in the PEMS that showed a better perception of empowerment (nine items) from 2012 to 2022 were: perceptions of support to and advocacy for women, recognition and backup from managers, being listened to by team members and collegial support, and valuing their own skills, scope of practice, and available resources for staff education (Table 2).

Decreased perception of empowerment

Despite the positive improvements of some variables, midwives in the 2022 sample were less likely to perceive that they were involved in a midwifery-led practice, and the communication with managers was rated lower. Midwives perceived a lack of professional recognition from the medical profession and felt less recognised for their contribution to the care of birthing women. Access to resources for birthing women was perceived lower in 2022 compared to 2012 (Table 2).

Differences in domains of the PEMS

After investigating the independent items of the PEMS, they were summed and organised under the four domains. Table 3 shows the domains of the PEMS for the two samples. There were statistically significant mean differences between the years in two of the domains: *Autonomy/Empowerment* and *Manager Support*, the first favouring the 2012 sample and the second the 2022 sample. Similarly, the Cronbach alpha values for the domains were lower than the recommended level of 0.70 for three of the domains. The exception was *Professional Recognition* (Cronbach alpha coefficient 0.70). The inter-item correlations exceeded the recommended values of 0.2–0.4 for all subscales. Cohen's d showed small effect sizes for all domains.

The impact of the main area of work

Thereafter, we investigated agreement of the items in relation to work-related variables for the whole sample. Midwives who worked in outpatient clinics were more likely to 'strongly agree' on 9 of the 19 studied variables, compared to midwives who worked in 'other areas' (reference group). They regarded themselves as an advocate for pregnant women (OR 1.35: 1.18–1.54, $p < 0{,}001$), felt involved in midwifery led practice (OR 1.76; 1.31–2,35, $p < 0{,}001$), had support from colleagues (OR 1.64;1.25–2.10, $p < 0.001$), knew their scope of practice (OR1.60;1.19–2.15, $p < 0.01$), were more likely to feel recognised by the medical profession (OR 1.51;1.23–1.84. $p < 0.001$), felt in control of the practice (OR 1.32; 1.03–1.69. $p < 0.05$), felt that they empowered women (OR 2.08;1.58–2.73, $p < 0.001$), had autonomy in practice (OR 1.51; 1.17–1.95, $p < 0{,}05$), and felt listened to by the team members (OR 1.35; 1.06–1.72, $p < 0.05$). Only one item was perceived negatively, communication with managers (OR 0.69;0.49–0.97, $p < 0.05$).

By comparison, midwives who worked in a labour ward strongly agreed on three items only: advocating for pregnant women (OR 1.15: 1.00–1.32, $p < 0.05$), support from colleagues

Table 1
Background variables for the two samples of midwives collected at two time-points*.

Year of data collection: Number of participants:	2012 *n* = 475 n(%)	2022 *n* = 2337 n (%)	p-value
Age groups			<0.001
24–35 years	63 (13.1)	349 (14.9)	
35–45 years	178 (37.6)	695 (29.7)	
45–55 years	159 (33.6)	623 (26.7)	
55-	73 (15.4)	670 (28.7)	
Main area of practice			<0.001
Outpatient clincs (antenatal care+youth cllinic)	142 (31.1)	811 (37.4)	
Intrapartum care and home birth	122 (26.7)	780 (36.0)	
Postpartum care	86 (18.8)	190 (8.8)	
Other	107 (23.4)	385 (17.8)	
Work experience as midwife			<0.001
0–3 years	50 (10.6)	264 (12.0)	
3–10 years	105 (22.3)	706 (32.1)	
10–20 years	119 (25.3)	575 (26.2)	
20 years or more	196 (41.7)	652 (29.7)	
Working hours			0.050
Full time	288 (61.4)	1354 (62.1)	
Part time	171 (36.5)	730 (33.5)	
Casual	10 (2.1)	96 (4.4)	
Work organisation			0.258
Work in only one area	263 (59.4)	1286 (60.0)	
Rotating between wards or between tasks	180 (40.6)	857 (40.0)	
Work distribution			0.056
Daytime only	207 (44.4)	1094 (50.3)	
Two-shift	118 (25.3)	460 (21.2)	
Three-shift	85 (18.2)	406 (18.7)	
Night shift only	56 (12.0)	214 (9.8)	

* Numbers might not add to 100% due to internal missing values.

Table 2
Comparison of mean values of the items in each domain in the revised.

Perceptions of Empowerment in Midwifery Scale Year of data collection: Number of participants:	2012 *n* = 475 Mean (SD)	2022 *n* = 1782 Mean (SD)	p-value by *t*-test
Autonomy/Empowerment			
I am an advocate for birthing women	4.30 (0.68)	4.39 (0.76)	0.015
I empower birthing women through my practice	4.68 (0.40)	4.72 (0.50)	0.015
I am involved in midwife-led practice	3.88 (1.10)	2.91 (1.46)	<0.001
I have autonomy in my practice	4.50 (0.66)	4.50 (0.63)	0.948
Manager Support			
I have a supportive manager	3.70 (1.18)	3.78 (1.09)	0.180
I am valued by the manager	3.91 (0.89)	3.90 (1.00)	0.762
I have the back-up of the manager	3.78 (0.97)	3.93 (1.04)	0.003
I am recognised for my contribution to the care of birthing women by my manager	2.02 (0.98)	3.72 (1.13)	<0.001
I have effective communication with management	3.05 (1.08)	2.93 (1.18)	0.044
Professional Recognition			
I am recognised as a professional by the medical profession	4.42 (0.70)	4.25 (0.87)	0.001
I am recognized for my contribution to the care of birthing women by the medical profession	4.02 (0.87)	3.85 (1.01)	0.001
I am listened to by members of the multidisciplinary team	4.19 (0.91)	4.40 (0.72)	<0.001
I have control over my practice	4.25 (0.76)	4.10 (0.90)	<0.001
I have support from my colleagues	4.48 (0.69)	4.58 (0.62)	0.003
Skills and Resources			
I am adequately educated to perform my role	4.44 (0.75)	4.47 (0.68)	0.467
I have the skills required to carry out my role	4.41 (1.00)	4.57 (0.62)	0.001
I do know what my scope of practice is	4.65 (0.84)	4.78 (0.46)	0.003
I do have adequate access to resources for staff education and training	2.44 (1.07)	2.78 (1.14)	<0.001
I have adequate access to resources for birthing women in my care	2.96 (1.16)	2.41 (1.13)	<0.001

Table 3
Comparison of subscales in the PEMS in year 2012 and year 2022 using t-tests.

	Mean (SD) 2012	Mean (SD) 2022	p-value
Autonomy/Empowerment	4.24 (0.59)	4.03 (0.67)	<0.001
Cronbach alpha values	0.46	0.36	
Inter-item correlations	0.43	0.40	
Manager Support	3.22 (0.68)	3.57 (0.92)	<0.001
Cronbach alpha values	0.46	0.58	
Inter-item correlations	0.40	0.40	
Professional recognition	4.21 (0.61)	4.17 (0.64)	0.239
Cronbach alpha values	0.70	0.71	
Inter-item correlations	0.45	0.45	
Skills and Resources	3.71 (0.66)	3.74 (0.60)	0.332
Cronbach alpha values	0.56	0.57	
Inter-item correlations	0.43	0.47	

(OR 1.13;1.05–1.73, $p < 0.05$) and empowerment of women (OR 1.30;1.00–1.703, $p < 0.05$). They were less likely to assess the following eight items with 'strongly agree': feeling valued by the manager (OR 0.66;0.51–0.88, $p < 0.01$), feeling involved in midwifery led practice (OR 0.68; 0.50–0.95, $p < 0.05$), having backup (OR 0.59;0.45–0.77, $p < 0.001$), support (OR 0.38;0.25–0.56, $p < 0.001$) or good communication with the manager (OR 0.36;0.24–0.53, $p < 0.001$), control over practice (OR 0.52;0.40–0.68, $p < 0.001$), enough staff education (OR 0.45;0.35–0.58, $p < 0.05$) and felt less autonomous (OR 045;0.35–0.58, $p < 0.05$). Midwives who worked in **postnatal care** showed a similar pattern as midwives working mainly in labour wards, disagreeing on nine items but showing no positive ratings.

The impact of years of practice

Similar tests were performed for the entire sample, regardless of study year, to assess the importance of work experience, with the group of midwives with 20 years or more used as a reference. Midwives with a work experience of less than 3 years were less likely to 'strongly agree' with the majority of items (17 out of 19) and gave no positive ratings. Two items were not statistically significant: advocacy and adequate resources for birthing women.

Those with **3–10 years** of working experience scored significantly lower in 12/19 items and there were no positive ratings (e.g. strongly agree). Similar to the former group, advocacy and resources for women did not differ from the reference group. Neither did perception of being involved in midwifery-led practice, support from manager, support from colleagues, empowerment of women or access to staff education. Midwives with **10–20 years** of experience were less likely to assess 8 items positively, very similar to the former groups. However, they rated two items higher, namely perception of resources to women and manager support.

Finally, to investigate the most important differences between the two samples of the items in the PEMS (scoring 'strongly agree'), crude and adjusted odds ratios with a 95% confidence interval were calculated. The odds ratios were adjusted by age, length of work experience and main area of work. There was no change between the years in the following items: midwives perception about their skills, education and their scope of practice, support from managers, control over their work and how they empower women, their autonomy in practice and their perception of being recognised by the medical profession for the contribution to the care of birthing women. In the crude analysis, 11 variables showed a statistically significant difference between the years in reporting 'strongly agree' or not (Table 4).

Table 4 shows that midwives in the 2021/22 sample were more likely to perceive themselves as advocating for and empowering pregnant women, but they were less likely to 'strongly agree' that they worked in a midwife-led practice, compared to midwives in 2012. They felt valued and perceived backup from managers, rated support from the colleagues and the team highly, but perceived less professional recognition from the medical staff. Midwives were more likely to assess resources to staff education positively, while the opposite was found regarding resources to women. After adjustment for background differences three variables were no longer statistically significant, namely perception of empowering women, professional recognition by the medical profession and resources to women (Table 4).

Discussion

The main findings of this study showed that midwives' perceptions of empowerment changed over time, in both directions. Age, area of work and length of work experience were associated with assessing empowerment. The PEMS does not seem to be sufficiently useful for a Swedish sample of midwives, according to the diversity of the Cronbach alpha values and the inter-item correlations.

When comparing the mean values of the domains of the PEMS, it appears there were improvements in a lot of areas. This study showed that midwives who acted like advocates for women and empowered them within an area of work where they had support and backup from managers and received collegial support was visible. Midwives felt appreciated by the team and acknowledged for their skills, scope of practice. In addition, they were given resources for staff education and training.

However, the drawbacks between the years was mirrored in the midwives' perception of no longer practicing midwife-led care, lack of control over their work, worse communication and lack of recognition from the medical profession. With the long-lasting tradition of midwifery in Sweden (Högberg, 2004), it is sad to view the deterioration of this profession. However, this is not really a new feature. In 2009, Larsson and co-workers concluded from a qualitative study with Swedish midwives that they felt that their professional role in childbirth care had decreased and been replaced by other professionals, despite the fact that the teamwork was strengthened (Larsson et al., 2009). Similarly, a study from Australia presented their findings of interviews with midwives as 'fighting a losing battle' that included factors that formed the core problem the midwives had to face. The working situation was described as being in a war and leading to work-related stress that made midwives leave the profession. They found it difficult to work within the medical model of care when adhering to the midwifery philosophy (Geragthy et al., 2019). Similar perceptions have previously been reported and linked to the attrition of midwives and their levels of burnout and stress (Knezevic et al., 2011; Hildingsson et al., 2013; Creedy et al., 2017; Båtsman et al., 2020; Hunter et al., 2019).

Midwives in the present sample, regardless of study years, who worked in outpatient clinics assessed the majority of items in the PEMS higher, compared to midwives working in 'other areas'. This might be attributed to working with usually heathy pregnant women, contraceptives or young people. They also usually work daytime only. Kirkham in 2006 also reported that community midwives were more likely to value their work (Kirkham et al., 2006). However, work in intrapartum care or postpartum care resulted in less positive ranking over the years.

In Sweden, similar to other countries, midwives are leaving the profession due to stressful work environment, medicalisation of birth and lack of professional recognition, most notably in intrapartum care (Myndigheten för vård-och omsorgsanalys, 2022)

Table 4
Comparison of midwives 'strongly agree' on the items in PEMS for year 2012 and 2022.

PEMS with statistically significant items grouped in 4 subscales	Crude Odds Ratios 95% CI	Adjusted Odds Ratios [#] 95% CI
Autonomy/Empowerment		
I am an advocate for pregnant women	1.57 (1.27–1.91)***	1.46 (1.17–1.83)***
I empower birthing women through my practice	1.25 (1.01–1.57)*	1.22 (0.96–1.56)
I am involved in midwife-led practice	0.44 (0.35–0.56)***	0.40 (0.31–0.51)***
Manager Support		
I am valued by the manager	1.30 (1.03–1.64)*	1.30 (1.01–1.67)*
I have the back-up of the manager	1.74 (1.37–2.21)***	1.89 (1.47–2.44)***
Professional Recognition		
I have support from my collegues	1.36 (1.10–1.65)**	1.40 (1.12–1.75)**
I am recognised as a professional by the medical profession	0.77 (0.62–0.95)**	0.81 (0.65–1.01)
I am listened to by members of the multidisciplinary team	1.43 (1.16–1.77)***	1.51 (1.21–1.89)**
Skills and Resources		
I do have adequate access to resources for staff education and training	2.60 (1.51–4.47)***	2.57 (1.47–4.49)**
I have adequate access to resources for birthing women in my care	0.61 (0.41–0.91)*	0.67 (0.43–1.03)
I am recognised for my contribution to the care of birthing women by my manager	0.77 (0.62–0.97)*	0.77 (0.60–0.97)*

[#] Adjusted for age, length of work experience and main area of work1=strongly disagree and 5= strongly agree.
* <0.05.
** <0.01.
*** <0.001.

The focus of the Swedish government to increase the number of midwives and to improve intrapartum care is welcome. One must bear in mind though, that the financial improvement, e.g. the large amount of finances directed to maternity services and midwifery education) in the recent years (Myndigheten för vård-och omsorgs-analys, 2022) has not resulted in more midwives, rather the opposite. The autonomy of the 21 regions might be a factor that actually hinders the development of intrapartum care and limits the influence midwives have in their work environment. If politicians and stakeholders ask the midwives about reasons for leaving and solutions for staying, it is possible that the picture would be clearer. Although important, the problem is not only about salary, as shown in a previous study (Hildingsson et al., 2013; Harvie et al., 2019; Cull et al., 2020). Many hospitals have organised mentorships for newly graduated midwives (Dixon et al., 2015; Pairman et al., 2016). However, when the more experienced midwives leave the profession, there will be fewer mentors available.

In the present study, being in the early years of one's career was associated with a lack of empowerment. Early career seems to be a triggering factor, not only for lack of empowerment but also midwives' emotional health and overall well-being. This was confirmed in a recent systematic review of 27 studies where a total of 5612 midwives participated (Albendín-García et al., 2021). In the review, it was found that midwives who had worked less than ten years were more exposed to burnout compared to their colleagues with longer working experience. Similar to the present study, deficit perceived autonomy, no recognition as professionals and high workload were associated with midwives' levels of burnout. Midwives who worked in organisations with good leadership and in continuity models were less likely to report burnout (Albendín-García et al., 2021). A qualitative study of open text comments from midwives in the UK who had been qualified for five years or less confirmed these findings (Cull et al., 2020). One theme identified was the enormous pressure the midwives felt. Shortages of staff, unmanageable workloads and the frustration of not being able to provide quality care contributed to the reported lack of safety for women and reluctance of managers to act on their working conditions.

Methodological considerations

The results also showed that the PEMS was not suitable for the Swedish sample of midwives. The PEMS was originally developed in Ireland and thereafter revisited on a sample of 600 midwives from New Zealand (Pallant et al., 2015). The population of midwives and their working conditions might be different from midwives in Sweden (Thomas et al., 2015). New Zealand based midwives are the leading maternity care providers who work independently as entrepreneurs. This is rarely the case in Sweden.In a previous study, Swedish midwives showed the highest levels of empowerment compared to midwives from Australia and New Zealand, in three out of four domains of the PEMS (Hildingsson et al., 2016). In the present sample it was noted that the Cronbach alpha values were low for two of the domains and the effect sizes were small for all domains (Cohen, 1998). In addition, the inter-item correlations exceeded the recommended levels, suggesting overlap between the concepts. It might be necessary to revise the PEMS for a pure Swedish sample of midwives and interpret the results with caution. The items removed from the original PEMS-scale were two items that did not load above 0.4 (being able to say no if needed and being accountable for my practice) and one item loaded of two components (not being informed about changes in the organisation that will affect practice). These items were removed from the scale prior to the 2012 sample, only 19 items remained and were analysed. It is possible that these items might have showed other loading if the full scale had been used. It is also possible that a principal component analysis would result in other components if PEMS was analysed for the Swedish sample only and not building on a previous study.

This study is compromised by the observational design, the self-selected nature of the survey and the fact that midwives were recruited through the unions. We do not know how many midwives do not belong to a union, and such information is difficult to obtain due to the General Data Protection Regulation (GDPR). One strength of this study is the relatively large number of participants who were drawn from two national samples of midwives in Sweden, representing the major areas where midwives usually work and are representative in terms of age distribution in the mid-

wifery workforce. However, there is a limitation that there is no way to compare the sample with the national workforce on more details. Some of the midwives did not completed the PEMS. In addition, non-completers were more likely not to work as a midwife (OR 3.73; 95% CI 2.64–5.27), or worked in 'other areas'(e.g. not in antenatal, intrapartum or postpartum care) (OR 1.82; 1.38–2.40) or were 55 years or older (OR 1.85; 1.38–2.46).

Conclusions

This study showed that midwives' perception of empowerment at work has changed over time, in both directions. Swedish midwives perceived themselves as advocates for birthing women but felt that they no longer worked in the midwife-led practice. Working in labour wards and postnatal wards generated lower perceptions of empowerment over time. If Sweden still wants midwives to be the primary caregivers during pregnancy, labour, birth and the postnatal period, it is of utmost importance to take a fresh approach in maternity services. Midwives need to have the authority and reality to practice midwife-led care, to receive control over their work, good communication and recognition from the medical profession in order to be empowered. This is important in order to maintain a healthy workforce.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.midw.2023.103599.

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