



## Sense of coherence in pregnant and new mothers – A longitudinal study of a national cohort of Swedish speaking women



Ingegerd Hildingsson <sup>a,b,\*</sup>

<sup>a</sup> Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden

<sup>b</sup> Department of Nursing, Mid Sweden University, Sundsvall, Sweden

### ARTICLE INFO

#### Article history:

Received 6 August 2016

Accepted 14 October 2016

### ABSTRACT

**Background:** Previous research shows inconsistent results about the stability of SOC during the childbearing period, and few studies have focused on longitudinal measures. There are contradictory results regarding the association between SOC and birth outcome. The link between levels of SOC and parental stress needs to be further explored.

**Aim:** The aim of this study was to investigate changes in SOC from early pregnancy to one year after birth and associations with background characteristics, birth outcome and parental stress.

**Methods:** A longitudinal survey of a national cohort of Swedish speaking women during 3 weeks in 1999–2000. Data were collected by questionnaires in early pregnancy, 2 months and 1 year after birth.

**Results:** SOC increased from pregnancy to 2 months after birth but decreased 1 year after birth. SOC was associated with women's background characteristics, emotional wellbeing and attitudes, but not with labour outcome. Women with low SOC reported higher parental stress after one year.

**Conclusion:** Sense of coherence is not stable during the childbearing period and is associated with women's sociodemographic background, emotional health and attitudes, but not with reproductive history or birth outcome. Parental stress is negatively correlated with SOC, and some important characteristics are similar in women having low SOC and high parental stress. Identifying women with low SOC in early pregnancy could be a means to prevent later parental stress.

© 2016 Elsevier B.V. All rights reserved.

Having a baby is usually a life changing situation. These changes are mostly expected and welcome, but could also be demanding and stressful. Such a major life event requires coping abilities, internal and external resources.

The theoretical construct of salutogenesis was presented in 1987 by Aaron Antonovsky [1]. The underlying approach was to identify factors protective for maintaining health and stability when facing stressful life situations, in contrast to the pathogenic approach in most literature. Sense of coherence (SOC) is a major construct in the salutogenic theory and mirrors the degree to which people view the world and face the stressors that life brings. People with high SOC view the world as manageable, comprehensible and meaningful. SOC has been investigated in a variety of populations [1–3].

SOC has been described as a stable disposition of personality [2,4], being more or less established in early adolescence [1], and fully stable around 30 years of age [1,4]. A more recent review aiming to test the validity and reliability of SOC concluded that it is not completely stable as SOC seems to increase with age and that the scale is multidimensional [5]. Another systematic review showed

that high SOC is associated with improved health outcomes in general populations [6], but few studies have addressed SOC during the childbearing period.

In the context of childbirth, Sjöström et al. [7] concluded that SOC was a strong predictor of women's well-being during pregnancy and childbirth, while socio-demographic background was not. The study is, however, compromised by the fairly small sample of women without complicated pregnancies. The authors found no changes in SOC over time and draw the conclusion that SOC is stable over time during the childbearing period. Contrary to this, other researchers have stressed that external input such as therapy and education could strengthen SOC [8].

Ferguson et al. [9] concluded, in a literature review of 15 studies about childbirth, that women with high SOC were less likely to smoke and sought support to a higher degree compared to women with low SOC. Women with high SOC also reported better emotional health and were less anxious, depressed and stressed and had lower prevalence of PTSD. In addition, women with high SOC were more likely to prefer a normal birth and were less likely to have a caesarean section [9].

A longitudinal survey of 1074 women in Australia recruited during pregnancy (mean gest week 18–19) and 753 women approached two months after birth showed that high SOC was associated with fewer CS and more assisted vaginal births. There was a

\* Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden.

E-mail address: [ingegerd.hildingsson@kbh.uu.se](mailto:ingegerd.hildingsson@kbh.uu.se).

statistically significant increase in SOC from the antenatal to the postnatal period. Increased SOC from the antenatal period to the postpartum period was associated with higher birth satisfaction, whereas decreased SOC was associated with epidural anaesthesia, assisted vaginal births and worse satisfaction with birth [10].

Closely related to the concept of SOC is the concept of parenting stress. Abidin [11] argued that parenting stress appears due to a disparity between the perceived demands of parenting and the available resources to meet those demands. Different background factors have been shown to be predictors of high parental stress such as parity [12], age [13], level of education [14–16], and single status [17]. Studies have shown that parents with psychological problems are at greater risk for parenting stress [18,19]. Parental stress has also been associated with lack of resources [20], relationship problems and difficulties in the parenting role [21].

Previous research shows inconsistent results about the stability of SOC during the childbearing period, and few studies have focused on longitudinal measures. There are contradictory results regarding the association between SOC and birth outcome. The link between levels of SOC and parental stress needs to be further explored. The aim of this study was to investigate changes in SOC from early pregnancy to one year after birth and associations with background characteristics, birth outcome and parental stress.

## Methods

### Study design

A longitudinal survey of a national cohort of Swedish speaking women in 1999–2001.

### Setting and participants

Antenatal care in Sweden is provided by community midwives within the primary health sector. Women have 6–9 antenatal visits during a normal pregnancy. There is no routine visit to a doctor. First-time parents are offered parental classes. During pregnancy women usually meet the same midwife during the antenatal visits, but it is not common to have a known midwife during labour and birth.

Women who came for their first booking visit in gestational week 10–12 in 97% of all antenatal clinics in Sweden during three weeks evenly spread over one year, were invited to participate. An inclusion criterion was to understand the Swedish language.

### Recruitment

Midwives working in the antenatal clinics informed the women about the study at their first antenatal visit in early pregnancy by handing out an information leaflet and asking them if they were willing to participate. They filled out a consent form with their contact details which was forwarded to the research team.

### Data collection

Data were collected by three questionnaires, in early pregnancy two months after birth and then after one year. The questionnaires were sent to the women's home addresses together with a prepaid envelope. Two reminders were sent to non-responders.

**Outcome variables:** The 13-item Sense of Coherence scale (SOC) [1] was used on all three data collection points and used as a continuous variable but was also categorized into low (<60), moderate (61–75) and high (>76) SOC [22].

**Explanatory variables** were collected for these areas:

**Socio-demographic background characteristics** (age, parity, civil status, country of birth, level of education, tobacco use)

**Variables related to reproductive history and health** (previous births, infertility, assisted conception, depressive symptoms). Depressive symptoms were assessed using EPDS with the cut off score 12/13 as recommended by Rubertsson et al. [23], for assessments during pregnancy. EPDS is a valid 10-item scale that ranges from 0 to 30 and was originally designed to measure depressive symptoms postpartum [24].

Three variables from the Cambridge Worry Scale [25] were investigated; major worries about giving birth, the baby's health, and hospital admission. The Cambridge Worry scale consists of 16 items. Each item is assessed on a scale ranging from 0 to 5 where 4 and 5 are regarded as "Major worries. The Cambridge Worry Scale can be used as a continuous scale or item-by-item [25].

**Attitudes and feelings** (planned pregnancy, attitudes towards being pregnant, labour and birth, the first weeks with a newborn baby, perceived support from partner, birth preferences).

**Birth related variables** were assessed two months after birth and contained the following: (onset of labour, epidural, augmentation, mode of birth and birth experience)

**Parental stress** was assessed one year after birth using the Swedish Parenting Stress Questionnaire [26], which is based on the parent domain of the US instrument Parenting Stress Index developed by Abidin [11]. The Swedish version of the PSI is composed of 34 items – 28 from the original PSI and six new questions [16]. All items are assessed on five-point Likert scales with the anchors ranging from "Do not agree at all" to "Strongly agree." The SPSQ consists of five subscales; *Incompetence* (11 items), which focuses on feelings of incompetence in the parental role. Items in *Role Restriction* (7 items) include ideas around restriction of activities due to parental responsibilities. The subscale *Social Isolation* (7 items) describes social contacts outside the family, and *Spouse Relationship Problems* (5 items) on experiences within the family. *Health Problems* (4 items) measures parental physical health and fatigue. High scores indicate higher levels of parental stress.

### Data analysis

Descriptive statistics (mean, SD and frequencies) were used to present data. To explore changes in SOC over time, repeated measures ANOVA and paired t-tests were used. Independent t-test and ANOVA were used to examine mean differences of SOC and the explanatory variables, separately for each time period. Finally, parental stress was examined in relation to the low, moderate and high levels of SOC. The study was approved by the Regional Research Ethical Committee of Karolinska Institutet, Sweden (Dnr 98–358).

## Results

During the three weeks of recruitment 4600 women were eligible for the study after the exclusion of 75 women booked in non-participating clinics, 275 women with a miscarriage, and 550 non-Swedish speaking women. In all 3061 women completed the first questionnaire and 3058 the SOC scale. The two months post birth questionnaire was completed by 2749 and the one year follow up by 2562 women. Women who did not participate in the study were more likely to be born outside Sweden ( $p < 0.001$ ), less likely to live in rural areas ( $p < 0.01$ ) and more likely to be smokers ( $p < 0.01$ ). Background characteristics of the participating women were fairly similar compared to all women who gave birth in Sweden during the year of recruitment.

Table 1 shows that the majority of women were aged 25–35 years (70%), married or cohabiting (95%), born in Sweden (90%) and had a high school education (55%). The proportions of primiparas and multiparas were 43% and 57% respectively.

The mean values and standard deviations for SOC on the three measurements are shown in Table 2.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات