

# 'Burnout' among Dutch midwives

**Rudi H. C. Bakker, Peter P. Groenewegen, Lea Jabaaij, Wouter Meijer, Herman Sixma and Anke de Veer**

**Objective:** to determine the effect of workload on 'burnout' having considered work capacity.

**Design:** cross-sectional study.

**Setting:** Dutch community midwives in independent practice.

**Participants:** 200 Dutch community midwives.

**Measurements:** three-week diary recordings, a questionnaire on practice and personal characteristics, and a questionnaire on 'burnout', social support and coping style.

**Findings:** differences in 'burnout' can be explained partly by the midwife's workload and partly by her work capacity. A high workload may lead to 'burnout' when a midwife is unable to handle stressful situations.

**Key conclusions:** when a higher percentage of the supervised births occurred at the client's own home instead of during a short-stay hospital visit, the chances of 'burnout' are lower.

**Implications for practice:** changes in the organisation of Dutch community midwifery care may contribute to the reduction of 'burnout'. 'Burnout' is a complex phenomenon influenced both by individual and organisational factors. When formulating policy to reduce 'burnout' among midwives specific work-related factors must be considered and emphasis be placed on the importance of personal resources.

## INTRODUCTION

### 'Burnout'

Since its 'discovery' by Herbert Freudenberger in 1974 the burnout syndrome has become an often used concept in research on work-related stress (Schaufeli 1990). Most authors agree on the definition that burnout is a psychological syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment which can occur among individuals who work with other people (Maslach & Jackson 1986).

Maslach (1982a, 1982b, Maslach & Jackson 1986, Schaufeli et al 1993) describes burnout as a process starting with emotionally burdening contacts with clients. Client contact is the core of 'people-work' where clients bring their problems to the caregiver. The tension evidently generated by these contacts can be further increased by such factors as insufficient training, a shortage of personnel or a lack of support from colleagues or superiors. A high

level of emotional tension can result in emotional exhaustion, the first stage in the burnout process. 'Depersonalisation' is the term Maslach uses for the reaction to emotional exhaustion. The caregiver distances him/herself from the client and develops a cold, cynical attitude. As a result the caregiver has increasing difficulty helping the client. This creates doubts in personal accomplishments and increasingly a negative self-image develops. In this case the burnout process is complete. Burnout is a complex process consisting of three inter-related stages. Maslach and Jackson (1986) developed a questionnaire, the Maslach Burnout Inventory (MBI), with which a score can be obtained for the separate stages. Only when a person scores high on emotional exhaustion and depersonalisation and low on personal accomplishment may this person be considered to have burnout.

Burnout is a serious problem. Heyman (1991) presents a list of nine possible outcomes of the burnout process, ranging from a reduction in the

**Rudi H. C. Bakker**  
MA, Junior Researcher  
**Peter P. Groenewegen**  
PhD, Head of Department  
**Wouter Meijer**  
MD, Senior Researcher  
**Herman Sixma**  
MA Senior Researcher  
**Anke de Veer**  
PhD, Senior Researcher  
NIVEL (Netherlands  
Institute of Primary Health  
Care), PO Box 1568, 3500  
BN Utrecht, The  
Netherlands, Fax (+ +)-31-  
30-2319290  
**Lea Jabaaij**  
PhD, Researcher NcGv,  
PO Box 5103, 3502 JC  
Utrecht, The Netherlands

(Address correspondence  
to RHCB )  
Manuscript accepted  
11 April 1996

quality of care and job turnover to the development of psychosomatic problems and even suicide.

### **Dutch maternity care organisation**

Maternity care in the Netherlands is organised differently from that in other Western countries, where most midwives work in hospitals. In the Netherlands the majority (80%) of midwives are in independent practice (Hingstman & Harmsen 1994). These community midwives are independent medical practitioners, much like the general practitioner (GP). The distinction is that the midwife is limited to a sub-area of medicine, that is the supervision of women during normal pregnancy and childbirth (Hingstman 1994). Pregnancy and birth are considered normal physiological processes in which medical intervention should be reduced to a minimum (Crébas 1990). When there is no medical indication a pregnant woman can choose whether the birth should take place at home or in a short-stay hospital maternity ward. In both cases the delivery takes place under the supervision of a community midwife (van Teijlinger & McCaffery 1987). In 1992, community midwives supervised 45% of all births in the Netherlands. Half of the births supervised by community midwives occurred at home (Netherlands Central Bureau of Statistics 1994).

### **Burnout and midwifery**

Although the literature on burnout among health care professionals is extensive (Jones 1982, Schaufeli 1990, Schaufeli et al 1993), no research has been undertaken into burnout among midwives. This does not mean that midwives are not liable to burnout. On the contrary, the profession demands a strong commitment to clients. It is conceivable that situations which deal with the beginning and the end of life are especially stressful. This commitment may be troubled by problematic encounters, causing emotional tension. Clients may, for instance, be very demanding or constantly question the midwife's skills. When a midwife is unable to cope with the emotional tension, she might distance herself too much from her clients and eventually lose her sense of personal accomplishment. In short, there is reason to expect that burnout is a problem among midwives.

An individual score on the MBI must be interpreted carefully (Schaufeli 1990). In quantitative research burnout is measurable only on a mean level by comparing the MBI scores of professional groups or subgroups within professions. Dutch community midwives as independent practitioners are, on the one hand, comparable to GPs in terms of high autonomy and responsibility. On the other hand, Dutch community midwives differ from GPs in that they have relatively limited medical qualifications. In other health care systems, midwifery is often closer and more comparable to the nursing profession. To

describe the level of burnout among Dutch community midwives they have been compared with GPs and nurses.

Determining the mean burnout level of Dutch community midwives gives little insight into burnout on the personal level. For this the conceptual model of workload and work capacity has been introduced.

### **Workload and work capacity**

The model of workload and work capacity was developed by van Dijk et al (1990). They argue that workload alone gives insufficient explanation for work stress. A person's capacity to deal with a high workload should be taken into account. In other words, a high workload does not necessarily lead to work stress outcomes, such as burnout, because it depends on a person's ability to handle the situation. This suggests that people with a high workload and a low work capacity will experience more burnout than people with a high workload and a high work capacity.

The objective of this study was to determine whether burnout among Dutch community midwives can be explained in terms of work load and work capacity. The research question was: 'What influence does workload have on burnout among Dutch community midwives, when the work capacity of these midwives is considered?'. In answering this question a research model was used in which burnout depends on workload factors accounting for factors concerning work capacity.

### **Operationalisation**

Factors which are associated with workload are: the average hours a midwife works per week; the percentage of all supervised births which occur at home; and the degree of urbanisation of the area where the midwife works.

The average hours a midwife works per week is the first indication of workload. Because midwives in the Netherlands are not contracted for an agreed number of clients or hours, midwives working many hours a week will, in general, have more contacts with clients, might have less time to deal with these contacts emotionally, and therefore have a higher risk of burnout.

A unique characteristic of the work of Dutch midwives is supervising home births. van der Hulst (1993) studied the Dutch community midwives' perception of home deliveries and short-stay hospital deliveries. She reports that, although home deliveries are considered more of a strain than deliveries taking place in hospital, the job satisfaction is higher for home births. Since the study reported here is the first of burnout among community midwives, the relationship between the percentage of home births and burnout has an exploratory character. Considering van der Hulst's finding it is conceivable

that burnout is higher in those doing more home births because of the more stressful character of the work, and that burnout is lower because of the higher job satisfaction.

The final indication of workload is the degree of urbanisation of the practice area. van Dierendonck et al (1992) found that Dutch GPs working in urban areas had more burnout than GPs in rural areas. They conclude that, owing to higher morbidity relatively more people from different ethnic groups and people of lower socio-economic status, GPs in large cities have more problematic encounters with patients than GPs in rural areas. These factors may also influence the contacts of midwives with their clients. In that case it could be expected that midwives working in large cities would experience more burnout than midwives working in smaller communities. Although the literature shows no further indication of the influence of urbanisation on burnout, van Dierendonck et al's finding deserves further exploration.

Various authors have shown the significance of work capacity on the burnout process. A professional working in a certain setting may experience burnout, whereas someone else in the same setting may experience no signs of burnout. In order to determine the importance of workload for burnout, work capacity has to be considered. According to the literature, indications for work capacity are: work experience, practice type, social support received, and coping style.

When considering work experience Schaufeli (1990) reports that burnout often occurs at a relatively young age, below 30–40 years. The explanation is that young professionals are liable to have too idealistic an image of their profession, which may lead to a disappointing start to their careers. A second explanation is the possibility that professionals who have burnout leave their jobs. Then, by 'selection' the older professionals without burnout remain. A strong positive correlation exists between age and work experience. Instead of age the work experience is used, i.e. the number of years a person has been working as a midwife. Midwives are expected to have a higher work capacity when they have more work experience. Given a certain workload, midwives with more work experience are expected to be less liable to burn out.

Practice type is operationalised as the number of midwives working in a practice. Midwifery care must be obtainable 24 hours a day. Consequently, a midwife running a single-handed practice is always 'on call'. Midwives working in group practices usually share the work (Jabaaij et al 1994). Clients are shared by all midwives working in the practice. In this way not all midwives have to be on call at the same time. Another advantage of working with colleagues in one practice is that it is easier to discuss the work. Problematic contacts with clients, the starting condition of the burnout

process, can be discussed directly with colleagues. For this reason it is expected that midwives in group practices are better able to cope with a higher workload.

Social support is described as a concept which signifies the fact that one human being recognises the other person's identity, values that person, and sometimes actually helps him or her. It is operationalised as perceived support from significant others. In the literature burnout is associated with a lack of social support (Boyle et al 1991, van Dierendonck & Schaufeli 1993). It is expected that people have a higher work capacity when they experience more social support. Therefore, given a high workload the level of burnout will be lower when community midwives experience more social support.

Coping is an effort to master conditions of harm, threat or challenge when routine or automatic response is not readily available (Monat & Lazarus 1977). Leiter (1990) found that ideas and actions aimed at controlling the situation (an active coping style) relate to low burnout. Evasive strategies (a passive coping style) are linked to a high level of burnout. Work capacity is expected to be higher when midwives have a more active coping style.

From the relationships described above, three hypotheses were formulated:

1. When midwives work more hours per week the level of burnout will be higher unless the working experience is high, the practice type is large, social support received is high, and the coping style is more active.
2. A high percentage of home births will influence the level of burnout unless the working experience is high, the practice type is large, social support received is high, and the coping style is more active. Burnout may be higher because of more strain, or lower owing to increased job satisfaction.
3. When midwives work in larger urban areas the level of burnout will be higher unless the working experience is high, the practice type is large, social support received is high, and the coping style is more active.

## METHODS

### Subjects

The data used in this article were originally collected in 1992 to determine how midwives spend their time (Jabaaij et al 1994). A sample ( $n=115$ ) was taken from the Dutch population of midwifery practices. For the purpose of the original study, the sample of practices was stratified according to practice type and urbanisation of the practice area. In each practice all midwives were asked to fill out a questionnaire and keep a detailed diary of their activities. Two hundred and sixty-nine midwives participated. At the end of 1993 all participating midwives

received an additional questionnaire with questions on burnout, coping, and social support. With a 74% response rate for the additional questionnaire the current data set consists of 200 midwives.

In Table 1 the differences between the community midwives in the study population and the total population of Dutch community midwives are shown. As a result of the stratification of the sample of practices, the characteristics of the study population differ from the total population. To determine the mean burnout level in the total population of Dutch community midwives, the data were re-weighted. The re-weighting procedure was necessary to obtain a study population which reflects the characteristics of all Dutch community midwives. The data used for answering the research question, about the relations between workload, work capacity and burnout, were unweighted.

## Measures

### Workload variables

The original sample was drawn from the database of practising midwives kept by NIVEL (Netherlands Institute of Primary Health Care) (Hingstman & Harmsen 1994, Jabaaij et al 1994). From this database the practice type and degree of urbanisation were obtained. The degree of urbanisation was measured with four categories: rural areas (less than 30 000 inhabitants); small urban areas (30 000–50 000 inhabitants); urban areas (over 50 000 inhabitants); and large cities (Amsterdam, Rotterdam, The Hague, Utrecht). Based on three-week diaries and the number of clients in the practice, an estimate was made of the average hours the midwives worked per week (Jabaaij et al 1994). The percentage of home births of all supervised births was requested in the 1992 questionnaire.

### Work capacity variables

In order to obtain length of working experience as a midwife the respondents had been asked in the 1993 questionnaire which year they had begun working as a midwife. Social support was measured using a validated scale from the 'Vragenlijst Organisatiestress-Doetinchem' (VOS-D, Bergers et al 1986). On an 18-item scale the respondents were asked to indicate how often they received support from/can count on: their colleagues in the practice; other midwives; their spouse; other people important to the midwife; and clients. All items range from 'never' (1) to 'always' (4). The 'social support' scale consisted of the mean score on all items. Cronbach's alpha for this scale was 0.80, which indicates a sufficiently strong internal consistency.

Coping represents the way people deal with stressful situations. Using a short form of the Utrecht Coping Scale (UCL, Schreurs et al 1988), on 25 items with four-point scales the respondents were asked how often they reacted in the described way to difficult situations. Using factor analysis, which clusters items with high coherence, one scale was obtained containing 15 items ranging from: 1, 'an active coping style'; to 4, 'a passive coping style'. Cronbach's alpha for this scale was 0.77.

### Burnout

Burnout is measured with the Dutch translation of the Maslach Burnout Inventory (MBI-NL) (Schaufeli & van Dierendonck 1994). The MBI-NL consists of three subscales: emotional exhaustion (9 items, Cronbach's alpha 0.88), depersonalisation (5 items, Cronbach's alpha 0.74) and personal accomplishment (8 items, Cronbach's alpha 0.74). All three subscales are moderately correlated with each other: emotional exhaustion with depersonalisation ( $r = 0.53$ ); emotional exhaustion with personal accomplishment ( $r = -0.48$ ); and depersonalisation with personal accomplishment ( $r = -0.52$ ). Respondents with high scores on emotional exhaustion and depersonalisation and a low score on personal accomplishment are considered to have a greater degree of burnout.

### Analysis

A *t*-test was used to determine the statistical significance of the differences between the mean burnout scores of community midwives, GPs, and nurses. Statistical significance was reached when there is a less than 5% chance of differences between the professional groups being coincidental. The research model was tested using multiple regression analysis. With this method the partial correlations (beta's) were calculated between the dependent variable and the independent variable, accounting for all the other variables in the model. The three dimensions of burnout were handled separately as the dependent variable. The way in which the hypotheses were for-

**Table 1** Background characteristics of the community midwives in the study population and all Dutch community midwives (source: Hingstman & Harmsen, 1994)

	Study population ( <i>n</i> =200)		All Dutch community midwives ( <i>n</i> =875)	
	No	%	No	%
<b>Age (years)</b>				
< 30	49	25	180	21
30–39	85	42	347	40
40–49	44	22	215	25
50–59	19	10	99	11
60 <	3	2	34	4
<b>Practice type</b>				
Solo	23	12	212	24
Duo	60	30	279	32
Group (3 or more)	117	59	384	55
<b>Degree of urbanisation</b>				
< 30 000	56	28	249	28
30 000–50 000	44	22	311	36
> 50 000	59	30	200	23
Amsterdam, Rotterdam The Hague, Utrecht	41	21	117	13

**Table 2** Mean burnout scores (MBI-NL) of Dutch community midwives, GPs, and nurses

	Community midwives (n=200, weighted)		General practitioners (n=540, weighted)		Nursing personnel (n=1337)	
	Mean	St. dev	Mean	St. dev	Mean	St. dev
Emotional exhaustion	19.9	8.2	20.1	7.5	16.2*	7.5
Depersonalisation	6.4	3.7	9.4*	3.8	6.9	3.8
Personal accomplishment	33.4	4.1	30.4*	3.8	31.0*	4.4

\*Differs significantly from community midwives (t-test,  $P < 0.05$ ).

mulated means that there is a main effect of workload and an interaction effect of work capacity.

To test the hypotheses twelve interaction terms were made by multiplying each workload variable by each work capacity variable. If the relationship between workload and burnout is affected by work capacity, these interaction terms should be significantly related to the burnout. For the interpretation of significant interaction terms, further analysis is required.

The workload variable in the interaction term was divided into quartiles. For each quartile the correlation was calculated between the work capacity variable in the interaction term and the dependent burnout variable. When the hypotheses are correct the workload variables will show higher correlations with burnout when the work capacity variable is lower.

## FINDINGS

The mean burnout scores from the MBI-NL of community midwives, GPs (van Dierendonck et al 1992), and nursing personnel (Schaufeli & van Dierendonck 1993) are shown in Table 2. The data

are weighted. No difference was found between the experience of emotional exhaustion by community midwives and GPs. However, both groups experienced a significantly higher level of emotional exhaustion than nursing personnel. On average GPs showed a significantly higher level of depersonalisation than community midwives. Compared to nursing personnel, community midwives showed no difference on this phase. Community midwives had the highest average rate of personal accomplishment. In the sense of personal accomplishment all differences between the three groups are statistically significant.

The results of the multiple regression analyses are shown in Table 3. The relationship of the workload variables to the dimensions of burnout was quite opposite to what was expected. The more hours a community midwife worked per week, the higher was the sense of personal accomplishment. No relation was found between working hours and emotional exhaustion and depersonalisation. The percentage of home births had a significant relationship with two aspects of burnout. When a higher proportion of supervised births occurred at home, the community midwife experienced less emotional

**Table 3** Standardised regression coefficients (betas) of workload variables and work capacity variables on the three dimensions of burnout (n=200)

	Emotional exhaustion	Depersonalisation	Personal accomplishment
<b>Workload</b>			
Hours per week	0.06	-0.10	0.20*
Percentage home births	-0.17*	-0.21*	0.08
Degree of urbanisation	0.06	0.03	-0.11
<b>Work capacity</b>			
Working experience	-0.04	-0.15*	0.03
Practice type	-0.04	-0.06	0.01
Social support	-0.28*	-0.21*	0.26*
Passive coping style	0.26*	0.16*	-0.2
<b>Interaction terms**</b>			
Percentage home births × Coping		-0.16*	
Percentage home births × Practice type			
Degree of urbanization × Practice type		0.14*	
Adjusted R <sup>2</sup>	0.14	0.16	0.15

\*Significant beta's ( $P < 0.05$ ).  
\*\* Only the significant interaction terms are shown.

exhaustion and less depersonalisation. The level of urbanisation had no significant relationship with the dimensions of burnout.

Three work capacity variables were significantly related to burnout. When a midwife received more social support, the levels of emotional exhaustion and depersonalisation were lower, and personal accomplishment was higher. A passive coping style was related to the first two stages of burnout. When the coping style of community midwives was more passive the levels of emotional exhaustion and depersonalisation were higher. The coping style showed no significant relationship to personal accomplishment. More experienced midwives had a lower level of depersonalisation.

Three interaction terms showed significant correlates with burnout. The combination of the percentage of home births and coping style had a significant relationship with depersonalisation. For interpretation of this relationship the coping scale was divided into quartiles (see Table 4). For the group of 50 midwives with the most active coping style, there was no relationship between percentage of home births and level of depersonalisation. However, for the midwives with the more passive coping style, a significant correlation was found between percentage of home births and depersonalisation. A higher percentage of home births was related to less depersonalisation for midwives with a more passive coping style.

A second significant interaction was found for the combination of the percentage of home births and practice type with personal accomplishment. In Table 4 one significant correlation between percent-

age of home births and personal accomplishment within the four categories of practice type is shown. A high percentage of home births was related with a higher level of personal accomplishment when midwives worked in large practices. In small practices a higher percentage of home births was related to less personal accomplishment. However, this correlation is not significant.

Finally, the interaction term of degree of urbanisation and practice type was significantly related to depersonalisation. A higher degree of urbanisation was related to a lower level of depersonalisation when midwives worked in small practices. A higher degree of urbanisation was related to a higher level of depersonalisation when the practice type was larger.

## DISCUSSION

As a group, the Dutch community midwives in this study may be considered to have had a lower level of burnout than Dutch GPs. They experienced as much emotional exhaustion but had lower levels of depersonalisation and a higher sense of personal accomplishment. This finding may be explained by the fact that the midwife's job is limited to the supervision of women experiencing normal pregnancy and childbirth, whereas the GP's job is much more fragmented and diverse. Owing to their limited field of work, midwives should be better able to reach a high level of expertise in their domain. Therefore, GPs are more likely to experience problematic situations which they have never encountered before, and consequently have a higher risk of burnout.

Another possible explanation is the following. van Dierendonck et al (1992) found that trivial complaints from patients during out-of-hours services, which could also be presented during normal surgery hours, are very stressful in the perception of GPs. Midwives are supposed to be more used to working irregular hours. Babies are born 24 hours a day. Therefore, midwives may perceive this as less burdening. Moreover, midwives are less often confronted with trivial complaints.

In comparison to Dutch nursing personnel, community midwives in general did not have a higher or lower level of burnout. They experienced more emotional exhaustion and showed the same level of depersonalisation, but they had a higher sense of personal accomplishment. Both professions operate in specific sub-areas of health care. The main difference is that community midwives are independent practitioners, whereas nurses usually work under the supervision of a physician. Consequently, community midwives have greater autonomy in their work. Hackman and Oldham (1976) state that high autonomy is related to high responsibility for the outcomes of the work. This increases emotional tension, but it also motivates a high-quality work performance and hence a higher sense of personal

**Table 4** Correlations of workload with burnout on levels of work capacity (n = 200)

<b>Coping style</b>		Correlations
	<i>n</i>	% of home births with depersonalisation
More active	50	-0.09
	54	0.00
	51	-0.28*
More passive	45	-0.46*
<b>Practice type</b>		Correlations
	<i>n</i>	% of home births with personal accomplishment
Solo	23	-0.25
Duo	60	0.00
Group (3)	73	0.07
Group (4-5)	44	0.36*
<b>Practice type</b>		Correlations
	<i>n</i>	degree of urbanisation with depersonalisation
Solo	23	-0.45*
Duo	60	-0.03
Group (3)	73	0.25*
Group (4-5)	44	0.19

\*significant correlation ( $P < 0.05$ ).

accomplishment. The data reported here are insufficient to test these explanations.

In this article the relationship between workload and burnout has been explored. None of the variables indicating a high workload is directly associated with all three stages of the burnout process. A relatively large number of working hours per week showed an unexpected positive correlation with personal accomplishment, but was not correlated with emotional exhaustion and depersonalisation. In this study the number of hours worked was found to be a poor predictor of burnout. When community midwives spend more time in their profession they probably feel more confident in their ability to practise it. On this assumption the number of working hours may play a small role in the complex concept of burnout.

The degree of urbanisation of the midwives' working area showed no directed relationship with burnout. However, there is some indication that the expected relationship is mediated by practice type. In large cities community midwives exhibited more depersonalisation when they were working in larger practices, and midwives working in larger cities showed less depersonalisation when they worked in small practices. Workload was expected to be higher in large cities and work capacity to be higher in larger practices. Therefore, burnout should be higher with community midwives in small large-city practices.

A high percentage of home births was found to reduce the risk of burnout when considering the first two stages of burnout. van der Hulst (1993) concludes that the job satisfaction is higher with home births than with births supervised in hospitals. A high job satisfaction reduces the risk of burnout (Schaufeli 1990). On the basis of these findings it might be concluded that the higher satisfaction of supervising home births outweighs the effect on workload. Furthermore, since a high percentage of home births automatically relates to a low percentage of short-stay hospital births, it can be concluded that a high number of short-stay deliveries relates to more emotional tension and decreasing commitment towards the client. At home the midwife seems to be more comfortable in performing her job.

The relationship between the place of birth and burnout is also influenced by the midwives' work capacity. Community midwives with a more passive style of coping experienced more depersonalisation when they had a relatively low proportion of home births, and thus had more short-stay deliveries. Research shows that more medical interventions take place with a short-stay delivery, even when controlled for the obstetric risks of the mother and baby (Damstra-Wijmenga 1982, Wieggers & Berghs 1994). Furthermore, it is known that short-stay deliveries are less satisfactory to community midwives (van der Hulst 1993). Therefore, it can be hypothesised that short-stay deliveries are more

stressful and this affects, in particular, midwives with a more passive coping style.

Taking all this into consideration, evidence is provided to suggest that, for Dutch community midwives, supervising births at the clients' own home instead of in a hospital maternity ward reduces their risk of burnout.

Work capacity showed significant direct effects on the burnout dimensions. It was hypothesised that work capacity affects burnout only above a certain level of work load. The fact that direct effects were found might indicate that other, unmeasured aspects of workload influence burnout. This is also indicated by the low values of the coefficients of determination ( $R^2$ ). Nevertheless, personal resources, such as social support and coping style, seem to play an important role in the burnout process. This supports the hypothesis that burnout depends not only on workload, but also on the ability to handle stressful situations.

It is difficult to translate the findings of this study into a cure for burnout. Firstly, burnout is the result of a process and our data have been collected at one point in time. Hence, the direction of causation might be the other way around and the 'healthy worker effect' might blur some of the relations. Research on a longitudinal basis, e.g. by repeating the survey with the same group of midwives, might provide the basis for firmer conclusions. Secondly, on the basis of this article one cannot simply conclude that Dutch community midwives can prevent burnout by working more hours per week and doing more home deliveries, burnout is too complex a phenomenon. However, evidence is provided that specific work-related factors are associated with burnout. It was also found that social support and an active coping style improve the work capacity. Paying attention to these personal resources may become a more explicit part of the midwives' education and training. By stimulating students to adopt a more active style of coping when encountering problems and by discussing the importance of social support, young midwives may become better able to handle the stressful situations in their job.

## REFERENCES

- Bergers G P A, Marcelissen F G H, De Wolff Ch J 1986 *Vos-D Vragenlijst Organisatiestress-D. Handleiding.* (in Dutch) Stressgroep publikatie 36, Nijmegen
- Boyle A, Grap M J, Younger J et al 1991 Personality hardiness, ways of coping, social support and burnout in critical care nurses. *Journal of Advanced Nursing* 16: 850-857
- Crébas A 1990 *Beroepsomschrijving Verloskundigen.* (in Dutch) NOV, Bilthoven
- Damstra-Wijmenga S M I 1982 *Veilig bevallen. Een vergelijkende studie tussen de thuisbevalling en de poliklinische bevalling.* (in Dutch) Groningen
- Dierendonck D van, Groenewegen P P, Sixma H 1992 *Opgebrand; een inventariserend onderzoek naar gevoelens van motivatie en demotivatie bij huisartsen.* (in Dutch) NIVEL, Utrecht

- Dierendonck D van, Schaufeli W 1993 Burnout en organisatiebetrokkenheid bij leerling-verpleegkundigen; de rol van billijkheid, sociale steun en probleemhantering. (English abstract) *Tijdschrift voor Sociale Gezondheidszorg* 6: 339-344
- Dijk F J H van, Dormolen M van, Kompier M A J et al 1990 Herwaardering model belasting-belastbaarheid. (English abstract) *Tijdschrift voor Sociale Gezondheidszorg* 1: 3-10
- Hackman J R, Oldham G R 1976 Motivation through the design of work: test of a theory. *Organizational Behavior and Human Performance* 16: 256
- Heyman T 1991 Burnout. (in Dutch) *Tijdschrift voor verloskundigen* 2: 111-116
- Hingstman L 1994 Primary care obstetrics and perinatal health in the Netherlands. *Journal of Nurse-Midwifery* 6: 379-386
- Hingstman L, Harmsen J 1994 Registratie verloskundigen peiling 1994. (in Dutch) NIVEL, Utrecht
- Jabaaij L, Winckers M, Hingstman L et al 1994 De vrijgevestigde verloskundige in Nederland: Werk en werkdruk. (in Dutch) NIVEL, Utrecht
- Jones J W (eds) 1982 *The burnout syndrome: current research, theory, interventions*. London House Press, Park Ridge, Illinois
- Leiter M P 1990 The impact of family resources, control coping and skill utilization on the development of burnout: a longitudinal study. *Human Relations* 11: 1067-1083
- Maslach C, Jackson S E 1981 The measurement of experienced burnout. *Journal of Occupational Behaviour* 2: 99-113
- Maslach C 1982a *Burnout: the cost of caring*. Prentice-Hall, Englewood Cliffs, NJ
- Maslach C 1982b *Burnout: a social psychological analysis*. In: Jones J W (eds) *The burnout syndrome*. London House Press, London
- Maslach C, Jackson S E 1986 *The Maslach Burnout Inventory Manual* (2nd edn). Consulting Psychologists Press, Palo Alto, CA
- Monat A, Lazarus R S 1977 *Stress and coping*. Columbia University Press, New York
- Netherlands Central Bureau of Statistics (CBS) 1994 *Birth. Vademecum of Health Statistics of the Netherlands*. CBS, Voorburg/Heerlen/Rijswijk: 89-101
- Schaufeli W B 1990 *Opgebrand. Achtergronden van werkstress bij contactuele beroepen: het burnout syndroom*. (in Dutch) AD. Donker, Rotterdam
- Schaufeli W B, Maslach C, Marek T 1993 *Professional burnout. Recent developments in theory and research*. Taylor & Francis, Washington DC
- Schaufeli W B, van Dierendonck D 1994 *Burnout een begrip gemeten. De Nederlandse versie van de Maslach Burnout Inventory (MBI-NL)*. (English abstract) *Gedrag en gezondheid* 4: 153-172
- Schreurs P J G, Van de Willige G, Tellegen B et al 1988 *De Utrechtse Coping Lijst: UCL. Omgaan met problemen en gebeurtenissen*. (in Dutch) Swets & Zeitlinger, Lisse
- van der Hulst L 1993 *Attitude-onderzoek onder verloskundigen* (in Dutch). Universiteit van Utrecht, Utrecht
- van Teijlingem E, McCaffery P 1987 *The profession of midwife in the Netherlands*. *Midwifery* 3: 178-186
- Wiegers T, Berghs G 1994 *Bevallen ... Thuis of poliklinisch?* (in Dutch) NIVEL, Utrecht