

## Social and economical impact of women in anaesthesia Women in medicine : an endangered species ?

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In most Western countries the number of women in medicine has increased during the last decades. For example, in Norway the proportion of women in medicine has doubled since 1970 (GJERBERG, 2001). In absolute figures, the growth of women physicians is even more remarkable. If today's trends continue, in the year 2015 about 45% of Norway's professionally active doctors will be women (GJERBERG, 2001). A similar change in the gender composition is expected in many other western countries, including Great Britain and the US.

The reasons for this increase are similar to the reasons for the increased labour participation of women in general : in the 1960s and 1970s, new attitudes about the role of women in society and about gender equality became apparent. As their educational levels raised, women claimed their place in the labour market. Also the rise of the consumer society made a second earning desirable.

Although the number of women in medicine has augmented spectacularly, real gender equality has not yet been established. Since the mid-1980s, gender segregation of medical work has become increasingly recognized as a sign of inequality between female and male members of the profession. Today, women are still a minority within the profession and they are still faced with skewed career advancement.

To begin with, in most countries both general practices and medical specialties still prove to be male dominated professions (RISKA, 2001). For example in the Netherlands, approximately 78% of the GP's and 81% of medical specialists are male (HEILIGERS, 2001). GJERBERG examined changes in the gender distribution within specialties in Norway, comparing cohorts authorized in 1970-73 and 1980-83. She found that there had been an increase in women in most specialties. The exceptions were anesthesiology, where there was a decrease (!), beyond radiology and otorhinolaryngology, where the percentage of women was almost unchanged. In both Norwegian cohorts, women

were particularly represented in child and adolescent psychiatry, obstetrics and gynaecology, occupational medicine and paediatrics. Even so, in all but one (child and adolescent psychiatry) women still form a (small) minority, see table 1 (GJERBERG, 2001 : 338).

According to RISKA, in all Nordic countries (Denmark, Finland, Norway and Sweden) women physicians are more likely to work in specialties pertaining to the needs of children (pediatrics, child psychiatry) and the elderly (geriatrics) or involving routine tasks (radiology) (RISKA, 2001 : 181).

Not surprisingly, statistics both in Europe and in the United States show that women physicians mainly work in branches of medicine characterized by relatively low earnings and prestige. A broad survey among US physicians pointed out that the mean income for women was approximately \$22.000 less than that of men (MCMURRAY, LINZER, KONRAD, DOUGLAS, SHUGERMAN, NELSON, 2000). Young male and female physicians with similar characteristics earn equal amounts of money. But among physicians with 10 or more years of experience, men earn more than women (BAKER, 1996). A study of NESS, UKOLI *et al.* points out female doctors are more likely to be in low-paying specialties, not to be a partner in the practice, and to be salaried employees ; they also spent fewer hours per week seeing patients. Even after adjustment for these differences, hourly earnings are significantly higher (14%) among men than among their female colleagues. Men's earnings significantly exceed women's earnings among physicians with no academic affiliation, those in high-earning specialties, and those in general internal medicine (NESS, UKOLI, HUNT, KIELY, MCNIEL, RICHARDSON, WEISSBACH, BELLE, 2000). Almost the same percentage (12% - 13%) was found in a study of 1982 (OHSFELDT, CULLER, 1986).

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Table 1

Percentage of Norwegian women specialists in different fields, total and according to authorisation year (source : Gjerberg, 2001 : 337)

	Percentage of women All active doctors	Percentage of women Authorisation year 1970-1973	Percentage of women Authorisation year 1980-1983
General practice	23	17	23
<b>Anaesthesiology</b>	17	19	14
Occupational medicine	32	31	43
Paediatrics	24	19	36
Child and adolescent psychiatry	64	73	87
Obstetrics and gynaecology	31	26	43
General surgery	8	0	18
Other fields of surgery	5	0	7
Surgical sub-specialties	2	0	5
General medicine	13	6	9
Other fields of medicine	24	12	23
General medicine subspecialties	10	9	17
"Laboratory disciplines"	22	25	37
Psychiatry	29	27	33
Community medicine	12	9	14
Ophthalmology	17	22	26
Otorhinolaryngology	7	8	8
Total	19	16	23

Analyses of different aspects of the medical profession show that, despite major historical changes, gender segregation is still a fact. In this article, we want to raise three questions :

- 1) Why is gender equality in medicine far from being established ?
- 2) What are the consequences for the well-being of women ?
- 3) What can be done ?

#### 1. WHY GENDER INEQUALITY ?

We can discern two major types of causes for the persisting gender inequality : the phenomenon of 'closure' and the barriers related to balancing career work and family work.

##### 1.1. Closure : problems entering male-dominated bastions

'Closure' is a concept that stands for exclusionary practices of professions. Rather than understanding professions as altruistic occupations, professions are described as institutional means of controlling occupational activities. A lot of authors point out that professions are not only characterised by closure mechanisms, but that these strategies are gendered, i.e. exclusionary practices depend on the gender of the participant involved. The disproportionate representation of women in medicine is seen as a result of male exclusionary practices, i.e. gender biased barriers which tend to restrict the entry of women (GJERBERG, 2001 : 333).

For example in surgery, in 1998 women only constituted 13% of surgeons in Finland, compared with 4% in 1982 and 6% in 1988. In the other Nordic countries, the proportions were even smaller for female physicians. The reason why surgery still counts a very small proportion of women, according to RISKÅ, is the persisting hierarchical and closed structure and the culture of hospital medicine. Interviews with female surgeons in Norway, Finland and Sweden have documented that the cultural components of a closed male world form more of an obstacle to women physicians' entrance into the advancement in surgery than does their own capacity to perform the actual work (RISKÅ, 2001 : 182).

One of the underlying problems is that simple definitions of what accounts as success are not self-evident but socially constructed. Hence, the power of the surgeons rests on their discursive strategies for enforcing their definition of the character and status of their work. In this process, women physicians who aspire to enter surgery are excluded as male surgeons enforce their own gendered professional role as the status of the work (RISKÅ 2001 : 182).

##### 1.2. Professional women have a hard time balancing career and family

The vast majority of physicians have both spouses and children. Balancing career work and family work, while infrequently raised by men, typically is high on the list of concerns of medical women, both students and faculty. The expectations

women face for unpaid "second shift" work in the household and as family caregivers are more extensive than those faced by men.

Married women physicians often find themselves involved in stressful dual career families. US data show that they tend to marry other professionals (70% of married women physicians are married to professionals) and half marry other physicians. While 88% of women physicians have spouses who are employed full-time, this is only the case for 26% of men physicians (JACKSON 1993 quoted in ZIMMERMAN, 2000 : 133). Thus, while a woman physician is likely to be struggling with dual responsibilities, a man is much more likely to be married with a full-time homemaker.

The realities of marriage and family responsibilities for women are reflected in the small but consistently found gender difference in the numbers of hours worked per week : women work slightly less (ZIMMERMAN, 2000 : 133 ; HEILIGERS, 2000 : 236). This finding has been shown to disappear among women who have no children, suggesting that it is parenthood that affects working hours and only among mothers, not among fathers (ZIMMERMAN, 2000 : 133). In a comparison among physicians in Australia, the USA, the UK and Sweden, it was found that for female physicians, marriage and child-rearing were clearly associated with a reduction in hours worked, while for men the effects of marriage and children were the opposite (UHLENBERG and COONEY, 1990 quoted in HEILIGERS, 2000 : 1237).

From a national survey it appears that Belgian anesthesiologists on average work 60 hours per week in a hospital, with their male colleagues working on average 11 percent more. According to nearly half of the respondents, the anesthesia workload is somehow too heavy. Nevertheless, only 18 percent would be prepared to work less if this would mean a loss of income, and 25 percent is not willing to work less at all, irrespective of income loss (DERCQ, SMETS, SOMER, DESANTOINE, 1998).

## 2. WHAT ARE THE CONSEQUENCES FOR THE WELL-BEING OF WOMEN ?

The somewhat precarious situation of women in medicine seems to have far-reaching consequences for their physical and mental well-being. First of all, figures show that women are confronted with stress. BROWN points out that nearly two third of Canadian female family physicians feel overloaded or overwhelmed by their multiple responsibilities, as often as once per week (BROWN, 1992).

Corresponding symptoms are bad habits like smoking. In the Czech population male doctors smoke less frequently than men (24.2% vs. 44.9%). Female doctors smoke more frequently than male doctors, and what is worse, more frequently than women in the Czech population (27.4% vs. 26.6%). Specialists in internal medicine smoke least frequently (17.4%) ; surgeons smoke most frequently (32.3%) (Summary of WIDIMSKY, SKIBOVA, SKODOVA, VALENTA, 1992).

One step further leads to the health complaints. The results of an extensive research program undertaken in Norway indicate that health complaints were significantly more frequent with female physicians and – that is the good news – decreased with age. Low job satisfaction, high job stress, and emotional distress were all significant predictors of subjective health complaints (AASLAND, OLFF, FALKUM, SCHWEDER, URSIN, 1997).

Concerning coronary-prone behaviour, males in the general public tended to score higher than females. In contrast, female physicians scored higher than male physicians did on several components of coronary-prone behaviour related to career goals, ambitiousness, job involvement, and time urgency (SMITH, STERNDOFF, 1991-1992).

In a comparative study about burnout between physicians in the United States and the Netherlands, it was found that US women experienced more burnout than US men did, but the sex difference in burnout among Dutch physicians was not significant. Women in both countries worked fewer hours than men did : 48 versus 56 in the US and 44 versus 56 in the Netherlands. Although women in both countries described less work control than men, the effect size of the sex difference in the United States was more than twice that in the Netherlands. In the opinion of the researchers, gender parity in physician burnout in the Netherlands may be due to fewer work hours and greater work control of women compared to those in the United States (LINZER, McMURRAY, VISSER, OORT, SMETS, DE HAES, 2002). Another recent study pointed out that women had 1.6 times the odds of reporting burnout compared with men, with the odds of burnout by women increasing by 12% to 15% for each additional 5 hours worked per week over 40 hours (McMURRAY, LINZER, KONRAD, DOUGLAS, SHUGERMAN, NELSON, 2000).

A study of NORTH and RYALL indicates that more than half of female physicians may experience a psychiatric illness during their lifetime (NORTH, RYALL, 1997). Even worse, female physicians seem to have a great risk of suicide. There is a lot of

research about the mortality rate in the Scandinavian countries. Female physicians have no greater risk of suicide than their male colleagues, but there is a higher suicide rate in female physicians compared with the general population and other female professionals (LINDEMAN, LAARA, HIRVONEN, LONNQVIST, 1997). In the same way, the results of another research show an elevated standardized mortality ratio (SMR) for suicide among female physicians compared to other academics as well as to the general population. Furthermore, male doctors exhibit an elevated suicide rate only when compared to other academics. The study clearly shows that female physicians are more prone to suicide than most other women, but that male physicians are also at risk compared to other male academics (ARNETZ, HORTE, HEDBERG, THEORELL, ALLANDER, MALKER, 1987). In the same way, suicidal intent tended to be more common in physicians than in the general population. It was also more common in female physicians with 26% than in male physicians with 22% (OLKINUORA, ASP, JUNTUNEN, KAUTTU, STRID, AARIMAA, 1990). Regarding anesthesiologists in particular, no increased mortality was found, but still there is a higher rate on suicide (OHTONEN, ALAHUHTA, 2002).

Although these findings sound truly depressing, there might be reasons to think more positive. For instance, BIRENBAUM notices that most lawsuits involve a breakdown in communication between doctor and patient, and very few female physicians have been the target of malpractice suits, even in high-risk specialities such as obstetrics and anesthesiology (BIRENBAUM, 1995). We found the same conclusion in a study published in 1992. According to TARAGIN, WILCZEK *et al.*, male physicians are three times as likely to be in a high-claims category as female physicians. The most likely explanation according to the authors is that women interact more effectively with patients (TARAGIN, WILCZEK, KARNS, TROUT, CARSON, 1992).

### 3. WHAT CAN BE DONE ?

In order to reduce gender inequality in medicine, closure has to be countered by supporting women, and work and family life will have to be reconciled by means of working hour reduction and flexibility.

#### 3.1. *Countering closure by supporting women*

Closure can only be countered when the social and cultural practices that define and confirm women's role in the division of labour in medical

work are unravelled. Changes in the traditional socialization patterns and gender expectations constitute the primary reason for the rise in the proportion of women in previously male-dominated professions. Women also need to be offered more affirmative and achievement-oriented role models and need to feel more free to choose among different career options. In order to give female pioneers a chance to get through, the male bias of medicine needs to be identified and eliminated. According to RISKKA, a large coalition of women in various health professions supported by a strong women's health movement advancing a public health agenda, can pursue this task. The individual and more collective strategies of women physicians should intersect (2001 : 184-185).

It is important to note that those who work in teaching, medical research and administration determine the content and priorities of future medicine. If more women work in these areas, it could be argued that they will have some impact on the content of medical knowledge and medical education in the future. One of the problems, however, is that a close examination of those areas shows that women still occupy the lower-level positions within these fields, rather than being equally represented with men at top positions (RISKKA, 2001 : 183). The glass ceiling hampering women's advancement still exists and needs to be broken.

The more women are able to enter the medical profession and to attain higher-level positions in medicine hierarchy, the more they will influence the social and cultural practices existing within. However to attain this, a better combination of work and family should also be enabled.

#### 3.2. *Reconciling work and family by means of working hour reduction and flexibility*

HEILIGERS and HINGSTMAN found that one of the dominant requests of women in medicine is the request for part-time arrangements or reduced work-loads (HEILIGERS, HINGSTMAN, 2000 : 236). Of the female specialists 79% expresses the wish to work part-time in the future, regardless of their actual family circumstances.

Furthermore, this need to reduce working hours is not restricted to female doctors. More than 40% of the male specialists would prefer a part-time career focus as well. The dominant part-time preference for men means starting with a full-time position and changing after five years to part-time work. These men want to do this because of home domain reasons. Only men with children under 5

prefer a part-time start, followed by a full-time career. An increasing number of the younger male specialists-in-training also want to reduce the traditional investment of 50 to 60 hours a week (HEILIGERS, HINGSTMAN, 2000 ; KEIZER, 1996).

Regardless of sex, more than 50% of the Dutch specialists prefer a part-time focus in their career. It can be concluded that a large proportion of specialists feels the need for a reduction in working hours. Generally, the wish to change working hours appears to be higher among specialists working full-time than among part-time workers. Especially young specialists express the wish to work part-time, older specialists, mostly men, prefer a full-time focus. Therefore, time reduction is a new and 'young' phenomenon for specialists, in which young specialists initiate changes in traditional standards and attitudes (HEILIGERS, HINGSTMAN, 2000 : 1244). It is not surprising that also young male specialists want to work less. More than their older colleagues, they are faced with dual career families, i.e. working wives.

The wish to change working hours does not only vary between the sexes, but also between specialties. In clinical specialties only practiced in hospitals, like anesthesiology and internal medicine, a full-time focus is the dominant preference. Only 20% of all specialists in clinical settings gave any support to working part-time. HEILIGERS and HINGSTMAN conclude that in hospitals personnel policy is not focused on a more flexible working hour structure and that secondly, standards accepting long working hours seem to bring about a system that selects specialists who are willing to accept the existing organizational setting. Consequently, female specialists in the hospital settings are also more often full-time. Moreover, not surprisingly, about 60% of women working full-time have no children (HEILIGERS, HINGSTMAN, 2000 : 1244).

Put briefly, there is a wish to work less among specialists. What needs to be done accordingly is to change personnel policy and the organizational time structure in hospitals and other health organizations. Because individual preferences in respect of time reduction are very diverse, an increasing degree of flexibility in organizations is required.

One of the forms of part-time work that must be considered is job-sharing. Critics have always argued that job-sharing poses a threat to the continuity of care. However, continuity is never guaranteed even if a doctor works eighty hours a week. In the same way of thinking, training needs to become more flexible : possibilities for part-time

training programmes need to be stepped up. Those correctives are also necessary to bring women in dominant power positions at universities and professional organisations and to restore the gender balance on a quantitative and a qualitative level, assuring that female and male values in medicine would be in equilibrium (DENEKENS, 2002).

In general, personnel policy will have to cope with changes in the traditional vertical career paths. Flexible career paths related to home domain determinants or other activities outside work will be less traditionally age-related and vertical. If home domain determinants are also important for male specialists in their career preferences, the distinction between male and female career paths could become outdated. HEILIGERS and HINGSTMAN say the concept of career path is perhaps not appropriate and should be changed into 'life cycle path'. The future trend in working patterns can be expected to be related to the life cycle, including family stages and individual diversity in preferences. The most dominant characteristic of future life cycle plans will be focusing on individuals balancing between work, family and other activities (HEILIGERS, HINGSTMAN, 2000 : 1245). If these changes in career policy were implemented widely in health care organizations, both female and male students would have the opportunity to choose a specialty without the barriers of demanding working hours (HEILIGERS, HINGSTMAN, 2000 : 1245). HEILIGERS and HINGSTMAN conclude that since home domain aspects have influenced men's preferences in career focus, the meaning of work and standards of professionalism in medicine will change (HEILIGERS, HINGSTMAN, 2000 : 1245).

Of course, special attention is still needed for the particular needs of women. ZIMMERMAN for example stresses the lack of inadequate policies to assist women during childbearing and parenthood (ZIMMERMAN, 2000 : 133). According to her, policies in need of improvement include flextime work arrangements, maternity leave, parental leave opportunities and childcare. Fortunately, many of these measures also appeal to modern or 'new' men.

Interesting to note is that outsourcing does not seem to be the ultimate solution. A study of FRANK, HARVEY and ELON shows that US women physicians spend little time on domestic activities that can be done for them by others, including cooking, housework, and especially gardening. Women physicians spend somewhat less time on child care and substantially less time on housework than do other US women. The authors stress that despite

abundant editorializing about role conflicts of women physicians, the measures of career satisfaction and mental health were not adversely affected by time spent on domestic obligations (FRANK, HARVEY, ELON, 2000).

#### 4. CONCLUSION : LIBERATING THE WOMAN ...

During the 1960s, it was assumed that men were the major breadwinners, and that women's responsibilities rested largely with the domestic sphere. It was taken for granted that men were the major actors in the public realm and that their experiences, therefore, could be used as representative of those of the family, including any women. The standard worker was built upon a masculine model of full-time, lifetime, uninterrupted labour-force participation.

In Western Europe, Australia and North America social and economic changes, as well as continuing pressure from feminism, has meant that the remaining barriers to women's participation in civil society have been removed. Levels of educational attainment among women have risen, and women's labour-force participation rates have continued to rise. Thus, the male-breadwinner model of the gender division of labour is undergoing a process of transformation (CROMPTON, 1999 : 2).

Today however, women still have to pay a heavy price for their orientation towards care and family in the form of lower status, less income and fewer future career prospects. Men on their turn more and more regret being left out of the home domain and express a wish to spend more time with their family (e.g. see VINKEN, ESTER 2001).

POT (1995 : 180) emphasizes we now need a state policy recognizing that the welfare of women, children and men would gain by further reconciling (informal) care and employment, and that such a policy contributes in the end to higher social and economic standards for all.

According to SCHMID (2001), a leading German social scientist, a 'new gender contract' will have to be established. This contract requires a new working time regime, which allows both men and women to combine work and social work in flexible ways during their life courses. SCHMID proposes a new labour market policy that supports various forms of 'transitional employment', such as short-time work, further training and retraining, sabbaticals, parental or career leaves. In addition, VAN DEN BURG (1999 : 96) emphasizes that the current distribution of work appears less and less to

match people's preferences and wishes. The emphasis should be on protection against overtime, irregular hours, disadvantageous schedules, and especially on increasing the possibilities for choice and autonomy for workers with regard to working hours and working patterns. Redistribution of work should be realised through a combination of fully-fledged part-time work, reduction in the average full-time working week, and through the extension of facilities for leave and (partial) retirement.

Women in medicine are confronted with similar problems as women working in other professions. None the less, there might be some specific 'solutions' for women in medicine that are reflected by the statistics. Assuming that it is wise to take into account your working conditions when you are planning your private life, a creative and selective search for a male partner might just make you happy.

The simplest solution is : do not marry. Or even more important : don't have any children. Women with children at home spent fewer hours on professional activities than men with children. Among physicians with children, men do spend time on child care (mean time 11.4 hours), although women spend much more time on it (mean time 39.7 hours). The women worked an average of 90.5 hours per week in professional and unwaged activities ; men averaged 68.6 hours. Childless physicians worked fewer hours : men 54.1, women 52.6 (WOODWARD, WILLIAMS, FERRIER, COHEN, 1996).

There is yet another alternative : marry a doctor. Men and women in dual-doctor families differed from other married physicians in key aspects of their professional and family lives : they earned less money, less often felt that their career took precedence over their spouse's career, and more often played a major role in child-rearing. These differences were greater for female physicians than for male physicians. Marriage to another physician had distinct benefits for both men and women, including more frequent enjoyment from shared work interests and higher total family incomes (SOBECKS, JUSTICE, HINZE, CHIRAYATH, LASEK, CHREN, AUCOTT, JUKNIALIS, FORTINSKY, YOUNGER, LANDEFELD, 1999 ; JOHNSON, JOHNSON, LIESE, 1991).

In dual-doctor marriages in Britain, there was found that the doctors were minimally competitive with their spouses, generally sympathetic with their partners' needs for personal time, supportive of their spouses' careers, reasonably satisfied with their sex lives, and communicated relatively well with their spouses. They just had some difficulty

relaxing. Nevertheless, there is a tendency for the husband's career development to take priority over the wife's. Husbands more frequently choose a specialty without considering domestic factors (JOHNSON, JOHNSON, LIESE, 1992 ; contra : summary of STEINSHOLT, RYGH, THESEN, 1990). So the conclusion is that dual doctor marriages are not capable to solve the whole problem.

An even better solution is to find you a supportive significant other. For those women with young children, odds of burnout were 40% less when support of colleagues, spouse, or significant other for balancing work and home issues was present (McMURRAY, LINZER, KONRAD, DOUGLAS, SHUGERMAN, NELSON, 2000). WARDE, MOONESINGHE, *et al.* measured ratings of marital and parental satisfaction of male and female physicians in South California. They found that two factors were associated with high marital satisfaction : a supportive spouse and absence of role conflict. The major factors associated with parental satisfaction were also a supportive spouse, absence of role conflict, working in a salaried position, marriage to a spouse working in a profession and marriage to a spouse working as a homemaker (WARDE, MOONESINGHE, ALIEN, GELBERG, 1999).

It is also possible to be even more creative and combine different suggestions. You might end up with a supportive doctor as your spouse. Needless to say that these suggestions, although supported by statistics, constitute a rather cynical – and what is more, a totally male oriented – view on how to choose a partner.

However, do we have the ultimate solution ? Yes, we have : “*The woman who most needs liberating is the woman who lives inside of each man*” (William Sloan COFFIN).

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