NEXT Scientific Report
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Sustaining Working Ability in the Nursing Profession – Investigation of Premature Departure from Work. (Nurses Early Exit Study – NEXT)

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Introduction

The NEXT-Study is investigating the reasons, circumstances and consequences surrounding premature departure from the nursing profession in Europe.

NEXT is financed by the European Union (QLK6-CT-2001-00475) and carried out simultaneously in Belgium, Finland, France, Germany, Great Britain, Italy, the Netherlands, Poland, Sweden and in Slovakia. More than 40 researchers in 14 research institutions are active members of the NEXT-Study Group. Norwegian researchers have become ‘associated members’. The study brings together interdisciplinary expertise from e.g. nurses, nursing scientists, (occupational health) physicians, psychologists, sociologists and statisticians.

The major part of the study has taken place from February 2002 until June 2005. However, first investigations have started in the year 2000 and even after June 2005 the data material will be used for further assessment of working life and life prospects of nurses in Europe.

In 10 countries, the Scientific NEXT team has collected and analysed cross sectional data from 56,406 participants including longitudinal data from 18,796 nurses. All in all, 65,963 questionnaires and 220 organisation checklists have been filled in and returned during the investigation period. Altogether, this has provided the NEXT team with a large basis for the investigation of the issue of premature departure from the nursing profession.

Dissemination

A central part of the project is dissemination of results. Initial results have been published in a book by all members of the NEXT Scientific Team. This was followed by – so far about 90 publications, 120 international and national oral presentations and 80 regional and national conferences organised by the NEXT Scientific Team. Dissemination is still ongoing and will continue even after conclusion of the official duration of the project. At all times, the NEXT home page www.next-study.net provides new research results in different languages.

In our mind, the role of NEXT is to provide a sound basis for the discussion of premature departure from the nursing profession on national and European level. Where appropriate, the NEXT researchers have provided proposals for policy implications. NEXT is disseminating the results. Now, it is on the stakeholders dealing with the sustainability of the nursing profession in Europe to take advantage of the knowledge provided by NEXT.

This report

When aiming at sustaining the nursing profession at times of ageing societies it is necessary to recognise the working and living conditions of nurses as well as the framework of international, national and local health policies.

This NEXT Scientific Report has been put together for stakeholders dealing with the sustainability of the nursing profession in Europe. The aim is to provide them with a documentation and concise but sound basic information related to the problem of premature departure from the nursing profession. Policy implications resulting from the findings are concluding each chapter.

The aim of this report is not, to go into detailed analysis of single scientific issues. This has been dealt with and will be dealt with in separate publications (see home page).

In the first part of this report the NEXT-Study design and performance are described and underlying problems are discussed.

The second part covers the analysis of premature departure from nursing.

This is followed by chapters covering single aspects of individual resources, working conditions and private conditions related to the problem of premature departure from nursing.

Acknowledgements

On behalf of the European NEXT team the coordinators of the NEXT-Study wish to express their gratitude to:

- SALTSA, a Swedish joint programme for working life research in Europe, for initiating the project,
- the European Commission for providing the majority of the funding,
- numerous national funds for additional funding,
- and to all those directly involved in the study, the supporting organisations, the field managers and – in particular – the nurses who have responded to our questionnaires.

They all have contributed to the positive national and international response to the NEXT-Study. We hope, that in the coming years our results will be used to the benefit of the nursing profession and of health care in Europe.

Hans-Martin Hasselhorn,
Bernd Hans Müller, and
Peter Tackenberg
University of Wuppertal, Germany
The European NEXT-Study

Summary
- At present, the NEXT-Study is the largest European study investigating working conditions of nurses in Europe. Participants and research groups from 11 countries including two NAS states have participated.
- The study is a longitudinal, multi-centred, multinational cohort study.
- In two waves five assessment instruments were used to measure relevant aspects with reliable and validated scales.
- Cross-sectional data of about 56,400 participants and longitudinal data of about 18,800 nurses from 623 institutions were collected.

Background
The NEXT-Study is investigating the reasons, circumstances and consequences surrounding premature departure from the nursing profession. Of particular interest are the consequences this step has for the person involved as well as for their health care institution and for health care in general.

NEXT is being financed by the European Union (QLK6-CT-2001-00475) and being carried out simultaneously in Belgium, Finland, France, Germany, Great Britain, Italy, the Netherlands, Poland, Sweden and in Slovakia. More than 40 researchers in 14 research institutions are active members of the NEXT-Study Group. Norwegian researchers have become ‘associated members’. The study brings together interdisciplinary expertise from e.g. nurses, nursing scientists, (occupational health) physicians, psychologists, sociologists and statisticians.

The study began in February 2002 and ended in June 2005. In this article, the NEXT-Study design and the performance are briefly documented. A detailed description of the underlying problem of current and expected shortage of nurses in European countries and of the NEXT-Study concept and design can be found in the first NEXT result book written by the members of the NEXT scientific team.1

Methodology of the NEXT-Study

The NEXT-Study concept
The NEXT-Study takes a systematic approach to the problem of sustaining the nursing workforce, approaching it from the worst case scenario of premature departure from the profession. However, our concept considers premature departure from health care work a priori to be neutral in value. We want to take into consideration the fact that early departure from the profession might also be advantageous for certain individuals, e.g. for those with severe health complaints or for those who wish to further their careers in other directions.

The decision to leave the nursing profession is likely to be the result of a process with – simultaneously – numerous underlying causes, push- as well as pull-factors. Push factors circumscribe adversely perceived aspects which make people want to stop working in the way they are currently (e.g. conflicts at work or ill health). Pull factors are attractive incentives from outside such as (university) studies or early retirement regulations. In the NEXT-Study as many of these aspects need to be assessed as possible to be able to understand ‘premature departure from the nursing profession’. The two central questions were: what are the relevant factors in each of the participating countries and how can we measure them?

As a first step, we have developed a model which should cover all relevant aspects (Figure 1).

As a second step, we have collected the relevant aspects of each box and defined whether and how they could be measured in the NEXT-Study.

We postulate that the following factors affect one’s desire/consideration to leave the profession (box 6)

a) the demands of work (circle 1) and private life (circle 2)
b) the pathway of exposure (box 3)
c) the individual’s resources (box 4)
d) possible alternatives (box 5, e.g. better job or pay, opportunities for education, disability pension, premature retirement or another job within the institution).

As a second step, we have collected the relevant aspects of each box and defined whether and how they could be measured in the NEXT-Study.

Summary
- At present, the NEXT-Study is the largest European study investigating working conditions of nurses in Europe. Participants and research groups from 11 countries including two NAS states have participated.
- The study is a longitudinal, multi-centred, multinational cohort study.
- In two waves five assessment instruments were used to measure relevant aspects with reliable and validated scales.
- Cross-sectional data of about 56,400 participants and longitudinal data of about 18,800 nurses from 623 institutions were collected.

Figure 1. NEXT model of departure from health care work
The NEXT-Study design

A longitudinal study design was chosen. The study should be performed in the same way in all participating countries (with some exceptions for Sweden) and should include hospitals, nursing homes and home care institutions. Repeated questionnaires should be sent to the nursing staff and a check list for the participating institutions should be completed. All in all, about 6,000 nursing staff of all qualification levels should be approached in each participating country. The design is shown in Figure 2 and described as follows:

a) Basic questionnaire (BQ)
In the beginning, the first questionnaire (‘basic questionnaire’ BQ) was sent out to all nursing staff in the participating institutions. The questionnaire covers working and private life as well as future perspectives of the respondents (see details below).

b) Leavers’ questionnaire (LQ)
In the following 12 months, all those who were approached at the first assessment and had left their current health care institution, received an additional questionnaire, the ‘leavers questionnaire’ (LQ). This records the underlying reasons for this departure.

c) 12 month leavers follow up questionnaire (LQ12)
One year after they had left the institution, the participants received a follow up questionnaire which investigates the effects and consequences of this step.

d) 12 month follow up questionnaire’ (BQ12)
All participants who had remained in their institution were asked to fill in a final questionnaire 12 months after the first. This should explore whether changes have occurred and what the consequences of continued nursing have been.

e) Organisation analysis (OA)
Since institutional factors also influence the departure of nursing staff an ‘organisation analysis’ (OA) had to be carried out for the participating institutions. With the use of a checklist the institutions have been described on the basis of defined parameters and economic trends (e.g. process of expansion, reorganisation, institutional education).

Figure 2. Design of the European NEXT-Study.

The design of the NEXT-Study is complex. It required a high degree of organisation, even within the institutions. A central part of NEXT is that the questionnaires had to be anonymous. The design was approved by the ethical committee of the University of Wuppertal in Germany.

By means of the above instruments the investigation should enable us to:

- describe and analyse the working conditions for nursing staff in large parts of Europe,
- identify the reasons why nursing staff considers leaving their profession,
- identify causes for premature departure from nursing (work related, socio-structural, individual),
- identify risk groups for premature departure,
- study the impact that premature departure has on the individual and the institutions,
- define conditions associated with ‘healthy ageing’ in health care work,
- deliver the basis for targeted workplace health promotion in order to sustain the working ability of nurses in European countries, and to
- deliver an estimation of the national Polish and Slovakian consequences of the inclusion of the NAS in the European Union with respect to the nursing workforce (‘freedom of movement of labour’).

NEXT-Study performance

The NEXT-Study was performed in a similar way in almost all participating countries. For three countries, however, there were exceptions:

- Sweden
The Swedish NEXT partners only carried out the ‘leavers’ part of the NEXT-Study in their country. They have been investigating similar questions in the ongoing HAKuL project (see respective chapter).

- United Kingdom
In the UK the study design was modified during the course of the project. Instead of ongoing questionnaire assessments, a detailed inquiry of the nurses’ recruitment practices was performed (see respective chapter).

- Norway
Coincidentally, central parts of the NEXT ‘basic questionnaire’ were also used in a Norwegian investigation, headed by Professor Aslaug Mikkelsen (Rogaland Research Institute, Stavanger), which was not funded by the EU. The Norwegian research group is therefore an ‘associated member’ of the NEXT-Study Group.

Participating institutions

A total of 623 health care institutions in 10 countries participated in the NEXT-Study: hospitals, nursing homes, home care institutions and institutions for out patient care (Table 1 does not include Sweden because institutions could not be registered there).
The NEXT team has sent out 5,640 questionnaires to all those who had left their institution during the investigation period. Altogether, 66,236 questionnaires and 56,406 participants and longitudinal data from 220 organisation checklists have been filled in and returned during the investigation period. This has provided the NEXT team with a large basis for the investigation of the issue of premature departure from the nursing profession.

**a) ‘basic questionnaire’**

The NEXT basic questionnaire covers working and private conditions of nurses as well as their future perspectives. It was sent out between autumn 2002 and spring 2003 (in Poland and Slovakia somewhat later) to a total of 77,681 professional carers of all qualification levels (Table 2). 39,898 participants have returned the questionnaire. The response rate was therefore 51.4% for the total investigation and varied between the participating countries from 32.4% to 76.9%.

**b) Leavers’ questionnaire (LQ)**

The NEXT Leavers’ questionnaire was sent to 5,640 nurses who had left their institution during the investigation period of 12 months (Table 3). It records the underlying reasons for the departure from the institution and – possibly from the nursing profession. Also further professional perspectives and health issues were assessed. 34.1% of all those approached have responded.

**c) 12 month leavers follow up questionnaire (LQ12)**

After 12 months the “leavers” received a follow up questionnaire investigating the effects and consequences of this step. The new job situation and occupational perspectives and health issues were assessed. The task to trace the leavers was not easy as it is to a large extent dependent on the cooperation of the participating institutions. In several countries the response rate was so low that the data could not be used. It was high in Sweden, where registers were used for contacting the nurses (Table 4). This assessment was not carried out by Slovakia and Poland due to their late entry into the project.

**d) 12 month follow up questionnaire (BQ12)**

The 12 month follow up assessment for all participants who have remained in their institution was performed in all countries except the UK, Sweden, and Norway. It should explore whether occupational and private changes have occurred and what the consequences of continued nursing have been. 55,571 questionnaires were sent out (Table 5). The response rate was somewhat lower than in the basic assessment: 42.3%. Interestingly, it has increased in Poland.
Table 5. Performance of the NEXT 12 month follow up assessment (BQ12). This investigation was not performed in Sweden and in the UK.

<table>
<thead>
<tr>
<th>country</th>
<th>sent out</th>
<th>collected</th>
<th>rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>6,115</td>
<td>2,538</td>
<td>41.5%</td>
</tr>
<tr>
<td>Belgium</td>
<td>5,955</td>
<td>2,853</td>
<td>47.9%</td>
</tr>
<tr>
<td>Finland</td>
<td>4,436</td>
<td>2,941</td>
<td>66.3%</td>
</tr>
<tr>
<td>France</td>
<td>11,131</td>
<td>2,627</td>
<td>23.6%</td>
</tr>
<tr>
<td>Italy</td>
<td>7,230</td>
<td>4,087</td>
<td>56.5%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9,675</td>
<td>2,433</td>
<td>25.1%</td>
</tr>
<tr>
<td>Poland</td>
<td>7,050</td>
<td>4,547</td>
<td>64.5%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3,979</td>
<td>1,497</td>
<td>37.6%</td>
</tr>
<tr>
<td>SUM</td>
<td>55,571</td>
<td>23,523</td>
<td>42.3%</td>
</tr>
</tbody>
</table>

e) Organisation Analysis (OA)

The ‘organisation analysis’ (OA) had to be carried out for the participating institutions. 571 OA were sent out and 220 questionnaires were collected. The quality of data differs between countries. Where checklists were made applicable with modifications matching the respective national health system, gained data could be used for analyses. In Belgium, Germany, Finland, and France research teams used the data. In other countries this has so far not been possible.

Further aspects

Differentiation between professional groups in nursing and type of institutions

The group of professional care givers is not uniform. Different qualification levels exist. They range from unqualified workers, nursing aides up to registered nurses with and without specialisation. The proportion of registered nurses varies between the countries as indicated in Figure 3.

Furthermore, as NEXT data indicates, work exposure, age and qualification level differ by the type of health care institution we are looking at. The types of institutions are to different degree represented in the different national samples (Figure 4).

The consequence is that for many issues the analysis had to be differentiated by – and often restricted to - one professional group and/or one type of health care institution. Most often, registered nurses in hospitals were chosen. In some instances compromises had to be made for practical reasons. However, we are aware of current trends shifting health care work from hospitals to nursing homes and home care thus increasing work load there. Further analysis will therefore consider these types of institutions to higher degree.

Nurse terminology

The English word “nurse” indicates the qualification level of a registered nurse (RN). However, for reasons of practicability we are often using the term nurse embracing all the group of professional caregivers. We ask the reader to contextually identify the group of caregivers meant in the respective context.

Reference


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Background

Nursing is embedded in national health care systems and thus is defined by national legislation. We summarize under the term 'structural background' relevant issues such as basic education, state of professional development and general indicators of the nursing workforce like nurse density.

These aspects should be taken into account when it comes to comparisons of nursing in Europe, such as nurses' career opportunities. Despite harmonization through the sectoral nursing directives which define basic education in nursing, further developments in each country vary substantially. In Sweden nurses with a PhD are able to work at the bedside; in Germany, the majority of nurses with bachelor or master's degrees are lost to direct care. This chapter gives a brief introduction; an in-depth description of national situations is beyond the scope of this chapter.

In some chapters we further explore differences between countries, e.g. the different retirement regulations in the participating countries (chapter retirement issues) and - directly related to this - different age distribution patterns of the nursing workforce (chapter older nurse). This chapter reflects the legislative, educational and job market background of the nursing profession in Europe. Several NEXT partners evidence similarities and also substantial differences in the nursing profession within their own national frameworks.

The legislative background of nursing in Europe

All participating countries in the European NEXT-Study have their own legislation for the nursing profession. Common denominators are the nursing directives 77/452/EEC and 77/453/EEC of the European Union. The sectoral directive for nurses in general care settings defines minimum educational requirements such as 10 years school education and 4,600 hours theoretical and practical training in nursing.1 National legislation has been modified to meet these requirements but nursing in special fields (like intensive or psychiatric care) on a post-basic education level, and the whole field of nursing assistants, are not covered by that.2

Beside these European Directives, national legislation defines the role, duties and responsibilities of nurses. The degree of autonomy of the nursing profession varies substantially between the member states. Several characteristics are predominant for professional autonomy, e.g. criteria for nurses' registration and de-registration are important issues in professional regulation.

Furthermore defined areas of self-regulation, mainly implemented by a professional council, are characteristics of professional autonomy. Table 1 summarises the legislative background of nursing in Europe. In all participating European countries, except Germany, nurses have to register - either on a national or a local level. The registration authorities in Belgium, France and Italy are local or central governmental institutions. In the Netherlands, Norway, Sweden and Finland, specialised authorities for health personnel in general have been set up. In Poland, Slovakia and Great Britain, nursing councils supervise the registration of nurses. The most important benefits of nursing registers are to monitor issues like the number of active nurses, migration and retirement rates, and other basic trends. Nevertheless it should be taken into account that current nursing registers do not fully achieve this demand.3

Table 1: Legislative background of nursing education

<table>
<thead>
<tr>
<th>Protected title registration</th>
<th>BE</th>
<th>DE</th>
<th>FIN</th>
<th>FR</th>
<th>GB</th>
<th>IT</th>
<th>N</th>
<th>NL</th>
<th>PL</th>
<th>SWE</th>
<th>SLK</th>
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<tr>
<td>Registration</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Registration authority</td>
<td>gov.</td>
<td>-</td>
<td>special authority</td>
<td>prof.</td>
<td>go v.</td>
<td>-</td>
<td>go v.</td>
<td>prof.</td>
<td>council authority</td>
<td>prof.</td>
<td>special authority</td>
</tr>
<tr>
<td>Renewal standards</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Based on sectoral directive</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 1: Legislative background of nursing education

Renewal standards for registration do not exist in most countries, which results in lifetime-registrations: once registered, always registered. However, in all countries definitions of misconduct make it possible to cancel registration or withdraw the title. Exceptions are renewal standards defining
continuing education as an obligation, or renewal after a defined period of time away from practice. In The Netherlands such renewal standards are in preparation. In Great Britain, nurses have to renew their registration every three years and need to prove five days of further professional education. In Poland a retraining is necessary after a break in practice of five years.

Nursing education

While the European nursing directives define cornerstones of education for nurses in general care settings in Europe, national vocational and academic education varies considerably (Table 2). Two major streams influence the current situation and make it difficult to draw a comprehensive picture of nursing education in Europe:

1. Almost all countries are preparing, implementing or have already implemented the shift from a vocational-based nursing education to higher education and
2. As a result of the Bologna declaration, higher education in Europe is in transition; this affects all academic disciplines and especially "new" disciplines like nursing.

Depending on the national educational framework, the minimum entry age for nursing education ranges between 16-19 years, whereas the actual entry age is either defined by the school leaving age or by national legislation for nursing education (in addition to the requirements of the sectoral directive). School graduation requirements also vary according to national education legislation, ranging between lower secondary education (e.g. DE) to higher secondary education meeting requirements for university access (e.g. SWE, GB). While in Sweden, Norway, Finland, Italy and Great Britain, nursing education already fulfills the academic level of higher education, The Netherlands, Poland and Slovakia are in the process of introducing this (PL and SLK), or are allowing both academic and non-academic education for nurses (NL).

Only Belgium and Germany continue with vocational basic nursing education. But further education on a higher educational level in nursing also exists in these countries (e.g. nursing management, or nursing science degrees, at a bachelor and master's level in Germany). Apart from this general care nursing education, specialised basic nursing education exists in some countries. In Italy and Germany paediatric nurse education, and in Finland public health nurse education focus on special fields in nursing and are covered by the sectoral directive.

<table>
<thead>
<tr>
<th>Country</th>
<th>Nurses per country (2004)</th>
<th>Inhabitants (*1,000,000) (2001)</th>
<th>Nurse density per 100,000 inhabitants</th>
<th>Total expenditure on health (%GDP, 2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>109,195</td>
<td>10.3</td>
<td>1,074</td>
<td>9.1</td>
</tr>
<tr>
<td>Germany</td>
<td>783,000</td>
<td>82.3</td>
<td>950</td>
<td>10.9</td>
</tr>
<tr>
<td>Finland</td>
<td>112,637</td>
<td>5.2</td>
<td>2,171</td>
<td>7.3</td>
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<td>France</td>
<td>397,506</td>
<td>59.6</td>
<td>667</td>
<td>9.7</td>
</tr>
<tr>
<td>Great Britain</td>
<td>284,578</td>
<td>57.3*</td>
<td>496</td>
<td>7.7</td>
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<td>256,860</td>
<td>57.5</td>
<td>446</td>
<td>8.5</td>
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<td>Norway</td>
<td>92,791</td>
<td>4.5</td>
<td>2,064</td>
<td>9.6</td>
</tr>
<tr>
<td>Netherland</td>
<td>213,128</td>
<td>16.0</td>
<td>1,333</td>
<td>9.1</td>
</tr>
<tr>
<td>POLAND</td>
<td>189,632</td>
<td>38.7**</td>
<td>490</td>
<td>6.1</td>
</tr>
<tr>
<td>SWEDE</td>
<td>86,512</td>
<td>8.9</td>
<td>977</td>
<td>9.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>39,428</td>
<td>5.4</td>
<td>731</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td>2,478,755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>WHO</td>
<td>WHO</td>
<td>WHO OECD</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Nurses per country and population

*1993 **2000
Gender & Qualification

For a more detailed analysis it is necessary to use national data sets. The following figures are based on national data gathered from different sources by the national NEXT Scientific Teams in the participating countries. Table 4 summarizes the data gathered from different institutions such as professional organisations and governmental institutions (e.g. ministry of health).

The percentage of male nurses ranges from around 1% in Poland to 21% in Italy, which means at least 80% of nurses are female and, therefore, that nursing is still a "female" profession. The NEXT data set delivers comparable rates (third column).

In terms of registered nurses in the nursing workforce as a whole, we see some countries with very high rates of registered nurses (Belgium, Germany, Great Britain, Italy) whereas other countries have developed subsidiary groups of assistants or "not registered" nursing staff (Finland, The Netherlands, Sweden).

<table>
<thead>
<tr>
<th>country</th>
<th>Year of investigation</th>
<th>Male nurses in % (sample)</th>
<th>Male nurses in % NEXT baseline assessment</th>
<th>RNs in % (all kinds of nurses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>2001**/1995</td>
<td>10.2 (n=44,988)</td>
<td>9.0 (n=3,649)</td>
<td>88.5 (n=104,554)</td>
</tr>
<tr>
<td>Germany</td>
<td>2000</td>
<td>17.2 (n=1,220,000)</td>
<td>17.2 (n=3,067)</td>
<td>89 (n=1,220,000)**</td>
</tr>
<tr>
<td>Finland</td>
<td>2000</td>
<td>7 (n=119,600)</td>
<td>4.7 (n=2,424)</td>
<td>46.7 (n=119,500)</td>
</tr>
<tr>
<td>France*</td>
<td>2001</td>
<td>13.7 (n=639,043)</td>
<td>11.5 (n=2,667)</td>
<td>45.3 (n=639,043)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>2003</td>
<td>10 (n.a.)</td>
<td>6 (n=2,051)</td>
<td>91 (n=293,998)</td>
</tr>
<tr>
<td>Italy</td>
<td>2001</td>
<td>21 (n=320,800)</td>
<td>25.9 (n=5,529)</td>
<td>97 (n=320,800)</td>
</tr>
<tr>
<td>Norway</td>
<td>-</td>
<td>-</td>
<td>8.8 (n=2,156)</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1996/2002</td>
<td>9.7 (n.a.)</td>
<td>10.2 (n=3,538)</td>
<td>42.1 (n=319,000)</td>
</tr>
<tr>
<td>Poland</td>
<td>1999</td>
<td>1.1 (n=166,006)</td>
<td>0.9 (n=4,319)</td>
<td>-</td>
</tr>
<tr>
<td>Sweden</td>
<td>2002</td>
<td>10 (n.a.)</td>
<td>-</td>
<td>43 (n=209,100)</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-</td>
<td>-</td>
<td>1.6 (n=2,534)</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4: Proportion of male nurses and registered nurses

Column "male nurses" indicates the percentage of male nurses in the national workforce (all kinds of nurses). Column "RN" indicates the proportion of registered nurses (according to the sectoral directive) in the overall nursing workforce. *only registered nurses, auxiliary nurses (AS), agents (ASH), and midwives employed by hospitals; **only Wallonia & Brussels Region; ***state registered nurses & geriatric nurses; RN= Registered nurse; n.a. = no answer.

Conclusions and implications

- While the sectoral nursing directives define minimum requirements for nursing education, several national educational developments - below or above these requirements - limit comparability and movement of labour.
- The development towards academic nursing education in all countries calls for a revision of the sectoral nursing directives.
- The establishment of national registration systems for nurses with European joint and comparable European documentation standards is necessary.

References

5. OECD (2004). OECD Health Data 2004. 3rd edition. http://www.oecd.org/document/16/0,2340,en_2825_495642_2085200_1_1_1_1,00.html. last access: 06.04.2005

Authors: NEXT-Study Group: Michael Simon (responsible), Hans-Martin Hasselhorn, Bernd H. Mueller, Peter Tackenberg (all University of Wuppertal, Germany), Andreas Buescher (Witten, Germany) and the NEXT-Study Group
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Early retirement among nursing staff

Summary
- Early retirement policies need to be considered from a variety of different perspectives.
- Retirement policies need to address a variety of factors to ensure a sufficient proportion of older nurses in the actual workforce.
- The example of several countries indicates that there is currently no clear relationship between early retirement options and the early retirement behaviour of nurses in European countries.
- Health care institutions could have a core role in dissuading nurses from early retirement.

Background
Early retirement of employees in general, and health care staff in particular, is a matter of concern from a number of different perspectives. The first perspective is that of the policy context of national and international labour market and retirement policies. The Stockholm European Council set the target of an employment rate of 50% by the year 2010 of people aged 55-64 years. In 2001 this employment rate only reached 40%. This target is influenced by the aim of ensuring the long-term financial sustainability of pension systems and their ability to provide adequate pensions. It is assumed that a one-year increase in the effective retirement age could absorb up to 20% of the expected increase in pension expenditure in 2050.1

A second perspective concerns workforce planning strategies. As Minnick2 points out, it is likely that the early withdrawal from work by registered nurses will have a profound effect on health care delivery. She calls for timely decisions on policy mechanisms to discourage early withdrawal from nursing as these mechanisms always take several years to implement.

The third perspective is related to the loss of the most experienced professionals of the nursing profession due to early retirement.3

This chapter will focus on retirement policies and early retirement options for nurses and provide information on the activity of older nurses in the countries participating in NEXT. Strategies for addressing early retirement behaviour will be described and implications for policy will be provided.

NEXT-Results

<table>
<thead>
<tr>
<th></th>
<th>BE</th>
<th>DE</th>
<th>FIN</th>
<th>FR</th>
<th>GB</th>
<th>IT</th>
<th>N</th>
<th>NL</th>
<th>POL</th>
<th>SLK</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n below 50 years</td>
<td>3,686</td>
<td>3,018</td>
<td>2,628</td>
<td>4,275</td>
<td>2,017</td>
<td>4,873</td>
<td>1,710</td>
<td>3,331</td>
<td>3,822</td>
<td>2,743</td>
<td>32,103</td>
</tr>
<tr>
<td>%</td>
<td>85.3</td>
<td>85.3</td>
<td>66.9</td>
<td>80.4</td>
<td>78.6</td>
<td>87.9</td>
<td>73.8</td>
<td>83.0</td>
<td>88.8</td>
<td>83.5</td>
<td>82.3</td>
</tr>
<tr>
<td>n 50 years and older</td>
<td>3,686</td>
<td>519</td>
<td>1,302</td>
<td>1,041</td>
<td>548</td>
<td>670</td>
<td>607</td>
<td>680</td>
<td>680</td>
<td>542</td>
<td>6,925</td>
</tr>
<tr>
<td>%</td>
<td>12.7</td>
<td>14.7</td>
<td>33.1</td>
<td>19.6</td>
<td>21.4</td>
<td>12.1</td>
<td>26.2</td>
<td>17.0</td>
<td>11.2</td>
<td>16.5</td>
<td>17.7</td>
</tr>
</tbody>
</table>

Table 1. Numbers of NEXT participants younger and older than 50 years of age (Ntotal=39,028).

Table 1 provides an overview of numbers and percentages of nurses in the participating countries aged under 50 and over 50. In the total sample the proportion of nurses aged over 50 was 17.7%. There are considerable differences in countries, with Finland having the highest proportion of nurses over 50 (33.1%), and Poland the lowest (11.2%). A simple explanation could be greater early retirement options for nurses in Belgium, Germany, Italy, and Poland (all lower than the NEXT study average for nurses aged over 50) compared to Finland, France, England and Norway (higher than the NEXT average).

1. Standard retirement age and general early retirement options in European countries

The legal retirement age in most major European countries is 65, even if the actual age when many people leave their jobs is often lower.4 General early retirement options are as follows:

Belgium: Early retirement is possible from 60 years of age (subject to – now – 35 years of employment).
Since 2001, a time-credit scheme has allowed workers aged 50 or over to reduce their working hours per week by one fifth or one half.

Germany: Early retirement is possible two years before standard retirement age (65 years of age), subject to 35 insured years.

France: The general retirement age is 60 years with 40 insurance years required for a full pension. The 2003 reform allows early retirement between 56 and 59 years of age for people who entered the labour market at a young age (between 14 and 17) and have worked for 40 to 42 years. For public sector (70% of HCWs) the retirement age was 55 until 2003.

Italy: Early retirement is either possible after the 56th year of age (with 35 years worked) or after 38 years of contributions.

The Netherlands: There is no early state pension but private schemes may allow early retirement.

Poland: Until the end of 2006 early retirement will be granted for women aged 55 with 30 years of work. This option will no longer be available from 2007.

Slovakia: no information available.
Finland: Early retirement has been possible from 60 years of age. In 2005 this age limit has been raised to 62 years.

Sweden: there is a flexible retirement option starting at the age of 61 years.

England: No early state pension, but benefits may be available from private schemes.

2. Early retirement among nurses

Besides these general options for early retirement in some countries there are policies for certain professions, mostly physically demanding professions. There are no particular early retirement options for nurses as such. Some countries have early retirement policies for public sector employees (Belgium, Germany, France and Italy). In these policies nursing as a profession is not explicitly mentioned. No such policies are known in Poland and Sweden. Within the National Health Service in the UK there is a voluntary early retirement option with a reduction of pension. Finland is the only country that explicitly mentions nurses as a professional group with early retirement rights. Interestingly Finland and the UK are among the three countries with the highest proportion of older nurses. It becomes obvious that early retirement options only have a limited influence on actual early retirement behaviour.

3. Driving factors for early retirement

Findings from different studies concerning the driving factors for early retirement provide different results. While an OECD study concludes that economic incentives embedded in old-age pension systems create strong incentives for the early retirement of older workers in OECD countries, Van Dalen and Henkens conclude that, in practice, factors other than financial incentives are powerful. Zimmerman et al. found that the actual timing for retirement of women is affected by spouse’s retirement, family caregiving responsibilities, health-related reasons, work-related effects (e.g.: adequate income) and/or a general preference for early retirement. In her study she found that the impact of caregiving responsibilities and health/stress reasons on early retirement are not anticipated when decisions on actual retirement timing are made.

From the GB it is reported that Community Nurses tend to be older than their acute counterparts. The NEXT data does not allow for a detailed figure on proportions of older nurses working in home and community care, but there is no evidence for this observation not being true.

4. Perspectives

Reday-Mulvey suggested gradual early retirement instead of full early retirement as a means at the crossroads of redesigning the end of career and flexibly extending working life for financial reasons, but also because of the need for proper management of human resources and skills. This would also constitute a move towards a socially fairer and more efficient division of labour within societies.

With reference to the employment target set at the Stockholm European Council, the aim should be to make it possible to keep nurses in the profession. The findings above indicate that the health care organisations play a core role in this respect. Behrens acknowledges this role and points out six errors often made in workplace and career development policies that need to be avoided:

1. a delayed mixture of working tasks
2. a specialisation in knowledge that is not up-to-date
3. a lack of horizontal career prospects
4. imbalanced institutional age distribution
5. work and continuing education in non-suitable teams
6. a lack of appropriate marketing strategies

It is interesting to note that core aspects mentioned here, such as continuous professional development, age distribution, age discrimination and influence at work are recurring important patterns in the analysis of NEXT data.

Policy implications

- Early retirement policies need to take into account different point of views. Nursing as a profession needs to be considered in terms of general retirement policies, but also in terms of ensuring an adequate supply for health care delivery in different settings.

- National and international workforce planning strategies may serve as a means of integrating different perspectives.

- Early retirement behaviour is not driven by a single factor, but the result of economic as well as personal and professional considerations.

- If early retirement is to be reduced, measures need to be taken among the younger and middle aged working groups.

- Health care institutions play an active role to play in keeping nurses in the profession.

References


6 Van Dalen HP, Henkens K (2002): Early-retirement reform: can it and will it work?, Ageing & Society 22, 209-231


Authors: NEXT-Study Group: Andreas Buescher (University of Witten, Germany; responsible), Peter Tackenberg (Wuppertal, Germany) and the NEXT-Study Group

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Shortage of nurses in Europe

**Summary**

- Nursing shortages are a worldwide phenomenon and expected to increase by 30 percent by the year 2020.
- Nursing shortages are a result of several different economical and other factors.
- The NEXT-Study documents pronounced changes in the labour market for nurses in some European countries.

Nursing shortage is reported to be an increasing problem worldwide including in Europe. In 2002 it has been reported that most industrialized countries are or will be facing nursing shortages. Estimations from the US Bureau of Labor Statistics in 2001 indicate that in the USA more than one million new nurses will be needed by the year 2010. Shortages are expected to grow to 30 percent by the year 2020.

In a recent OECD report examining nurse shortages in OECD countries the following underlying reasons for the increased demands have been listed: economic expansion, population growth, an ageing population, technological advances, and higher patient expectations.

Nursing shortage and understaffing have been linked to a number of indicators for insufficient care such as patient mortality, adverse event, accidents and nosocomial infections.

Four components determine ‘nursing shortages’:

- the need for nursing care
- the presence of nurses in population
- the willingness of nursing staff to work as a nurse (occupationally active nurses)
- the financial resources spent for health care and nurses.

Most European countries are in need for nurses. However, the relevance of the four single components listed above may be different in different countries and regions. In Eastern Europe the nurse:population ratio is low. There, the additional need for care is high, many unemployed nurses would be willing to work but lack of financial resources result in fewer nurses employed and even dismissals. In several Scandinavian countries, the number of educated nurses is too low for meeting the demands. In many European countries, the number of nurses in the population would be sufficient for satisfying the populations’ needs, but not enough of them are actually working in nursing for whatever reasons. These conditions may even shift considerably within a short period of time as NEXT results indicate (Figure 1).

Buchan and Calman summarise this multifaceted situation as follows: "A ‘shortage’ is therefore not merely about a numbers game or economic model, it is about individual and collective decision-making and choices."

The NEXT-Study is able to contribute to the discussion about nursing shortages and ways to overcome them. This is done by investigating the individual nurses in their organisations, regions and countries. The aim is to contribute to making nursing an attractive profession and to promote healthy ageing in the nursing profession.

**References**


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**Contact:** www.next-study.net, next@uni-wuppertal.de June 2005
International migration of nurses

Summary

- For many decades nurses’ migration has been a worldwide and growing phenomenon. Migration is commonly associated with positive and with negative implications in donor and destination countries.
- While ethical guidelines for the recruitment of nurses exist, they appear to have somewhat limited impact.
- In 2003, 1 in 5 (21%) of all Slovakian and 1 in 8 (12%) of all Polish nurses participating in NEXT frequently considered working as a nurse abroad. One year later, the respective proportion of nurses in Slovakia decreased to 11% and in Poland increased to 21%.
- On average, Slovakian and Polish nurses who considered migration were younger, had fewer family ties, were less well educated, were less committed to the profession and especially to their institution, and had experienced fewer rewards at work.
- Only a few Polish and Slovakian NEXT participants have migrated abroad during the investigation period.
- Unofficial information indicates, however, that many Slovakian nurses are in fact working abroad, mostly in less qualified positions.
- Recent months showed a massive migration stream of highly qualified Slovak theatre nurses to hospitals in neighbouring countries. Other data indicates increasing interest in migration among Polish nurses, but migration still seems to be limited.

Background

International migration of health care workers and especially nurses is a worldwide issue which has received considerable attention.1,2,3 With respect to nurses, a number of issues are discussed:

- the degree and direction of professional migration,
- the impact on the donor countries,
- the impact on the stakeholders in the destination countries.

There is an upward trend in inflow of nurses to European countries. “Push” factors may include low pay, poor employment, economic, safety and working conditions. “Pull” factors are facilitated immigration (e.g. within EU countries) active recruitment, and the mutual recognition of diplomas in the EU.4

Nurses’ migration in Europe

The UK and Ireland are mainly recruiting nurses from the developing countries. For the first time in 2001-02 more than 50% of all newly registered nurses in the UK were from overseas (about 15,000 nurses of which almost half (7,235) were from the Philippines). There is also a substantial flow of nurses between European countries, e.g. 1,000 nurses per year in 2001 and 2002 from the UK to Ireland and, annually, about 1,000 nurses from other Nordic countries to Norway. However, the proportion of international nurses among the nursing population still seems to be rather low (7% in the UK in 2001-02, 6.9% in Germany (only women)).5

Effects of nurses’ migration

International migration of nurses may be regarded as beneficial for the individual as well as for the destination country. Also the donor country may benefit from the migration if the nurse returns with increased expertise, but also by reducing labour market oversupply and by increasing financial flow into the country. On the other hand, adverse effects of nurses’ migration have been observed: Unmanaged outflow of nurses may damage the health care system and lead to a loss of skills and competence. In addition, many registered nurses from Eastern European countries who have migrated to Western Europe have received positions of lower qualification.

Ethical guidelines

Ethical guidelines for international recruitment, issued either by governments or by Nursing Associations, exist in several countries such as Australia, Norway, Ireland, the UK, and the USA. The UK experience indicates that ethical guidance on recruitment tends to have mainly short-term impact only. Assessment guidelines for recruitment agencies have been implemented by a Dutch Hospital Organisation (NVZ).

The International Council of Nurses, ICN (Geneva) has issued a position paper on “Ethical Nurse Recruitment”6 recognizing the right to migrate, the potential benefits and acknowledging adverse effects on the quality of care in the donor countries. The ICN has condemned the authorities for failures of sound human resource planning, unethical recruitment practices, and has called for a regulated recruitment process.

NEXT questions

The impact that the inclusion of the Eastern European countries may have on the European labour market is unknown. Since May 1 2004, citizens of the new member states have free access to the labour market of several European countries, and in a few years, to all member states.

Two questions arise:
1. To what extent do nurses consider working as a nurse abroad?
2. To what extent will East-West migration of nurses create shortages in Eastern European countries?
NEXT-Results

1. To what extent do nurses consider working as a nurse abroad?

In the NEXT-Study the readiness of Slovakian and Polish nurses to migrate into other countries for working as a nurse has been assessed by the question:

“How often in the past 12 months have you considered working as a nurse abroad?”

The data indicate that in Eastern Europe there is a pronounced willingness to leave the country to work abroad as a nurse. In the NEXT basic assessment (2002/2003), 1 in 5 (21%) of all nursing staff in Slovakia and 1 in 8 (12%) in Poland considered this step frequently (“at least several times per month”). In both countries, those considering this step on average:

- were younger (Figure 1),
- had fewer family ties,
- were less well educated,
- were less committed to the profession and especially to their institution, and
- had experienced fewer rewards at work (pay, esteem, status control (see effort-reward imbalance model)).

Working conditions played only a minor role.

Interestingly, 12 months later this has changed: In Poland, there has been an increase in the number of those “frequently considering working as a nurse abroad”: 12 to 21% whereas in Slovakia it has decreased from 21 to 11%.

![Figure 1. Proportion of nurses frequently considering working abroad as a nurse (Basic assessment 2003; NPoland=4,303, NSlovakia=3,285)](image)

2. To what extent will East-West migration of nurses create shortages in Eastern European countries?

- Shortages in Eastern Europe?

Thinking about working abroad as a nurse is not necessarily the same as actually taking this step. First informal reports from hospitals in the Baltic States indicate that since May 1 2004, many (mostly young and engaged) nurses (and physicians) have moved to northern or central Europe. This has not only caused severe staff shortages in their hospitals, but also substantial concern for the future supply of qualified nursing staff in their own country.

The NEXT-Study cannot address the question of who actually is leaving to work as a nurse abroad. In Poland, only two nurses responding to the Leavers questionnaire have migrated abroad. Reliable registers are lacking in both countries.

There are indications for a pronounced interest in international migration in Poland: Between May 2004 and February 2005 qualification certificates confirming compatibility of Polish nurses' competencies with EU demands were given to 3,011 nurses (data from 42 Regional Chambers of Nurses and Midwifes). Most nurses who left went to Italy. It can be estimated that, since the accedence to the EU (May 1 2004), about 2,000 nurses have left Poland to work in other EU countries, many of them to Italy (3,500 work in the US). According to unofficial information, most contracts cover one or two years only and about half of the migrating nurses would want to remain in the new country. In
some countries, Polish nurses are more likely to work as non nursing care givers (e.g. UK, Norway, and Italy) and in others rather as nurses (Germany, Austria) (in Sweden both). In spite of a high interest, the current extent of emigration of Polish nurses may be regarded as limited: in an own survey (M. Widerszal-Bazyl), large hospitals report that only a few (up to 4) nurses have left to work abroad in recent years.

In Slovakia, official registers indicate that nurses migrate, especially to the UK and Austria. However, personal reports indicate that, for many years, many Slovakian nurses have worked abroad but without registration. It seems that the majority of migrated Slovakian nurses work in lower positions such as home helpers, au pairs and, in some cases, as nursing assistants. The largest proportion of migrating nurses comes from the most deprived part of the country, Eastern Slovakia. There is a pronounced geographic inequality in working opportunities for nurses: while there are vacancies for nurses in the capital and in the western part of the country there is an oversupply of nurses in the Eastern Slovak region.

Policy implications

- The inner-European migration process of nurses (and other health care workers) should be closely monitored and surveyed in donor and destination countries.
- Nurses’ registers should be established to measure nurses’ flow.
- Guidelines should be established for the recruitment and the occupational integration of Eastern European nurses in other EU member states.
- Destination countries should assure the continued provision of sufficient nurses’ education facilities.
- There should be evaluation of cross border compensation mechanisms for (additional) educational efforts to prevent “brain drain” in the donor countries.
- This is linked with the need to consider whether and where targeted education should be implemented for nurses prior to migration.
- Nurses intending to migrate should receive support in the form of information, bureaucratic help, and legal protection.
- Health policy makers in the donor countries should be aware of the responsibility they have for the nursing profession and the supply of nurses in their own country.
- International recognition of nursing diplomas should be again be discussed at the European level.

References and further reading


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Nursing in Europe: Intention to leave the nursing profession

Summary

- The proportion of nurses frequently considering leaving the profession varied between the participating countries. It was very high in Great Britain, Germany and Italy whilst it was low in The Netherlands and in Belgium.
- The intention to leave the profession (ITL) was in most countries to higher degree linked to health and work organisational factors than to other factors.
- ITL is a strong outcome mirroring organisational as well as individual features. It may be a useful indicator on organisational, national and European level.
- ITL is preceding the decision to leave the profession.

Background

Assuring a sufficient nursing pool

In theory, there are four ways in which the pool of active nurses might be increased (Figure 1). The input may be increased by providing more education facilities at nursing schools or by increasing immigration of nursing staff from other countries. On the output side, raising the retirement age may be regarded by some as a solution to the problem of a shortage of nurses.

For several reasons it is unlikely that these three possibilities will secure the future need of nurses. A more sustainable and probably the most effective way of assuring nursing in the future therefore seems to be to promote the retention of existing nursing staff. This is the research topic of the European NEXT-Study.

Assessing premature departure from nursing

The NEXT-Study provides two ways of assessing premature departure from the nursing profession: a) those who are considering leaving nursing (intention to leave nursing, ITL) and b) those who actually have done it.

In this chapter, we are presenting the results from analysis of the nurses' intention to leave the profession (ITL). Detailed analysis of ITL for each participating country is found in the first NEXT result book issued in 2003. In this contribution, we will

1. analyse the degree of ITL in the basic and the follow up assessment, and
2. investigate the underlying causes of ITL in each country.

Intention to leave nursing

Nursing turnover has been studied since several decades. In 1981, Price and Mueller have developed a model which is based on work organisational factors, pay, professional perspectives as well as the 'opportunity'. In this turnover model job satisfaction has been used as a mediator between exposure and the outcome intent to stay.

In the following years, in most studies investigating professional nursing turnover the attention was focused on work organisational factors. Very often 'job satisfaction' was used as a mediating determinant. Accordingly, employers have attempted to improve job satisfaction but the turnover rate has generally remained high as Matthews & Nunley constitute. Interestingly, age and health have played a minor role in the investigations.

In the model developed by NEXT we have introduced further aspects as indicated in the previous chapter, namely health and age. Furthermore, we have not used the job satisfaction scale for predicting ITL because this scale reflects the perception of underlying working conditions which we rather assess directly. Another new approach in NEXT is international benchmarking. Different results in the participating countries should reflect the different national backgrounds.
NEXT-Method

In the NEXT-Study, ‘intention to leave nursing’ (ITL) was measured by the question: ‘How often during the course of the past year have you thought about giving up nursing?’. The answer categories were ‘never’, ‘sometimes a year’, ‘sometimes a month’, ‘sometimes a week’, ‘every day’, and ‘not applicable’.

Those considering leaving several times a month or more (hereafter described as those thinking of leaving ‘often’ or ‘frequently’) were compared to those considering leaving less frequently or not at all. The underlying reason for choosing this cut off was that the occasional consideration of such a step (thinking of leaving several times a year) may be regarded as natural for most professional people. In contrast, considering leaving several times a month indicates a serious desire to leave the profession.5

For assessing the underlying reasons for the participants’ wish to leave the nursing profession, stepwise logistic regression analysis was performed with the dichotomized ITL variable as dependent variable. This was done separately for each country using the data from the NEXT basic assessment 2002/3.

In a first step, the analysis was performed for each of the five following potential areas:
- health and individual factors (HE),
- private conditions (PC),
- social work environment (WE),
- work content (WC),
- work organization (WO).

Each area has been operationalised by variables deriving from the self administered basic questionnaire (2002/3) (see Figure 3). The aim was to explore to which extent each of these five single areas contribute to the nurses’ wish to leave the profession in the respective country (‘explained variance’, see 5 light bars in Figures 5a and b on following pages). Finally, the ‘overall analysis’ was done simultaneously for all variables of the five areas which had in the first step shown to be influential (dark bar ‘ALL’).

The INDIVIDUAL

Demands (DEMANDS)

- Work content (WC):
  - quantitative demands, lifting & bending
  - confrontation with – death, disease/suffering,
  - aggressive patients, - unfriendly patients,
  - exposure to – infectious agents, - chemicals,
  - noise, - heat or cold

- Work organization (WO):
  - influence at work, possibilities for development,
  - tasks not belonging to nursing, conflicting orders, not qualified enough,
  - receiving information too late, time pressure, influence when planning rota,
  - have to switch shift on short notice, weekend work, occupational position

- Social work environment (WE):
  - quality of leadership,
  - social support from superior, social support from colleagues,
  - relation to head nurse, relation to physicians,
  - relation to nursing management, relation to colleagues

- Private conditions (PC):
  - living status, financial situation, living status,
  - time spent with partner, availability of childcare,
  - household work, work home conflict,
  - number of weekly working hours

Outcome (OUTCOME)

- Health and individual factors (HE):
  - burnout,
  - general health,
  - physical diseases,
  - work ability,
  - age

- ITL, Intention to leave nursing

The INDIVIDUAL

Figure 3. Five areas contributing to the nurses’ intention to leave the nursing profession (ITL) and their underlying variables in the NEXT-Study according to the NEXT-Model. These variables and factors are the basis for the statistical analysis of ITL as described in the text above (see Figures 5 below).

NEXT-Results: Degree of ITL

As reported earlier1, the proportion of nurses who frequently considered leaving the nursing profession differed substantially between the participating countries. In the total sample 15.4% of all participants who have responded to this question belonged to this group (Figure 4). 12 months later, the proportion had decreased in all countries where the follow up was performed except in Slovakia (constant) and in Poland (increase).
Figure 4. Proportion of participants frequently considering leaving the nursing profession in 2002/3 (NEXT basic assessment) and in 2003/4 (NEXT follow up assessment). Follow up not performed in GB and in Norway.


- ITL and gender
Male nurses considered leaving the nursing profession more often than women. This was observed for all age groups and was especially pronounced among the 30 to 40 years age group. Only in Italy men thought slightly less often of leaving the profession than women. There, men comprised a relatively large proportion of the sample (25.9%).

- ITL and age
ITL varied with age. In most countries maximum for ITL was found in the age groups between 25 and 35 years of age. Thereafter it decreased to minimum levels.

- ITL and qualification level
The higher the nursing qualification level of the participants the higher was the intensity of considering leaving the profession. This pattern was observed for most of the participating countries and it was more pronounced in men than in women.

- ITL and type of health care institution
Nurses’ ITL was – on average – most pronounced in hospitals (16.5% considering leaving nursing frequently), followed by nursing homes (12.4%) and home care institutions (10.9%) (out patient care in Finland 11.5%; in Poland 12.0%). This trend was most prominent among younger staff. However, it was not uniform in all the participating countries.

NEXT-Results: Underlying aspects of ITL

As Figures 5 a and b indicate, the nurses’ intention to leave the nursing profession could in all countries be explained to a considerable degree (between 16.0 [The Netherlands] and 24.9% [Germany] of the variance of ITL).

Five areas contributing to ITL
In most countries, health and individual factors (HE), and work organisation (WO) contributed most to ITL. Exceptions from this pattern were The Netherlands, Poland and Slovakia.

In Poland and Slovakia, health and individual factors did not contribute to the same pronounced degree to the nurses’ ITL than in the other countries. These countries report very low physical and psychological health. Detailed analysis shows that, in contrast to the other countries, nurses with low psychological and – especially – low physical health tend to want to remain in the profession. This was the case for the nurses aged 30 and above. It may be concluded that there, middle aged and older nurses with low health are trapped in their profession because they cannot see an occupational alternative.

Nurses in The Netherlands worked less weekly working hours, had rather good working conditions, reported good health, were satisfied with work and the proportion of participants intending to leave the profession was low. Therefore, it is not surprising that neither health indicators nor work related factors can substantially ‘explain’ the ITL.

- Health and individual aspects (HE):
In our analysis, the major determinants of health and individual aspects were age (significant in 8 countries) and burnout (in all 10 countries).

Age: The middle aged nursing work force considered leaving the profession to highest degree. It is our impression that among nurses between 30 and 40 years serious considerations about the own professional future are ongoing. According to NEXT data this age group is characterised by dissatisfaction with the profession, the working conditions and the work prospects. The results for nurses aged between 45 and 55 often reflect more positive perceptions. It cannot be excluded that they are those who have ‘survived’ this critical period in the profession.

Burnout: In NEXT, a burnout scale was used which represents general psychological exhaustion. Which occupational factors influence burnout? Linear regression analysis showed that in all countries work ability (indicating a mismatch of the working conditions and the individuals’ abilities and attitudes) and the work family conflict contributed the most to burnout among the nurses (Table 1). In Great Britain, the work family conflict has not been assessed. (Dis-)satisfaction with pay played a relevant role in Great Britain, Poland and Slovakia. In Finland, Great Britain, Italy and The Netherlands, high quantitative demands were an additional significant predictor of burnout.
These strikingly uniform findings may indicate that major causes of burnout among nurses are perceived low work ability and the work home interference. Both aspects are known to be realistic targets for successful intervention on organisational level. With respect to the work home conflict in hospitals specific assessment and certification programmes have been developed. Findings becomes increasing attention on European level.

Table 1. Predictors for burnout in registered nurses in ten countries (N=31,493).

<table>
<thead>
<tr>
<th>country</th>
<th>significant predictors for burnout</th>
<th>explained variance (corr. R²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>WAI, WFC, satisf. w. working time</td>
<td>49.0</td>
</tr>
<tr>
<td>DE</td>
<td>WAI, WFC</td>
<td>45.4</td>
</tr>
<tr>
<td>FIN</td>
<td>WAI, WFC, quantitative demands</td>
<td>39.6</td>
</tr>
<tr>
<td>FR*</td>
<td>WAI, WFC</td>
<td>38.0</td>
</tr>
<tr>
<td>GB**</td>
<td>WAI, satisf. w. working time, quantitaive demands, satisf. w. pay</td>
<td>39.0</td>
</tr>
<tr>
<td>IT</td>
<td>WAI, WFC, quantitative demands</td>
<td>37.6</td>
</tr>
<tr>
<td>N*</td>
<td>WAI, WFC</td>
<td>43.7</td>
</tr>
<tr>
<td>NL</td>
<td>WAI, WFC, quantitative demands</td>
<td>31.6</td>
</tr>
<tr>
<td>POL</td>
<td>WAI, WFC, satisf. w. pay</td>
<td>36.9</td>
</tr>
<tr>
<td>SLK</td>
<td>WFC, WAI, satisf. w. pay, lifting and bending</td>
<td>32.4</td>
</tr>
</tbody>
</table>

WAI = Work Ability Index, WFC = Work Family Conflict
Multiple linear regression analysis adjusted for age and positive and negative affectivity. Factors included when contributing with additional increase of at least 1% to total corrected R².

* not adjusted for affectivity (variables not assessed),
** not adjusted for affectivity, not work family conflict in equation (variables not assessed).

- Private conditions (PC)
The most influential factor determining the association of private conditions and ITL was the work home conflict scale. In 9 out of 10 countries it contributed significantly to ITL. This scale is known to be strongly associated with outcomes such as burnout, general health and job satisfaction. We have earlier found that the work home conflict is to a large degree a matter of irregularity and unpredictability of working hours.

In five countries, the nurses’ economic situation influenced the wish to leave the profession: this was as expected – the case in Poland and Slovakia, but also in Belgium, Great Britain, and in Italy.

- Social work environment (WE)
In 8 countries, the (insufficient) relation to the head nurse (nursing management) and (low) quality of leadership were associated with ITL. These findings allow the conclusion that improved social relations, communication and possibly feedback procedures within the hierarchical structure of institutions may reduce ITL.

- Work content (WC)
In all participating countries, the quantitative demands played a significant role when considering leaving the nursing profession. This is likely to reflect the influence of economic changes on the working conditions in modern health care systems. An unexpected finding is the relevance of work with ‘troublesome’ or ‘aggressive’ patients which in 8 countries significantly contributed to the association of work content and ITL. These two work characteristics are in addition linearly associated with burnout and other outcomes – unlike being exposed to ‘disease and illness’ or ‘death and dying’. Obviously, work with uncooperative patients has a negative impact on nursing staff. Considering the large proportion of nurses exposed (troublesome patients: 43.2% of all respondents are ‘often’ or ‘always’ exposed; aggressive patients: 34.4%), the results indicate a need for targeted nurses’ training and education mirroring the reality in today’s health care work.

- Work organisation (WO)
The relevance of work organisation for nurses ITL is obvious (Tables 5a and b). The most frequent underlying factor was possibilities for development which significantly contributing in all 10 countries. This finding was expected and supported by findings analysing the nurses who have left the profession (see respective chapter). Another well known work organisational factor is influence at work (8 countries).

In contrast, the consistent association between ITL and tasks not belonging to nursing (significant in 9 countries) was unexpected. This finding raises several questions: could it be that if nurses perceive their work as insufficiently defined they want to leave the profession? Does intensification of work lead to a creation or redistribution of tasks which has not been accepted by nurses? Does nursing education take into account the ongoing shift of tasks and responsibilities in nursing?

The role of occupational and career opportunities
So far, we have considered the contribution of individual and work related areas to the nurses’ ITL. Another influential factor is the ‘opportunity’ (Price and Mueller) or ‘alternative’ (NEXT). This comprises the job market situation and the occupational promotion aspects in the respective country or region.

NEXT results indicate that poor occupational perspectives and poor promotion prospects make nurses consider leaving the profession. In analogy, those who are afraid to become unemployed or unable to work more often consider to leave the profession. Also perceived job insecurity is associated with an increased ITL. An exception was Germany where this association was reversed: nurses reporting job insecurity were more likely to want to remain in the profession.

The inclusion of the ‘opportunity’ or ‘alternative’ in the NEXT model goes beyond the frame of this report. In short, we summarize that in some countries the explained variance of ITL increases substantially when the opportunities are included in the model. Interestingly this was most pronounced in the Netherlands where the explained variance of ITL increased from 16.0 to 36.0%. This means that there, the availability of occupational alternatives explains to a high degree, why nurses are (or are not) thinking about leaving the nursing profession.

While the Dutch example represents an extreme situation (positive working conditions), several countries showed a medium high influence of ‘opportunity’ (Belgium, Germany, Great Britain) and the remaining countries the additional influence of this aspect was low to absent. The role the job market situation and the occupational promotion aspects will be elaborated in detail in the future.
Belgium: Areas contributing to intention to leave the profession. (% = explained variance)

- Health and individual factors (HE): burnout, general health
- Private conditions (PC): work home conflict, financial situation, time spent with partner
- Social work environment (WE): quality of leadership, relation to head nurse, relation to physicians
- Work content (WC): quantitative demands, exposure to aggressive patients, exposure to diseases & suffering, noise, phys. climate
- Work organization (WO): possibilities for development, influence at work, tasks not belonging to nursing, conflicting orders, influence when planning rota, time pressure

Germany: Areas contributing to intention to leave the profession. (% = explained variance)

- Health and individual factors (HE): burnout, age
- Private conditions (PC): work home conflict, living status, number of weekly working hours
- Social work environment (WE): relation to head nurse, relation to physicians, quality of leadership
- Work content (WC): quantitative demands, confrontation with troublesome patients, noise
- Work organization (WO): possibilities for development, influence at work, tasks not belonging to nursing, receiving conflicting orders, time pressure

Finland: Areas contributing to intention to leave the profession. (% = explained variance)

- Health and individual factors (HE): burnout, age, physical diseases
- Private conditions (PC): work home conflict, time spent with partner
- Social work environment (WE): relation to head nurse & physicians, social support from superior, quality of leadership
- Work content (WC): quantitative demands, confrontation with troublesome patients, phys. climate
- Work organization (WO): possibilities for development, influence at work, tasks not belonging to nursing, receiving relevant information too late, receiving conflicting orders

France: Areas contributing to intention to leave the profession. (% = explained variance)

- Health and individual factors (HE): burnout
- Private conditions (PC): work home conflict, availability of child care, time spent with partner
- Social work environment (WE): quality of leadership, relation to head nurse, relation to colleagues
- Work content (WC): quantitative demands, confrontation with troublesome patients, lifting & bending
- Work organization (WO): possibilities for development, influence at work, tasks not belonging to nursing, receiving relevant information too late, receiving conflicting orders

Great Britain: Areas contributing to intention to leave the profession. (% = explained variance)

- Health and individual factors (HE): burnout
- Private conditions (PC): financial situation, living status, availability of child care, time for oneself
- Social work environment (WE): relation to head nurse, relation to colleagues, quality of leadership
- Work content (WC): phys. climate, confrontation with troublesome patients, quantitative demands
- Work organization (WO): possibilities for development, influence at work, occupational position, tasks not belonging to nursing, tasks not qualified enough

Figure 5a: Association of five work and private factors and the nurses’ intent to leave the nursing profession.
### Italy: Areas contributing to intention to leave the profession. (% = explained variance)

- **Health and individual factors (HE):** burnout, physical diseases, age
- **Private conditions (PC):** work home conflict, financial situation, living status, time for recreation
- **Social work environment (WE):** quality of leadership, relation to head nurse
- **Work content (WC):** quantitative demands, exposure to aggressive patients, noise, phys. climate
- **Work organization (WO):** possibilities for development, influence at work, tasks not belonging to nursing, receiving conflicting orders, time pressure

### Norway: Areas contributing to intention to leave the profession. (% = explained variance)

- **Health and individual factors (HE):** burnout, age
- **Private conditions (PC):** work home conflict, living status
- **Social work environment (WE):** relation to sister
- **Work content (WC):** quantitative demands, confrontation with troublesome patients, toxic exposure
- **Work organization (WO):** possibilities for development, tasks not belonging to nursing, receiving relevant information too late, time pressure

### Netherlands: Areas contributing to intention to leave the profession. (% = explained variance)

- **Health and individual factors (HE):** burnout, age
- **Private conditions (PC):** work home conflict, living status, number of weekly working hours, home work
- **Social work environment (WE):** relation to colleagues, relation to physicians, social support from superior, quality of leadership
- **Work content (WC):** noise, quantitative demands
- **Work organization (WO):** tasks not belonging to nursing, receiving relevant information too late, possibilities for development, influence at work

### Poland: Areas contributing to intention to leave the profession. (% = explained variance)

- **Health and individual factors (HE):** burnout, age
- **Private conditions (PC):** work home conflict, financial situation, availability of child care at home, time spent with partner
- **Social work environment (WE):** quality of leadership, relation to head nurse, relation to physicians
- **Work content (WC):** quantitative demands, exposure to infectious diseases, phys. climate, lifting & bending
- **Work organization (WO):** possibilities for development, influence at work, tasks not belonging to nursing, receiving conflicting orders, time pressure

### Slovakia: Areas contributing to intention to leave the profession. (% = explained variance)

- **Health and individual factors (HE):** burnout, age
- **Private conditions (PC):** work home conflict, financial situation
- **Social work environment (WE):** quality of leadership, relation to head nurse
- **Work content (WC):** quantitative demands, exposure to aggressive patients
- **Work organization (WO):** possibilities for development, tasks not qualified enough, receiving relevant information too late

Figure 5b: Association of five work and private factors and the nurses’ intent to leave the nursing profession.
Discussion

Degree of ITL

NEXT findings show that the degree of intention to leave the profession among nurses differs substantially between the participating countries. Apart from GB, the proportion of nurses considering to leave the profession is of medium to low quantity. The follow up data shows, that there is some flexibility in the proportion of potential leavers; it has increased in Poland where the new membership in the European Union has opened new possibilities for the members of a profession with extremely adverse working conditions. In the old member states the proportion decreased probably in course of tighter economic conditions.

Instead of focusing the attention on those 15.4% of all participants who are frequently considering leaving the nursing profession one might see the other 84.6% of the participants who obviously constitute a large group of nurses devoted to the profession. They may be regarded as a resource for future work which should be taken care of. However, if the aim is to assure a sustainable pool of nurses, such thinking might be too short sighted: 15.4% are a mean value only and risk groups with higher prevalences exist, for example the nursing work force in Great Britain, in Italy and in Germany. There, special attention and possibly special measures are required to enable nurses to remain in the profession. Furthermore, one might keep in mind that those who want to leave the profession (and also those who are leaving) are more often highly qualified and often seek new challenges. It might be to the benefit of the health care systems to attempt to keep especially this group of nurses in the profession and to open possibilities for new challenges within nursing.

What does ITL actually indicate?

In most countries participating in NEXT, the intention to leave the profession (ITL) is to higher degree determined by health and individual as well as work organisational factors.

The relevance of these findings becomes evident, when considering the fact that the nursing work force is ageing and will continue to age in the coming decades. Health is an issue which cannot be dealt with on short term level. It requires a long term approach involving all stakeholders from the employers to occupational health and the nursing work force (of all age groups) itself. Activities of work place health promotion (see reference 10) may be an existing adequate approach for this work.

Not surprisingly, aspects of work organisation play another major role for the ITL. Among the key indicators was the scale possibilities for development. Also the results from the leavers assessment (next chapter) indicate that some nurses seek the challenge in work and will leave if this need is not satisfied. Linked to this aspect is the professional perspective of nurses, which in many countries seems to be dissatisfying.

Finally, there are some country specific causes for ITL. One example is the financial situation. It is not surprising to find this aspect to be of relevance in Poland and in Slovakia. Interestingly, it also has remained in the model in Great Britain. There, many aspects of work receive comparably positive scores in NEXT, not so the factors related to income and the economic situation. Closely related to the financial situation is the satisfaction with pay among nurses. As expected, this factor is linked to ITL but to low degree only (see respective chapter).

Interestingly, the work content – and thus the work intensity – does not play the major role in the countries assessed. This may be surprising in times of restructuring and increasing demands in health care. However, it shall be noted that the core scale quantitative demands has found entry in all ten models. Consequently it is clearly associated with the ITL, but according to our results, the other 2 areas discussed above have more influence on ITL.

ITL as an indicator?

The factor ITL could be regarded as an index of attitudinal stability of the nursing work force in the sense of perceived mismatch of the demands of the health care systems and the demands of the individual. It may be seen as an early indicator which – once it has reached a limit – should lead to intervention to prevent actual departure from the profession. According to our data, the final decision to leave the profession is usually made within the 6 months prior to departure (in NEXT 83% of all leavers). This is preceded by a consideration process of again 6 months: 80% of all Leavers have started seriously considering leaving the profession within the 12 months prior to departure. This indicates that the consideration process is of medium duration both reflecting recent exposure and allowing for intervention when so wanted.

ITL is a monitoring indicator which can be assessed repeatedly on organisational, on national and even on European level. Trends and the effect of interventions can be followed. In contrast to actual departure, ITL can be assessed among many nurses, thus, analysis may go into detail. This way, uniform and diverging trends in subgroups such as countries or health care institutions may be elaborated and allow for targeted prevention.

ITL and actual departure from the profession

To which extent is the intention to leave the profession (ITL) a predictor for real departure? In the NEXT basic assessment, 53.2% of all those who later have left the profession to work in another profession have ‘frequently considered’ to leave nursing vs. 13.7% of those who have remained in their institution during the following 12 months. Again, this shows that the consideration is a process preceding the decision.
Policy implications

- The intention to leave the profession (ITL) is in most countries linked to health and work organisational factors. This implies that targeted preventive action is possible on organisational level.
- ITL is clearly preceding the decision to leave the profession. This implies that there is a time frame for preventive intervention.
- NEXT results indicate that ITL should be monitored on organisational, national and possibly on European level. It may be a useful and feasible indicator for organisations and professions.
- The education of nurses should reflect ongoing changes in the health care system. Changes in nursing tasks, exposures and responsibilities should be considered and brought forward to the nursing work force. NEXT results indicate that else, the risk for premature departure increases.
- The systems which are financing health care must acknowledge that exclusively aiming at economic targets may lead to a damage of the health care system. In addition, the utilisation of "soft" indicators (such as 'ITL') might be necessary to follow stakeholders in health care, such as the nursing profession, to react to deficiencies and to assure a sustainable supply of nurses. Otherwise, there is a risk that the integrity of a profession will be damaged with long lasting and costly consequences. NEXT is able to identify such examples.

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Nursing in Europe: Leaving the profession

Summary
- The decision to leave the institution is preceded by a consideration of about six months. The decision precedes the actual step by three to six months. This was largely independent on whether the nurses left the profession, took a time out or changed to another health care institution.
- Participants left the nursing profession to larger degree because of 'too low demands' followed by working conditions, financial and personal reasons. This, however, was different in some countries.
- Participants who 'took time out' from nursing did so mainly because of private reasons.
- Men tended to leave the profession to higher degree than women.

Background
In the course of the NEXT-Study the 'intention to leave the nursing profession' (ITL) has been assessed among almost 40,000 nurses (see previous chapter). We have found that in the basic assessment between 7.1% (The Netherlands) and 33.2% (Great Britain) of all respondents frequently considered leaving the profession.1 In this report we are looking at those who actually have left their institution during the 12 months period following the NEXT basic assessment, subsequently called 'leavers'. In detail we are investigating:
1. How and where did the leavers go?
2. What are the underlying reasons for their decision to leave?

Methodological issues
The data collection among the leavers was difficult because anonymity had to be assured and the national researchers were dependent on the cooperation of the health care institutions. This worked rather well in some and was difficult in other countries. The final response rates by country were between 15% and 54% and not as high as in the basic assessment (see chapter 'The European NEXT-Study'). Different circumstances may have accounted for this: It could not always be assured that the health care institutions have handed out or sent out the questionnaires to the leavers, the addresses of leavers may have changed, some health care institutions refused to acknowledge that their staff had voluntarily left the institution and some leavers may have been less committed to the problem investigated. In consequence, in some countries, the leavers’ assessment was prolonged and extended. All in all, 5,640 leavers questionnaires were sent out and 1,924 people responded (total response rate of 34.1%). This group was not uniform as indicated below. Some participants have changed employer within health care and others have left the nursing profession, others have taken a time out. Consequently, it is of interest to compare these groups with respect to the underlying reasons for leaving their health care institution.

A central part of the NEXT leavers’ questionnaire was a series of questions covering 59 aspects of work and private life. The participants were asked to which extent this aspect has contributed to his/her decision to leave the employer. To identify summarising factors for reasons for leaving nursing care, several explanatory factor analysis have been carried out. Finally, five factors for leaving nursing were isolated:
- factor 1: working conditions
- factor 2: work environment
- factor 3: ‘too low demands’
- factor 4: financial reasons
- factor 5: personal reasons and working time

This analysis was successfully carried out for Belgium, Finland, France, Germany, The Netherlands, and Sweden. For Poland, construction of these scores was not possible due to the high proportion of retired people in the Polish leavers’ sample. Furthermore, many missing values in the data sets made analysis impossible for Italy and Slovakia.

Results
1. How and where did the leavers go?

Where did the leavers go?
The participants were categorised into the following three main groups:
- those who have left nursing and continued working outside nursing
- those who have changed to another health care institution and, finally
- those who ‘took time out’. This group did not continue to work and had not retired either (e.g. took time out for family reasons).

The following analysis will concentrate on these three groups. However, there were two additional groups: those who have retired and individuals whose future occupation was not clear.

In the total sample 54.4% of the respondents had left the institution but continued to work in health care (between 40.1% in Finland and 71.4% in Swe-
den). 12.9% of the participants had taken ‘time out’ (between 4.4% in Slovakia and 32.9% in Finland). In total, 9.3% of all respondents had left the profession (between 4.5% in Italy and 14.6% in Germany).

The French and Polish samples contained a large proportion of retired people. The detailed results are shown in Figure 1.

Age, gender, family status

The mean age of the participants of each of the three main groups identified above was around 37 years. The average age of those who retired was 56.2 years. In Belgium and Germany nurses who have left either the profession or the institution were on average significantly younger than the European average. The oldest ‘leavers’ (all categories) were found in Sweden.

The number of men among all leavers was low (0% in Slovakia to 16% in Germany). Compared to their female colleagues, men left their institution more often because they wanted to change profession. This was the case in nearly all countries. In Poland (where the proportion of men in nursing was 1%) all men who have participated in the leavers’ assessment had left the profession.

About half of the leavers were people living with partner and child/children. Many of them stopped working for taking a time out. There were only few single parents among the leavers, most of them switched institutions.

How did they terminate their jobs?

In most instances, the leavers participating in this assessment had resigned their jobs (Figure 2). In three countries, however, there was a rather large proportion of people who had taken a time out: on Finland mainly for family reasons, in France and Italy mainly for ‘other reasons’. Noteworthy is the relatively large proportion of participants who have been dismissed in Slovakia, but also to some extent in Poland, Germany and Belgium.

‘First consideration’ and ‘decision’ to leave

It is of interest to know when nurses decide to leave their institution (and possibly the profession). NEXT data indicates that in 80% of all cases the serious consideration process begins in the final year preceding leaving. The final decision is in about 80% made during the last six months and in 60% during the last three months. This was largely independent on whether the nurses left the profession, took a time out or changed to another health care institution (Figure 3).

2. What are the underlying factors for leaving?

As indicated above, factor analysis has isolated five factors as potential underlying reasons for leaving: Working conditions, work environment, ‘too low demands’, financial reasons and, finally, personal reasons including working hours. All of them have contributed to the decision of the participants to leave their institution.

Of interest is to which degree the different groups of leavers differ with respect to these factors. The three major groups of leavers are compared in Figure 4: for participants who have left the nursing profession, four aspects played a larger role than for the other two groups of leavers: ‘too low demands’ followed by working conditions, financial reasons and personal reasons. The work environment, however, played a much lesser role in relation to those who have changed institution but remained in health care. Participants, who have taken a time out, did this mainly for personal reasons.
The pattern described in Figure 4 was found for the German, Finnish, French and Dutch sample. In some countries a different picture emerged. In Sweden, for example, nurses leaving the profession did this to a considerably higher extent because of financial and private reasons than the other Swedish leavers in Sweden (Figure 5). There, the nurses’ working conditions are usually rated better than in many other European countries. However, a debate concerning nurses’ wages has been ongoing since many years and job opportunities are to higher degree available than in many other countries.

**Discussion and implications**

**Role of organisation**

Our data indicate that – for organisations – it may be possible to retain nurses who otherwise would be leaving the profession

a) because the period of consideration and decision making among the leavers seems to be of medium duration (consideration: up to 12 months, decision within 3 months prior to termination), and

b) because working conditions and financial reasons were major reasons for leaving the profession.

Our results concerning the nurses’ intention to leave the profession indicate that it is possible to monitor such considerations in the way that timely intervention might be possible.

**Role of profession**

On the other hand, for nurses leaving the profession perceived ‘too low demands’ were – more than for the other groups – an important reason for leaving the profession. These nurses seem to be striving for higher challenges. We do not know whether the low demands were attributed to the institution or the scope of practice of the entire nursing profession in their country. When looking at the Swedish results, however, we find that there, ‘too low demands’ did not play a major role in relation to the other groups of leavers. It is known, that in Sweden, registered nurses have greater self autonomy and responsibility than in many other European countries.

These findings call for better occupational promotion perspectives for nurses in several countries.

**Taking time out**

The group of leavers who ‘took time out’ was characterised by the major influencing factor ‘personal reasons’. This indicates that apparently not much can be done within institutions to motivate them to continue working.

Whether they will return to nursing or not is not clear. It can be speculated that – in some countries – many nurses who for family reasons leave their job do not return. There, it should be investigated whether programs for keeping them attached to the institution and the profession during ‘time out’ could encourage more nurses to return to nursing work.

**Reference**


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Work related factors contributing to the decision to leave the workplace: Results for Swedish registered nurses and assistant nurses

Summary

- 3879 nurses were followed for three years, of whom 693 left their employment. The NEXT Leavers’ questionnaire was completed by 355 nurses (51%).
- Insufficient rewards in nursing work contribute to turnover.
- Reasonable pay and possibilities for development are core parts of sufficient reward.
- For assistant nurses issues relating to work conditions contributed to a larger extent to their decision to leave than among registered nurses.

Background

The Swedish element of the NEXT-Study is part of the longitudinal Swedish cohort study of sustainable working health in the public sector (The HAKuL-study). The HAKuL-study started two years before the NEXT-Study. The questionnaire to leavers was the same as used in the NEXT-Study but the baseline data were collected in a different way.

The supply of nurses varies between countries and between different health care sectors. In Sweden geriatric health care has problems recruiting nurses, and the status of geriatric health care, as a professional arena, is relatively low compared to other sectors in health care. At the same time, the number of elderly people is growing rapidly, and consequently the need for geriatric health care is increasing.

Identifying factors that influence turnover can hopefully help organisations to increase their attractiveness and keep their nurses. In a turnover model for nurses, factors affecting turnover included economic, organizational and social factors. Nurses value certain work conditions, and if these conditions are met by their employers, overall levels of satisfaction will be higher and likelihood to leave lower. According to the model, negative conditions can affect organizational commitment, job satisfaction, intention to leave and actual turnover. The aim of this study was to identify work conditions contributing to registered nurses and assistant nurses’ decision to leave their workplace.

Methods

In Sweden, the Nurses Early Exit Study (NEXT) was conducted within the framework of the prospective Swedish cohort study of sustainable working health in the public sector (The HAKuL-study). Geriatric health care in five municipalities, and hospitals and psychiatric care in three different county councils of Sweden were represented, as well as primary care in one county council. The institutions varied in size, and hence in organizational structure, from small worksites with 2-3 district nurses to hospitals with several hundred employees. The study base consisted of registered nurses and assistant nurses employed for at least three months during November 1999/2000 to 2003, in total 3,879 persons. Temporary nurses paid on hourly basis were not included.

During 2000-2003 data on retirement pensions and leave from employment was recorded by means of continuous contact with the work units and managers. All leavers received the NEXT Leavers’ questionnaire focused on reasons for leaving.

NEXT-Results

Highest rate of turnover in elderly care

During a three year period, 18% of the nurses left their employment contract. A higher rate of leavers was observed in elderly care than in other sectors; among nurses aged under 50 than over 50; and among registered nurses than assistant nurses (Table 1).
Table 1. Proportions of nurses in different strata that left their employment contracts during a period of three years. Odds Ratios (OR) with 95% test-based CI (95% CI) for leaving was calculated by means of multivariate logistic regression analysis including four different factors; gender, age, occupation and health care sector.

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Proportion of nurses who have left their employment contract</th>
<th>OR (95% CI)</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>Proportion</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>who have left their employment contract</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>3510</td>
<td>17.8%</td>
<td>1</td>
</tr>
<tr>
<td>Men</td>
<td>369</td>
<td>18.4%</td>
<td>1.2 (0.91-1.64)</td>
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<tr>
<td>≥50 years of age</td>
<td>1224</td>
<td>14.5%</td>
<td>1</td>
</tr>
<tr>
<td>&lt;50 years of age</td>
<td>2655</td>
<td>19.4%</td>
<td>1.40 (1.16-1.69)</td>
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<tr>
<td>Assistant nurses</td>
<td>2033</td>
<td>15.2%</td>
<td>1</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>1846</td>
<td>20.9%</td>
<td>1.91 (1.59-2.30)</td>
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<tr>
<td>Hospital care</td>
<td>1166</td>
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<td>796</td>
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<td>521</td>
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<td>Elderly care</td>
<td>1396</td>
<td>21.6%</td>
<td>2.04 (1.63-2.56)</td>
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<tr>
<td>Total</td>
<td>3879</td>
<td>17.9%</td>
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</table>

Earlier research has mainly focused on turnover intentions. Even though there is a strong relationship between turnover intentions and actual turnover there may be various reasons why nurses express an intention to leave without actually leaving. The main strength of this study is the use of reports from nurses who have actually left their workplace. Of the 693 nurses that terminated their employment, 355 (51%) completed the NEXT Leavers’ questionnaire.

**Turnover between organisations**

Leaving their workplace did not imply that the nurses left health care, most of them remained in nursing but changed institution. Of the registered nurses who left their workplace, 86% changed nursing institution but remained in nursing; among assistant nurses 68% remained in nursing.

**Contributing factors for the decision to leave**

Of the 355 nurses who left their jobs, 85% did so voluntarily, i.e. they resigned, did not want to renew the contract or took time out. For 10%, their employment contract was not extended or they were dismissed, and 5% went into early retirement. The 85% (300 nurses: 201 registered nurses and 99 assistant nurses) that voluntarily left their workplace are the base for the following analyses of contributing factors for leaving the workplace.

The leavers were asked to indicate to what extent different factors had contributed to their decision to leave. Unsatisfactory salary contributed most to both registered nurses and assistant nurses’ decision to leave the workplace. The factor consisted of four items describing salary in relation to work performance, educational level, pay opportunities at other workplaces, and salary trends.

Lack of professional opportunities emerged as another important factor influencing the decision to leave. The factor contained items concerning professional development prospects, development opportunities, desire for change, and unfulfilled professional expectations.

Restricted professional autonomy, unsatisfactory time schedule, high patient-oriented workload, unstable organisation and lack of professional opportunities contributed more for assistant nurses than for registered nurses to their decision to leave (T-test p-value <0.05) (Figure 1).

**Discussion**

The importance of adequate pay and opportunities for development for the retention of nurses is in line with a recently conducted study in Sweden on nurses who had left nursing care. NEXT data show that high efforts and insufficient rewards are common in nursing. Reasonable pay and possibilities for development are core parts of sufficient rewards to balance the nurses’ efforts.
In Sweden, the salaries of nursing personnel have been the focus of much public debate, and efforts have been made by the trade unions to improve these. On average, contractual salaries for registered nurses have increased more in recent years than for female employees in Sweden in general and the wage differentials between health care institutions are significant. The salary differences among nurses are partly due to the possibility of individual setting of wages within the public sector in Sweden. On average, registered nurses in geriatric care earn somewhat more than registered nurses in other health care sectors, but there are wage differentials between different municipalities and organisations. For assistant nurses the trend in wages has been less positive and the wage differentials between organisations are less significant. A registered nurse can often increase her salary by means of changing job in the health care sector, while for assistant nurses such possibilities are more limited.

Policy implications

- In Sweden, the main challenge is to promote retention of nurses in geriatric health care.
- Reasonable pay and possibilities for development seem to be core parts of sufficient reward.
- Intervention is needed to improve working conditions.
- Strategies for retaining personnel in elderly care need to be developed both at the political level, by giving more resources to geriatric health care, and at the organisational level by creating possibilities for professional development.

References


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Contact: www.next-study.net, Malin.Josephson@cns.ki.se June 2005
Aging in the Nursing Profession

Summary
- There are profound differences with respect to the proportion of older nurses in hospitals between the NEXT countries.
- Older nurses work the same number of hours per week as younger nurses.
- Rates of sickness (and family duty) absence of older and younger nurses do not differ.
- In most countries older nurses report better working conditions than younger ones: e.g. less emotional and quantitative demands and more influence at work. Moreover, their work involves less ‘lifting and bending’.
- Younger nurses are generally healthier than their older colleagues but tend to suffer more from burnout.
- In some countries (e.g. UK, Norway), older nurses report distinctly better working conditions than their colleagues in other countries (e.g. Belgium, Germany, Finland).
- In Finland, the large proportion of older nurses is – logically – associated with greater work load. Still, commitment, job satisfaction and physical health are better compared to their colleagues in most other countries.
- The Norwegian example shows that older nurses can have both low work load and positive health and attitudinal outcomes.
- Countries with a high proportion of older nurses show the most positive outcomes, however the healthy worker effect must be taken into account: two countries with the highest proportion of older nurses show the most positive health and attitudinal outcomes.
- Conclusion: It is possible to remain in nursing at an older age. NEXT data indicates
  a) that an institution may profit from keeping older nurses in the job and
  b) that the age distribution of a nursing work force influences the work culture: when there are more older nurses, positive outcomes e.g. high job satisfaction are possible despite higher work load.

Background
The undergoing demographic change in the Western world and in Europe in particular is causing several challenges and problems for the nursing profession. Currently the nursing profession is facing a lack of nurses and many nurses are leaving their profession prematurely. At the same time more and more older people are in need of care. In many - but not all - European countries nurses are predominantly in the younger age groups. Many employers as well as the public are prejudiced with respect to the work ability of older workers. In nursing, these prejudices predominantly concern reduced physical capacity, less flexibility and more sickness absence. On the other hand, social capabilities are commonly expected to be better. Nursing is a highly demanding profession with respect to both emotional and physical demands. Furthermore, the nursing profession is known to be at higher risk of adverse psychological health than other professions. The underlying question is: is nursing at older age possible?

The NEXT-Study provides the opportunity to assess exposure at work as well as attitudinal and health outcomes with respect to age. In this presentation the following questions are being investigated:
1. How is the age distribution of the nursing work force in European countries?
2. To which extent does the work situation of older nurses differ from that of their younger colleagues?
3. Are there national differences with respect to the working situation of older nurses?

NEXT-Results
For the sake of homogeneity of results we have limited the data analysis to registered nurses working in hospitals. The data from 25,321 nurses from ten countries has been included: BE 1,959; DE 2,524; FI 1,825; FR 2,474; GB 1,845; IT 4,710; N 2,162; NL 2,455; POL 3,207; SLK 2,160. In the following analysis we refer to the NEXT basic assessment only.

Although age and ageing of employees are very important topics in the social sciences, there is currently no general definition of an ‘older employee’. In some studies ‘being older’ starts at 45 years of age, in others the reference line is 55 years. After taking relevant literature and national differing retirement regulations into account, we decided to define ‘older’ age group of nurses to be 50 years or older.

1. Age distribution of nurses
While the average proportion of older active nurses was about 14% in the total NEXT sample, the amount of older nurses (> 50 years) differed substantially between the participating countries. The proportion was very low in Poland (7.4%) and high
in Norway (19.6%) and particularly high in Finland (25.5%) (Table 1).

2. Work situation of older nurses in European countries

The mean weekly working hours of older and younger nurses do not differ substantially from those of younger nurses (Figure 2). However, older nurses had a tendency to be more involved in the shift type ‘only night shifts (not shown)’.

![Figure 1. Proportion of older nurses (> 50 years of age) by country.](image1)

![Figure 2. Mean weekly working hours of older (> 50 years of age) and younger nurses (< 50 years of age) by country.](image2)

![Figure 3. Mean days of absence during the last 12 months by age and country (absenteeism due to sickness and family duties).](image3)

- Absenteeism and age

Mean annual absenteeism of older nurses (due to sickness and family obligations) was in most countries between 0.3 and 1.3 days more than among their younger colleagues (Figure 3). In The Nether-lands this figure was considerably higher (5.3 days). Only in Italy and in Belgium older nurses were somewhat less absent than their younger colleagues – on average approximately 0.3 days.

The differences between older and younger nurses decreased when absenteeism due to pregnancy was taken into account.

With the exception of Norway and The Netherlands the differences between the age groups were not significant. Hence, it can be concluded that younger and older nurses do not have a substantially different number of days of absence.

- Work exposure and outcomes

The NEXT-Study provides the opportunity to investigate whether differences exist between younger and older nurses with respect to work exposure and different outcomes. The international comparison may reveal common patterns in the working situation of older (and younger) nurses.

In Table 1 we are assessing whether older nurses are more or less exposed to selected aspects of work exposure and certain attitudinal and health outcomes. See Kuemmerling et al. for details of the scales used.

The results are rather similar in the ten countries assessed. Most aspects of work exposure were more positively rated by older nurses. In all countries this was the case for ‘emotional demands’ and in most countries for ‘quantitative demands’, exposure to ‘lifting and bending’, ‘influence at work’ and ‘uncertainty concerning treatment’. Less consistent were the results for ‘social support from the superior’. Interestingly, in five out of nine countries, ‘social support from colleagues’ was lower among older nurses than their younger colleagues.

Also on the outcome side the data indicate a fortunate situation of many older employees: despite the fact that they – as expected – had lower ‘general health’, they appear to suffer less from ‘burnout’. Furthermore they were substantially more committed to their profession and – persistently – to the institution. It should be noted that even though reported work exposure was less adverse among older nurses this was not reflected by generally more positive ratings for job satisfaction.

Some national peculiarities attract attention. In Italy, Poland, Slovakia, the UK and Norway, the working conditions and outcomes were especially positive for older workers.

- In Italy the consistently positive scores may be accounted for by the fact that there, nurses retire by the age of 55 years. Only those older nurses remain professionally active who deliberately chose to do so. This is likely to be a selection of engaged and healthy individuals.

- There is evidence that in Poland and Slovakia, people of older age are more respected at work by younger workers than other parts of Europe.

- In the UK and Norway the group of nurses is rather old (see above), it is well organised (since many years) and both countries face a severe lack of nurses. These factors may contribute to the positive results found in these countries.

In Table 1 we are assessing whether older nurses are more or less exposed to selected aspects of work exposure and certain attitudinal and health outcomes. See Kuemmerling et al. for details of the scales used.
### Table 1. Work exposure and outcomes among older nurses (≥ 50 years) in relation to their younger colleagues (19-49 years) by country.

<table>
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<tr>
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<td>less**</td>
<td>less**</td>
<td>less**</td>
<td>less***</td>
<td>less***</td>
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<td>less***</td>
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</tr>
<tr>
<td>Quantitative demands</td>
<td>=</td>
<td>=</td>
<td>=</td>
<td>less**</td>
<td>less*</td>
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<td>less**</td>
<td>=</td>
<td>less**</td>
<td>less***</td>
</tr>
<tr>
<td>Lifting and bending</td>
<td>less**</td>
<td>less**</td>
<td>=</td>
<td>less***</td>
<td>=</td>
<td>less***</td>
<td>--</td>
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<td>less***</td>
</tr>
<tr>
<td>Influence at work</td>
<td>=</td>
<td>=</td>
<td>more**</td>
<td>more***</td>
<td>more***</td>
<td>more***</td>
<td>more***</td>
<td>=</td>
<td>more***</td>
<td>more***</td>
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<td>less***</td>
<td>less***</td>
<td>less**</td>
<td>less***</td>
<td>less***</td>
<td>=</td>
<td>=</td>
<td>less***</td>
</tr>
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<td>less*</td>
<td>=</td>
<td>more**</td>
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</tr>
<tr>
<td>Social support colleagues</td>
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<td>less***</td>
<td>less***</td>
<td>less***</td>
<td>more**</td>
<td>=</td>
<td>--</td>
<td>less***</td>
<td>=</td>
</tr>
</tbody>
</table>

### Outcome

| Professional commitment   | =   | =  | more*** | =   | more*** | more*** | more*** | =   | more*** | more*** |
| Institutional commitment  | more*** | more*** | more*** | more*** | more*** | more*** | more*** | =   | more*** | more*** |
| Job satisfaction          | less*** | more* | =   | less** | =   | more*** | less*** | less*** | more** | more* |
| Burnout                   | =   | less** | =   | less* | less** | less*** | less* | =   | =   | =   |
| General health            | less*** | less*** | less*** | less*** | less*** | less*** | less*** | =   | less*** | less*** |

3. **International differences of the work situation of older nurses**

Finally, we have compared working conditions and attitudinal and health outcomes for older nurses across countries. For this purpose, the z-standardised scale scores between countries were compared (Table 2). The results indicate that the findings for work exposure do not necessarily allow conclusions to be drawn about the outcomes.

In comparison to their older colleagues in the other countries, older Belgian, Finnish (and German to lesser degree) nurses reported the most demanding job situation. Interestingly, this was associated with completely different outcomes: whereas in Belgium the adverse work exposure seems to lead to consistently negative attitudinal outcomes (low commitment and low job satisfaction), the opposite was the case in Finland. There, older nurses were not only more committed and more satisfied with their work but also had a better general health. In Finland, we assume a special age related work culture; due to the very high proportion of older nurses in the work force, an age-segregated distribution of tasks is not possible. On the other hand, older nurses may automatically be more incorporated into decision making. This may cause a climate of mutual respect, satisfaction and commitment.

The UK and Norway emerge as countries with the best working conditions for older nurses when compared to the other participating countries. This is in line with the above findings (Table 1). The nevertheless comparably low commitment scores for older British nurses reflect a general critical attitude to the profession and the institutions found in the British NEXT sample.

The adverse health and job satisfaction outcomes in Polish and the Slovakian sample reflect rather age independent lower scores in these countries.

### Conclusion

Our findings indicate rather pronounced age related differences in the working situation of older nurses, in so far as they tend to report better working conditions. However, especially when analysing data of older nurses the ’healthy worker effect’ must be taken into account. This may have the effect that those older nurses remaining in the profession constitute a positive selection of healthy and high-performance individuals. But the two countries with the largest proportion of older nurses show the most positive health and attitudinal outcomes. This speaks strongly for the fact that the integration of older nurses in the work force might have an impact on the work culture which then might lead to better working conditions for older nurses and hence, greater job satisfaction.
### Table 2: Work conditions among older nurses (> 50 years) compared over countries.

Standardised mean scores, negative scores indicate that the national mean is lower that the overall mean. Asterisks indicate significant difference (t-test) to the group of older nurses in all other countries. Significant positive findings are written in black; adverse exposure / outcome among older nurses is indicated by white numbers (in grey cell).

#### Exposure

<table>
<thead>
<tr>
<th></th>
<th>BE</th>
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<tr>
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<td>0.42***</td>
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<td>-0.38***</td>
<td>-0.56***</td>
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<td>-0.16***</td>
<td>--</td>
<td>0.05</td>
<td>0.16*</td>
<td>-0.08</td>
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#### Outcome

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<tr>
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<td>Institutional commitment</td>
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<td>0.18**</td>
<td>0.14**</td>
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<td>0.19***</td>
<td>0.08**</td>
<td>0.29***</td>
<td>-0.42***</td>
<td>-0.29***</td>
<td>0.14**</td>
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<td>0.29***</td>
<td>0.01</td>
<td>0.47***</td>
<td>0.13*</td>
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<td>-0.52***</td>
<td>-0.73***</td>
<td>0.34***</td>
<td>0.47***</td>
</tr>
<tr>
<td>General health</td>
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<td>0.14*</td>
<td>0.14**</td>
<td>0.06</td>
<td>0.24***</td>
<td>0.01</td>
<td>--</td>
<td>0.28**</td>
<td>-0.56***</td>
<td>-0.54***</td>
</tr>
</tbody>
</table>

Policy implications

- Health policy makers should recognise that the nursing work force is ageing and will continue to age.
- Health policy makers should learn from good examples with respect to older nursing work forces (e.g. Finland, Norway, Great Britain).
- Health care institutions must recognise that older nurses often can be a resource with better expertise, more commitment and better psychological health.
- However, the lower physical exposure and lower general health must be acknowledged and preventive measures taken at early stages.
- Health care institutions must prevent age discrimination among nurses (see low perceived social support) and assure high mutual support in the work groups.
- All stakeholders must accept their responsibility in reducing age discrimination in the nursing work force.

References


Authors: NEXT-Study Group: Angelika Kuemmerling (University of Wuppertal, Germany; responsible), Hans-Martin Hasselhorn (Wuppertal, Germany), Sabine Stordeur (Brussels, Belgium), Donatella Camerino (Milan, Italy) and the NEXT-Study Group

Contact: www.next-study.net, next@uni-wuppertal.de June 2005
Psychological and physical health among nurses in Europe

Summary

- Physical health differs between occupational levels. Registered nurses reported better physical health than nursing assistants. For psychological health ('burnout') the difference was less pronounced.
- In most countries, younger nurses were more 'burned out' than their older colleagues.
- Physical health and – especially – burnout are clearly associated with the intention to leave the nursing profession.
- In previous decades, nurses in many countries had the opportunity to leave the profession early. These possibilities are increasingly being reduced and the regular retirement age has been raised in many countries. This process is still ongoing in Europe.

Background

Nursing is a job with high quantitative and qualitative work load. Thus, physical and psychological health is crucial for a nursing work team.

It is well known that nursing work significantly contributes to reduced health in nurses. In 1976, JM Stelman wrote: “If you ever wondered how people can manage to work with the sick and always stay healthy themselves, the answer is – they can’t!”.

However, since then, many things have changed – for the better and for the worse:

- There has been a substantial improvement in several aspects of working conditions for nurses in the past 50 years (e.g. higher awareness of risks, better equipment, better protection from infectious diseases).
- On the other hand, deep economic changes in health care have lead to increased financial constraints and to an increased work load for many nurses. In addition, niches for nurses with reduced health are few and have become even more scarce in times of increasing economic constraints in health care.
- The nursing work force is ageing in many countries. For example, the proportion of older nurses (aged 50 and over) working in the German nursing work force increased from 12.0% in 1996 to 15.3% in 2003.
- In previous decades, nurses in many countries had the opportunity to leave the profession early. These possibilities are increasingly being reduced and the regular retirement age has been raised in many countries. This process is still ongoing in Europe.

These changes in health care and nursing, however, are subject to substantial variations within Europe. Consequently both work exposure and health outcomes differ considerably across individual countries. Thus, both different exposure and a different degree of a healthy worker effect must be taken into account when considering health in the European nursing profession.

In this overview, it is not the aim to disentangle the different underlying causes of bad health among nurses in Europe. This has been done in many NEXT publications (see www.next-study.net). Instead, we describe health in the European nursing profession and address the following questions:

1. What is the state of physical and psychological health among nurses in Europe?
2. To which extent does good or poor health contribute to the intention to leave nursing?

NEXT-Results

1. Physical and psychological health among nurses in Europe

A range of health indicators was used in the NEXT-Study:

Physical health

- general health scale (SF-36)
- prevalence of diseases (from WAI)
- disability due to low back/neck/shoulder pain (von Korff disability score)

Psychological health

- burnout (Copenhagen Burnout Inventory, CBI) (assesses general exhaustion)

For information concerning the scales, see Kuemmerling et al 2003.*

- Health by occupational level and institution

Health differs between occupational levels: Registered nurses in general reported better physical health than nursing aides. In BE, FR, FIN, SLK this difference was highly significant (p<.001, ANOVA, adjusted for age). In addition, the von Korff disability score was higher among nursing aides (significant, p<.05 in BE, DE, FR, SLK). For burnout the difference between occupational levels was less pronounced.

With respect to physical health there were no major differences between nurses working in hospitals, nursing homes and in home care when age and qualification level were also taken into account.

However, there were differences regarding burnout. In the total sample, nurses working in home care had – on average – lower burnout scores (adjusted burnout score [0-100]: 28) compared to hospitals (37), nursing homes (36) and out patient care (36). In most countries, however, the institutional differences for burnout were low. Only in BE and DE could considerable institution-related differences be observed: In BE, nurses working in hospitals and in DE those working in nursing homes had a considerably higher risk of burnout than their colleagues working in the other types of institutions.
- International comparison of health indicators

For reasons of comparability, we have limited the following analysis to registered nurses working in hospitals. The data from 25,324 nurses from ten countries have been included: BE 1,959; DE 2,524; FIN 1,825; FR 2,474; GB 1,845; IT 4,713; N 2,162; NL 2,455; PL 3,207; SLK 2,160.

- Physical health

Self-reported physical health was – on average – best among nurses in The Netherlands (Figure 1, adjusted for age) and worst in Poland and Slovakia. As Figure 2 (left graph) indicates, the international differences were consistent for all age groups. The age-related decline of general health varied between countries. It was most pronounced in Poland and Slovakia and in Finland (though overall general health was better in Finland than in the other two countries). In these countries the possibilities for premature departure from the active working life are limited. Thus, older workers are – to a greater extent than in other countries – forced to remain active in nursing even if they wanted to leave for health reasons.

- Disability due to neck/shoulder and low back pain

The von Korff disability score covers a range from 0 (no disability due to neck/shoulder or low back pain) to 6 (maximal disability). Again, pronounced international differences and a clear age-related increase were observed (Figure 2, middle). Mean scores were low in NL and GB and highest in POL, SLK and DE. In all countries, disability increased with age. This association was, however, small in NL, GB and IT.

- Psychological health (burnout)

Mean burnout scores for all countries were below ‘50’ of 100 possible units (Figure 3). It should be noted that a score of ‘≥50’ represents a substantial degree of psychological exhaustion (see Ref. 4).

The mean score for burnout was highest among registered nurses in French hospitals (this was also the case for nursing homes and in home care) and it was very low in N and NL. In most countries, younger nurses were more burned out than their older colleagues (Figure 2, right graph).
2. Health and premature departure from nursing
NEXT results indicate that general health and even more psychological health (burnout) is clearly associated with the intention to leave the nursing profession (Figure 5). This was especially the case in BE, DE and NL. The association was stronger for those with low health and with high burnout.

Younger nurses with low perceived health were more likely than older nurses with low health to frequently consider leaving nursing. While the first may be looking for occupational alternatives, older nurses with low health have a greater fear of unemployment and are thus glad to have a job.

### Policy implications
- The physical and psychological health status of nurses is associated with the intention to leave the profession. It should be monitored regularly in occupational health examinations.
- Examples from several countries indicate that targeted health promotion activities need to be developed or intensified to keep the nursing workforce healthy even in higher age groups.
- Work health promotion activities in health care should include preventive measures aimed at physical as well as psychological strain. These measures should take the large amount of existing knowledge about characteristics of the nursing workforce in different age groups and different types of institutions into account.

### References

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Work ability among nurses in Europe

Summary

- Work ability of employees is a crucial individual and organisational resource.
- Work ability is regarded as a concept combining both the individuals’ resources and work characteristics.
- The Work Ability Index (WAI) is an internationally widely used measurement instrument.
- Nurses with low work ability would rather leave the profession.
- Some nurses with poor work ability may be trapped in nursing, mainly because of lack of occupational alternatives.
- In Norway, the Netherlands and Finland the nursing work force had very high WAI scores.
- In Poland, France and Germany work ability was low, this was the case throughout all age groups.
- Work ability is an organisational resource which is associated with work exposure (e.g. leadership) and the intention to leave the profession. Good practice examples can be (have been) identified.

Background

Since the 1980s Finnish researchers have investigated workers’ work ability on a large scale. In 2004 the Finnish researcher Juhani Ilmarinen defined work ability as follows:

The concept of work ability

“A modern concept of Work Ability is composed of human resources and work characteristics. Human resources include functional capabilities (physical, mental, social) and health, competences as well as attitudes and values. The large variety of dimensions of work are described by features of work environment, work community, physical and mental work demands, and by managerial and leadership issues.”

The Work Ability Index (WAI)

On the basis of their research, the Finnish scientists have developed a short questionnaire instrument, the Work Ability Index (WAI), aimed at assessing both individual and work aspects of work ability. Eleven questions cover the following seven so called ‘items’ (Table 1).

The seven items of the Work Ability Index (WAI)

- WAI 1: Subjective estimation of own current work ability compared with the lifetime best.
- WAI 2: Subjective estimation of own work ability in relation both to physical and to mental demands of the work.
- WAI 3: Number of diagnosed diseases.
- WAI 4: Subjective estimation of work impairment due to disease.
- WAI 5: Sickness absence during past 12 months.
- WAI 6: Own prognosis of work ability in two years.
- WAI 7: Mental resources.

NEXT-Results

In this report we have limited the data analysis to registered nurses with complete data for all variables used. The data from 22,355 registered nurses working in hospitals in 10 countries have been included: BE 1,806; DE 2,398; FIN 1,735; FR 2,062; UK 1,707; IT 3,406; N 1,831; NL 2,402; POL 3,207; SLK 1,981.

1. How is the work ability of nurses according to age and country? Can risk groups be identified?

In NEXT, mean scores for work ability were rather high. Only 3.5% of the participants had a poor WAI score (7-27), 19.5% had a moderate (28-36), 49.1% a good (37-43) and 25.4% excellent (44-49) score. However, there were pronounced international differences: e.g., in Norway, 48% of all participants had an excellent WAI, while this is the case for only 18% in Germany and 15% in Poland (Figure 1).

Work ability was highest in N, NL and FIN; it was comparably low in DE and FR and lowest in POL. As indicated in Figure 2, work ability decreased with age and the international differences were largely constant over age. Young Polish, German or French nurses reported lower work ability than older Dutch or Norwegian nurses.

Table 1. Seven items of the Work Ability Index (WAI)

To date, the NEXT-Study provides the largest international collection of WAI data. Here, the WAI was used to assess the following questions:

1. How is the work ability of nurses according to age and country? Can risk groups be identified?
2. To what extent does work ability contribute to premature departure from the profession?
The interconnectedness of work ability and working conditions was obvious: in most countries, about 20% of the WAI variance could statistically be explained by working conditions, predominantly work organisational factors, especially: possibilities for development, uncertainty concerning treatment and the work-home conflict.

A strong component of the WAI is the respondents’ own estimation of his or her work ability (WAI items 1,2,6,7). This estimation largely depends on interaction at work: do colleagues support people with reduced physical abilities? This seems to be the case especially for N, NL and IT where the age-related decline of this component is weakened. In Italy, a country with a low proportion of older nurses, those with reduced physical abilities may expect a reduction of heavy manual tasks because of the larger proportion of young colleagues.

Nurses in Finland work in teams where one quarter is 50 years old or older. According to NEXT data, older Finnish nurses, in spite of comparably low work ability (Figure 2), participate in manual work to the same extent as their younger colleagues. It is interesting to note that the older Finnish nurses were still satisfied with their work (see chapter on older nurses) and did not want to leave the nursing profession.

- Risk groups - Trapped in nursing work?
The NEXT model implies that for some groups it may be beneficial to leave nursing work. One group may be formed by those with poor work ability. 3.5% of all registered nurses in hospitals belonged to this group and 60% of them wanted to remain in nursing. The follow-up data showed that after one year about half of them still had poor work ability. Since those with reduced work ability were much less satisfied with their work, the question is: what keeps them in nursing?

Threat of unemployment: older and especially middle-aged nurses with poor work ability clearly tend to stay in their profession because of fear of unemployment.

Mutual social support: The assumption that team support enables nurses with poor work ability to remain in the profession could only be confirmed for the group of older nurses with poor work ability. Among younger nurses with poor work ability, social support and leadership quality was not associated with the intention to leave the profession.

Quantitative demands: If quantitative work demands are comparably low, even nurses with poor work ability tend to stay in their profession.

In summary: Nurses with poor work ability do not leave the profession mainly because of lack of alternatives on the job market and to some degree because of institutional tolerance toward workers with poor work ability.

- Work ability as an organisational resource
The authors of the Work Ability Index regard work ability as an organisational resource leading to increased productivity. On the basis of a number of longitudinal investigations, they stated that a sustainable increase of work ability is possible even among older workers. This, however, required simultaneous interventions on several levels including leadership.

Figure 3 shows the pronounced differences of mean WAI scores between 38 German health care institutions (adjusted for differences of mean age). It also shows the association between mean leadership scores and mean WAI scores: the higher the quality of leadership of the institutions the higher the mean WAI scores.
2. Role of work ability in premature departure from nursing

There is a clear association: people with low work ability were more frequently considering leaving their profession (Figure 4). This was the case for all age groups in all countries.

As a consequence, in institutions with a low mean WAI score (corrected for age) a lower proportion of participants considered leaving the nursing profession (Figure 5).

- Leaving the institution and work ability

Further analysis shows that the work ability rose significantly among those who have left their institution during the investigation period (318 'cases'). After 12 months the work ability remained higher than among 931 matched 'controls' who have stayed in their institutions. This WAI increase was most pronounced (but not significant) among those who have changed to another profession.

Policy implications

- Health care institutions should recognise the organisational resource that work ability constitutes. They should acknowledge the large differences of work ability between health care institutions. The regular assessment of work ability can be useful and the basis for preventive measures to improve work ability.

- National work ability index (WAI) data sets should include the nursing profession for the purpose of occupational and institutional benchmarking.

- Human resource management should recognize the relevance of leadership and social relations in staff's work ability throughout all age groups.
References


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Physical exposure to lifting and bending tasks among nurses in Europe

Summary
- Registered nurses and – especially – nursing assistants are exposed to high levels of lifting and bending activities.
- Lifting and bending are associated with musculoskeletal disorders
- The level of exposure of nurses to these physical tasks is highest in medical/surgical wards and in nursing homes.
- Musculoskeletal disorders but not physical exposure to lifting and bending correlate with the intention to leave the profession.
- In most countries both the availability and the usage of available lifting aids are insufficient. This is especially the case in medical/surgical wards.
- International benchmarking shows: the availability of lifting aids seems to promote their usage.

Background
A high degree of exposure to lifting and bending tasks at work is a well-known feature of nursing. The consequences are well known: adverse physical health, low back and neck/shoulder disorders and – not infrequently – premature departure from the profession.1

The bearing of physical loads is to be expected in most forms of nursing. However, both the degree and the consequences of exposure to these physical tasks might vary between different participating countries, and thus professional cultures, taking different organisational, social and mechanical support systems at work into account. The NEXT-Study provides the opportunity to investigate

1. the degree of physical exposure to lifting and bending tasks in nursing work,
2. associations of this physical exposure with
   - physical health
   - behaviour intention (‘intention to leave the nursing profession’: ITL)
3. support systems for this physical exposure, i.e. lifting aids.

NEXT-Results
In order to quantify the specific physical demands in the nursing profession a ‘lifting and bending’ scale was developed by the NEXT-Study Group based on our own validity measurements including the use of pre-tests. The scale consists of eight characteristic physical tasks for nurses. The answer categories were ‘0-1 times a day’, ‘2-5 times a day’, ‘6-10 times a day’, and ‘more than 10 times a day’. The scale has been constructed as a weighted sum score (weight of categories 1 to 4: 0, 3.5, 8, 15). The possible range was set from 0 to 100.2 A mean score of 50 would indicate a substantial physical exposure of between 50 and 80 major physical tasks per work day.

1. Physical exposure to lifting and bending in nursing work
Physical exposure to lifting and bending is greatly influenced by occupational position: in almost all European countries nursing assistants carried out lifting and bending tasks considerably more than registered nurses did (Figure 1). Also the nurses’ work areas play a significant role: In almost all countries exposure to lifting and bending was highest in nursing homes, followed by medical and surgical wards and intensive care units (Figure 2).

- Physical exposure and health
Health outcomes used in this report are
- the prevalence of musculoskeletal disorders diagnosed by a physician
- and the ‘von Korff disability score’, summarising perceived disability in daily life due to low back and neck/shoulder complaints.3

More information on the scales is included in Kuemmerling et al.2
Both outcomes were clearly associated with lifting and bending tasks (Figures 3 and 4). However, it should be noted that even 28% of the nurses with the lowest exposure to lifting and bending reported a muscular diagnosis (Figure 4).

Figure 1. Mean scores (and 95% CI) for lifting and bending among nurses and nursing assistants. Possi-ble range for lifting and bending from 0-100; n_nurses=27,992; n_aides=3,822.

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ICU = intensive care units; WARD = hospital ward; PSY = psychiatry; NH = nursing homes; HC = home care

Figure 2. Exposure to lifting and bending tasks of registered nurses in 9 European countries by working area. Score for lifting and bending ranging from 0 (no exposure) to 100 (maximal exposure), (n=32,645).

Figure 3. Exposure to lifting and bending tasks at work and von Korff disability score (mean scores and 95% CI interval) (n=30,663).

Figure 4. Exposure to lifting and bending at work and the prevalence of musculoskeletal disease (n= 33,712).

- Physical exposure to lifting and bending and intention to leave the nursing profession
As might be expected, NEXT data indicate a clear association between the degree of exposure to lifting and bending and the intention to leave the nursing profession (ITL, defined as ‘considering leaving the profession several times a month or more often’). Among those not exposed to lifting and bending activities, 15.6% of nurses considered this step compared with 25.6% of those nurses with maximal exposure to these tasks (not shown). However, as Figure 5 shows, this association seems to be related to the disability due to neck/shoulder or back complaints. Among nurses with no or low levels of this disability, the association between physical exposure and ITL was almost absent. It was only among nurses with medium and high levels of this disability that an additional effect of physical exposure on ITL could be observed.

Consequently, as long as nurses perceive their physical health to be good, high levels of exposure to physical tasks does not seem to contribute to the wish to leave the nursing profession.

Consequently, as long as nurses perceive their physical health to be good, high levels of exposure to physical tasks does not seem to contribute to the wish to leave the nursing profession.

3. Physical exposure to lifting and bending and lifting aids
In nursing, the use of lifting aids is a basic preventive measure for the development of musculoskeletal diseases. Therefore, we analysed the availability and usage of technical lifting aids. For this purpose, we selected nursing homes and medical/surgical wards, the working areas with the highest exposure to lifting and bending tasks (see Figure 2).

- Availability and usage
In Belgium, Great Britain and The Netherlands, the availability of lifting aids was almost 100% in nursing homes and more than 50% in medical and surgical wards. In contrast, in Poland and Slovakia, the availability was very low in nursing homes and virtually absent on hospital wards (Figure 6).

Our results show that many nurses are not using lifting aids even though aids are available. This proportion varied in nursing homes between 41% in Germany and 3% in The Netherlands, in hospitals it varied between 65% (Germany) and 13% (UK) (not shown).

It should be noted that in most countries in hospital wards both the availability and the usage of lifting aids was inadequate considering the high levels of exposure to these physical tasks.
Figure 6. Prevalence of lifting aids and their usage among nursing staff (including nursing assistants) in nursing homes (left Figure, n=3,812, no cases in Norway) and in Medical/Surgical Wards (right Figure, n=15,483).

Policy implications

- Health care institutions should monitor physical exposure to lifting and bending tasks at work and offer lifting aids where needed.
- Multifactor interventions\(^4\) (risk assessments, mechanical lifting aids, training, education) are essential in order to prevent the development of musculoskeletal disease among nurses.
- Only up to 10% of nurses in Slovakia, Poland and Germany have lifting aids available for use at work. These figures are very low, and need to be addressed.

References


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Nursing in Europe: Effort, Reward and Health

Summary
- Effort-reward imbalance is associated with an increased risk of poor physical and psychological health.
- Substantial differences exist with respect to effort-reward imbalance (ERI) among nurses in Europe. There are four countries with extremely high ERI: Poland, Slovakia, Germany and Italy.
- High effort-reward imbalance among the nursing profession may reflect the national economic transition (Poland and Slovakia) or transition in the health care system (e.g. Germany and Italy). In all instances it should be regarded as a warning signal.
- The findings emphasise the need for esteem and status control reward in nursing, not only of financial reward.
- A strong association of ERI and poor health exists. Furthermore, nurses with high ERI more often want to leave their profession.
- Institutions with low ERI benefit from higher commitment to their institution and to the profession.
- Conclusion: The ERI model identifies nursing professions in a crisis. The findings implicate the importance of not only financial, but especially esteem and status control reward and may be used for targeted intervention.

Background
One of the two worldwide most discussed stress models is the effort-reward imbalance (ERI) model by Siegrist. This model maintains that lack of reciprocity between efforts spent and rewards received (i.e. high 'cost' / low 'gain' conditions) in a core social role, the work role, defines a state of emotional distress in those who are particularly prone to autonomic arousal and neuroendocrine response and related adverse health outcomes.

High efforts and insufficient reward are topics high on the agenda within the nursing profession. Here, effort often includes high emotional, physical and quantitative demands and reward comprises aspects such as
- pay (financial reward),
- recognition and respect within a hierarchical system and public image (esteem reward) and
- possibilities for development, career opportunities and job security (status control reward).

Many of these aspects are closely related to the ongoing adjustments which have been taking place since the early 80s to the health care sector turning it into an economic environment focused on management efficiency. A recent cross-sectional study supports the assumption that stressful experience in terms of effort-reward imbalance and related health-adverse outcomes are relevant for nurses. However, no investigations have been carried out on the effort-reward imbalance and health among nurses in different countries.

In the NEXT-Study, the recently developed short version of the ERI assessment instrument was used. Besides the effort component (assessing work demands), the items cover the three reward components as indicated above. The instrument was used to investigate:

1. the degree of perceived effort and reward in the participating countries and in different health care settings,
2. the impact that effort-reward imbalance has on the nurses with respect to
   - physical health
   - psychological health
   - behaviour intention ("intention to leave the nursing profession" - ITL)

NEXT-Results
To investigate effort and reward in the European nursing profession we have transformed the scores of the scales to range from 0 (low) to 100 (maximum). The imbalance between effort and reward is being indicated by a ratio (ranging from .2 to 5) where increasing values indicate an increasingly adverse imbalance situation. An ERI ratio above ‘1’ can be considered to be a risk indicator not only with respect to general wellbeing but also to physical and psychological health. More about the ERI scales used in NEXT can be found in Kuemmerling et al, 2003.

In this report we limited the data analysis to registered nurses with complete data for all variables used. The data from 24,328 nurses from seven countries have been included: BE 3,522; DE 2,997; FR 2,661; IT 5,193; NL 3,509; POL 4,087; SLK 2,359.

1. Perceived effort and reward in the participating countries and health care settings

As Figure 1 indicates, the most fortunate situation was found in the Netherlands, where mean scores for effort were comparably lower and reward scores higher. The opposite was the case for nurses in Poland and Germany with rather high effort and low reward scores.

This is being reflected by the proportion of nurses with a pronounced imbalance between effort and reward, e.g. having adverse ERI ratios above ‘1’ (Figure 2). The proportion of those nurses was
found to be – in relation to other investigations – extremely high in Poland (22.1%) and Germany (21.8%), but also in Italy (18.1%) and Slovakia (13.9%).

A differentiated analysis of the reward components reveals:

- low perceived financial reward in Poland, Germany and Italy,
- high esteem reward in all countries, especially in the Netherlands and Belgium,
- low status control reward in Poland and Slovakia and to some degree in Germany and Italy.

![Figure 1. Mean scores for effort and reward for registered nurses in seven European countries (N=24,328). High scores for effort as well as low scores for reward indicate adverse situations.](image)

![Figure 2. Proportion of nurses with an (adverse) effort-reward imbalance ratio above '1' (N=24,328).](image)

- **ERI by type of institution**

In several countries effort, reward and the resulting imbalance differ substantially between the types of health care institutions. A differentiated view reveals the following ERI risk institutions in the participating countries:

In Germany, workers in hospitals were at high risk for ERI. There, 21.7% of all respondents had an ERI ratio >‘1’. This could be attributed to high effort and very low rewards (all reward categories). In German nursing homes even 26.5% were exposed to a high ERI. This was mainly due to extremely high effort and to low esteem reward. The high imbalance in German home care institutions (16.9%) was due to high efforts at work.

In France, nurses in nursing homes were at relatively high risk for having an adverse ERI ratio (12.5%). This could be attributed to high efforts.

In Italian hospitals (19.3% exposed to ERI >‘1’) and nursing homes (21.3%) the high ratio was due to high effort and low reward at work. The low scores for reward were due to all three reward components: esteem, status control and financial reward.

Nurses in Polish hospitals have a high ERI (25.5% exposed) due to both high efforts and low reward (all three components). In nursing homes (22.6%) the ERI was mainly due to low reward (all three components). Nurses in Polish home care institutions (12.0%) had a high ERI because of low status control and financial reward.

In Slovakian hospitals (14.3 exposed) and nursing homes (11.7%) nurses were exposed to ERI mainly due to low status control reward.

The effort-reward imbalance model may be used to support the implementation of specific intervention activities in health care institutions to reduce the burden of distress among those mostly concerned (specific nursing sectors, wards, types of institutions). This includes the application on different types of actions: on individual level (e.g. coping behaviours), on interpersonal level (e.g. social exchange at worksite) and at structural level (e.g. work organization).

2. Effort-reward imbalance, health and ITL - ERI and health

NEXT results show a clear association of ERI with general health. The higher the effort-reward imbalance ratio the higher the proportion of participants with low general health (Figure 3). The association was even more pronounced with burnout (Figure 4). These findings do not allow conclusions about causality, but causal association of ERI with health outcomes have been demonstrated in other studies.

![Figure 3. Association of effort-reward imbalance ratio with low general health (proportion of participants with low general health [SF36 gen. health score below 50], error bars indicate 95%CI of mean, N=23,846).](image)

![Figure 4. Association of effort-reward imbalance ratio with high burnout (proportion of participants with high burnout [CBI score over 50], error bars indicate 95%CI of mean, N=23,846).](image)
- ERI and intention to leave the profession

Even in countries with high ERI, the institutions may differ substantially with respect to ERI. Institutions with low ERI benefit from it: their nurses are significantly more committed to the Institution and - interestingly - also to the profession: the German example shows that in institutions with relatively low ERI, only half as many nurses want to leave the nursing profession (Figure 5).

Figure 5. Example Germany: in institutions with a low effort-reward imbalance less nurses want to leave the nursing profession (proportion of participants considering this step at least several times a month, error bars indicate 95%CI of mean; N=3,020).

Conclusions and implications

- Effort-reward imbalance (ERI) helps to identify populations of nursing staff at risk.
- The ERI results in NEXT indicate that even in stable countries single economic sectors such as health care are undergoing profound changes which may lead to a deep professional crisis.
- Perceived distress in nursing is not a consequence of increased intensity of demanding work but also of a lack of reward. Appropriate measures include human resources’ development as well as organisational restructuring based on needs of staff and the population served.
- The ERI instrument is a self-administered work stress assessment tool which can be useful in workplace health promotion. It supports the implementation of specific intervention activities to reduce the burden of distress among nurses mostly concerned.

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Attractive hospitals – the Belgian illustration

Summary
- In the NEXT sample, nurses easily left one job for another without leaving the nursing profession. Nevertheless, nursing turnover was not uniform across hospitals, leading us to compare low-turnover hospitals, defined as attractive, and high-turnover hospitals, defined as conventional, in the Belgian sub-sample.
- If structural characteristics did not help differentiating attractive and conventional hospitals, nurses’ perceptions of management features and work environment made the difference.
- These results, congruent with research findings in American magnet hospitals, emphasize the positive impact of high level of job autonomy, nursing leadership, organisational support and sustainable quantitative and emotional demands on nurses’ retention.

Background
In the NEXT sample, we observed that nurses easily leave one health care institution for another without leaving the nursing profession. The demand for qualified nurses enables them to change frequently and easily. This turnover is a burden for hospitals: it obliges human resources management departments to spend substantial amounts of time and energy in recruitment procedures; it enforces executives and head nurses to inform, train and socialize newcomers; it increases pressure on nurses who remain in their institutions; it also results in hidden costs and decreased standards of patient care. Finally, it leads to a feeling of nursing shortage.

In NEXT, it was observed that nursing turnover was not uniform across hospitals. In the Belgian sample, figures varied from 0.6% to 13.1% during the NEXT investigation period. This prompted us to compare low-turnover hospitals, defined as attractive, and high-turnover hospitals, defined as conventional. To interpret variations in turnover, we explored the antecedents of commitment, job satisfaction and retention, i.e. managerial practices and work environment attributes, which are relevant characteristics to examine.\(^1\)

The aim of this chapter is to analyse structural and organisational features of the Belgian hospitals involved in the NEXT-Study in order to identify institutions able to recruit and retain nurses. From a theoretical viewpoint, these institutions were supposed to present an organizational profile promoting nurses’ job satisfaction and organisational commitment, with fulfilment of both professional and personal needs.

Methods
The Belgian team followed the NEXT methodology described in ref. 2. Three healthcare sectors were involved in the survey (hospitals, old people homes and home care). For the purpose of this chapter, we focused on all 16 hospitals and used data from two questionnaires:
1. the organisational analysis carried out by each institution in the beginning of the data collection (September 2002). This questionnaire was available for only 12 institutions of 16. This questionnaire filled in by the nursing director with the human resources director was divided in 5 parts:
   a) local factors
   b) legal status of the institution
   c) general characteristics of the institution (level of care, professional model of care, activity, financial balance)
   d) resources data (number of nurses, specialised nurses and assistant nurses; number of permanent contracts; age distribution; turnover, absenteeism; vacancy positions)
   e) human resources management in the nursing department (posts descriptions, continuous teaching policy, career management, clinical ladder).
2. The baseline questionnaire (Q0, 2002) in which nurses assessed organisational factors, work environment as well as their level of job satisfaction, organisational commitment, burnout and intent to leave. Mean response rate in Belgium was 52.4% (2,305 nurses / 4399) with institutional rates ranging from 34.1% to 67.9%.

To define attractive and conventional institutions, we proceeded as follows: between September 2002 and September 2003, all nursing directions of the 16 hospitals recorded the number of nurses who were present at Q0 and then voluntarily left the institution. So, an annual turnover rate could be computed. The institutions were then classified into four quartiles according to their turnover rate:
(1) 0.6% to 3.1% (attractive hospitals);
(2) 3.7% to 5.0%;
(3) 6.3% to 7.4% and
(4) 11.8% to 13.1% (conventional hospitals).

We contrasted structural and organisational features of hospitals belonging to first and fourth quartiles.
NEXT-Results

Table 1 shows selected indicators of structure, activity, financial results, human resources management, and nursing. As it can be seen, characteristics were equally distributed among attractive and conventional hospitals. One should keep in mind that some questions were not easily answerable (e.g. absenteeism data). Sometimes, answers were difficult to interpret (e.g. part of the budget devoted to continuing education, perceived difficulty to recruit nurses, staffing ratio when service mix is unknown). Context should also be taken into account. For example, two conventional hospitals are located in a region with the highest hospital density. In this region, turnover is high because competition between hospitals is hard and nurses can move between hospitals without much inconvenience in terms of e.g. home-work travels.

So, structural characteristics did not help differentiating attractive and conventional hospitals. We analysed nurses’ perceptions of management features and work environment. Comparisons of means between attractive and conventional hospitals were conducted according to nurses’ reports to the baseline questionnaire (Q0) (Figures 1 and 2).

<table>
<thead>
<tr>
<th>Legal status</th>
<th>Attractive institutions (n=3)</th>
<th>Conventional institutions (n=3)</th>
</tr>
</thead>
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<tr>
<td>Size (beds)</td>
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</tr>
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<td>1 loss / 1 balanced / 1 profit</td>
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</tr>
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<td>Perceived difficulties to recruit aid nurses</td>
<td>3 no</td>
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</table>

Table 1. Structural features of attractive and conventional hospitals

Significant differences were obtained for the following dimensions (p<0.05):

- In attractive institutions, nurses reported a higher satisfaction towards the value of their work, in terms of:
  - better fit between work content and nursing professional ideal
  - better adequacy between nurses personal and professional values and philosophy of care advocated by the nursing department
  - patient centeredness, visible through a charter accepted and shared by professionals.

- Nurse autonomy defined as ‘independent clinical decision-making in the best interest of the patient’ and control over practice relating to nurses’ decision-making capabilities over issues within their scope of practice are better evaluated in attractive institutions. Nurses appreciate to have a professional practice that covers their entire field of expertise. Moreover, working with other nurses and colleagues to have a ‘say’ in the issues affecting one’s work environment was pointed out in attractive institutions. Autonomous practice has been shown to be correlated with increased nurse satisfaction and retention of staff.

- Relationships between staff nurses and the hierarchical levels (from the head nurse to the nursing direction) were perceived as better in attractive institutions. Nurses recognised they have superiors who adopt a positive attitude, favour vertical and transversal communication,
provide necessary resources to the staff needs, take care of nurses and are supportive (recognition and answers to practical needs), promote professional development by autonomous and collaborative relationships, empower nurses to work collaboratively and value positive ways to resolve conflicts.

- In Belgian institutions, there is no objective workload measure. Nevertheless, in attractive institutions, nurses felt their workload more acceptable than in conventional institutions. Their arguments were (1) a good repartition of tasks between the staff members according to their level of qualifications; (2) a good balance in activities during the different shifts.

- Because in attractive institutions, nurses recognised to have good organisational support and high level of autonomy, they reported to be less frequently confronted to emotional demands and difficult and troublesome physician relationships (lack of communication and coordination). The burnout level was lower than in conventional hospitals.

- Finally, in attractive institutions, nurses reported lower work-family conflicts, due to a good balance between work demands at hospital (foreseeable and flexible work schedules, limitation of recalling) and personal life.

- Consequences of the combination of these organisational attributes are clear: in attractive institutions, nurses reported a higher job satisfaction, a higher affective commitment to the institution and a lower intent to leave the institution (intent to leave the institution was an excellent predictor of the behaviour, because hospitals were classified according to their turnover rate).

As a whole, these features are typical of common variance sources:

- transformational leadership, associated with strong supervisor support and individual consideration, resulting in employee extra-effort, which could explain why workload is perceived as more acceptable.

- through its dimension of intellectual stimulation, transformational leadership is also expected to favour empowerment and provide impetus for nursing practice improvement.

- high degree of organizational support ("caring organization"), associated with feelings of recognition and reward, which could also explain extra-effort and why nurses feel their work is valued.

- fairness and justice in HRM practices, resulting in feelings of meaningful and valued work.

- open and timely communication allied with some degree of formalization, which decreases role ambiguity and role conflicts, and increases job autonomy, enabling nurses to respond adequately to emotional demands, which decreases the risk of burnout.

- good relationships between colleagues, between physicians and nurses, resulting in an overall good organizational climate, favouring trust and respect, and leading to a higher commitment.

**Implications**

These results are quite congruent with research findings in American magnet hospitals. In the early 1980s, these hospitals were recognized for their success in attracting and retaining nurses even during times of serious shortages; they were then described as "magnets" for nurses. An extensive research has been conducted in these magnet institutions to identify the keys of their success. The following elements were found in magnet hospitals: flat organizational structure, decentralized decision-making, flexibility in scheduling, positive nurse-physician relationships, opportunities for professional development, a good balance between effort and reward, and nursing leadership that supports investment in education for nurses and values their expertise. In addition to organizational factors that contribute to the working environment, the nursing practice plays an important role in American hospitals with high nurse job satisfaction: high level of autonomy, opportunity to exercise control over one's professional practice, and sustainable quantitative and emotional demands.³ At this stage, caution is required in the interpretation of attractiveness of Belgian hospitals. Firstly, data from the NEXT-Study are limited and our interpretation of "magnetism" was mainly inductive. Secondly, we do not know how attractive hospitals performed on other dimensions, such as the quality of care. Dissemination of NEXT results and further research should help hospital managers to identify managerial practices and work environment attributes leading to both a high level of quality of care and a good nursing staff attraction and retention, according to limited resources and national legislation, policies and rules. Acting on these attributes and creating a workplace that fosters retention could prevent the lower productivity caused by high turnover rates and help institutions in their human resources management.

Throughout the world, nursing researchers are interested by identifying some of means to alleviate national nursing shortage or, more humbly, to encourage nurses retention in healthcare institutions. The international research had increased the visibility of attractive institutions in the United States but also in European countries² and had fostered other interesting researches. All the results obtained suggest that in many countries, hospitals can work on their attractiveness. In Europe, nurses face a lot of difficulties in their work organisation as well as in their work content or in the lack of autonomy they obtain in their field of competence. The international promotion of the concept of attractive institutions could serve as catalyst for widespread improvement in nurses’ work environments in European institutions.
References


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Work schedules of nurses in Europe

Summary

- Inconvenient working hours are commonly regarded as one of the major disadvantages of nursing work.
- There are pronounced international differences with respect to shift systems and working hours between the countries.
- In many countries a high proportion of nurses is satisfied with their work schedules.
- In all countries, the dominant shift pattern, working day and night shifts is the most dissatisfying shift pattern.
- Quantitative demands, quality of leadership, influence when planning the rota and opportunities to swap shifts are work organisational predictors for (dis-)satisfaction with working hours.
- The degree of influence when planning the rota varies considerably between the participating countries.
- For a small but significant proportion of nurses night work is an appreciated work schedule for combining professional and private life.
- Low quality and quantity of sleep seem to play an important role as factors reducing psychological and physical health of the night working nurses.
- The shift schedule was not associated with the intention to leave the nursing profession. However, unpredictable and irregular working hours make nurses consider leaving the profession.
- Forcing nurses to change shift patterns and not taking nurses’ wishes to change shifts into account increases the nurses’ wish to leave the profession.

Background

The work schedule is an important work aspect influencing not only job satisfaction but also health. In nursing, four work schedule characteristics are of importance:

- amount of time (weekly working hours),
- timing of the working hours (shift system),
- predictability/flexibility and
- control over one’s work schedule.

Work schedules in nursing differ between the European countries and also between health care institutions. This indicates that in spite of the necessity of 24 hours work in nursing a substantial potential for variation (and improvement) exists. The adequate organisation of the nurses’ work schedule may have a considerable influence on nurses’ commitment to the institution and profession.

The NEXT-Study provides the opportunity to investigate:

1. How do the work schedules differ between European countries?
2. How satisfied are nurses with the different work schedules and which factors influence this?
3. To what extent are work schedules associated with age and health outcomes?
4. To what extent do work schedules play a role when leaving the nursing profession?

NEXT-Results

When considering different work schedules among nursing staff, the following should be taken into account: Different work schedules reflect different working hours but also different work exposure. For example, working nights in hospitals is associated with substantially higher emotional and lower quantitative demands. Furthermore, work schedules may to some degree represent different types of health care organisations: nurses working in home care and in out patient care usually do not work nights. More importantly, some occupational groups are found in certain shifts and not in others: head nurses, sisters and also unqualified carers usually do not work nights.

Still, in this overview all participants have been included to describe the associations of work schedules with the total sample of participants. Where the effects described above influenced the results this was discussed.

Data from the NEXT basic assessment (2002/3) and the follow up assessment (2003/4) have been used.

1. How do the work schedules differ between European countries?

The international variation of distribution of work schedules is evident (Figure 1). In most countries more than half of all participants worked in the (strenuous, (see below)) ‘day and night shift’. A different pattern was found in France. There, most night shifts were done by nurses ‘working nights only’. Findings below indicate that this was perceived as a favourable work schedule.

The length of weekly working hours differed considerably between the participating countries. In Poland and Slovakia full time work prevailed, resulting in mean weekly working hours of almost 40 hours (Figure 2). In contrast, part time work was common especially in The Netherlands and in Belgium. The shortest mean weekly working hours were found in The Netherlands (25.8 hours a week) and in Norway (31.4). Interestingly, the frequent positive ratings for working conditions and different outcomes found in these two countries were largely independent of the number of weekly working hours.
2. Satisfaction with the working schedules

Satisfaction with working hours will be regarded from two points of view, subjective well being and private life.

All in all, 72% of all participants were satisfied with their working hours with respect to their well being (Table 1). The very high figures for Belgium (78%), Norway (80%) and The Netherlands (87%) indicate that nursing work schedules can be organised in a satisfying way in spite of the necessity of inconvenient working time.

As expected, the proportion of satisfied participants was highest among those working regular day hours (in total 89%). In this group, one of five respondents was a ward sister which means more influence when planning the rota. As Figure 4 indicates, this differs substantially between the participating countries. In Poland and Belgium one out of two, and in Italy, France and Slovakia two of three participants: The Netherlands, Norway and Belgium this association was significant.

Another explanation for the high proportion of satisfied nurses ’working night shift’ may be a process of self-selection, which is known to occur among night shift workers, resulting in the fact that older workers are those who dealt better with night shifts (e.g. due to ‘healthy worker effect’). Indeed, in the group of night shift workers the proportion of nurses satisfied with working time increased linearly with age (Figure 3), which was not the case for the groups working in other shift schedules. This selection process needs to be considered when interpreting findings associating shift, health and further outcomes.

- Influence when planning the rota

One of the most important factors with respect to satisfaction with working hours is the degree of influence when planning the rota. As Figure 4 indicates, this differs substantially between the participating countries. In Poland and Belgium one out of two, and in Italy, France and Slovakia two of three nurses reported no or little influence.
Figure 3. Satisfaction with working time with respect to well being by shift schedule and age (N=36,722).

Figure 4. Do you have any influence in the planning of the rota? (N=36,095).

Table 2. Work organisational factors contributing to (dis-) satisfaction with working hours (with respect to their well being) by country (multiple Log. Regression with categorical variables; ‘--’ indicates: variable not assessed).

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Naegelkerke $R^2$: .27 .20 .24 .21 .21 .21 .17 .16 .28 .11

Table 3. Proportion of participants aged 50 years and above by work schedule and country. Oldest group in each country marked grey (N=36,492; no data for UK).

<table>
<thead>
<tr>
<th>Shift, age and health</th>
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<td>There is scientific evidence of increased adverse effects of night shift among older nurses. NEXT data indicates that nurses working night shifts only are on average comparably old (42.8 years) and in three countries (BE, FIN, NL) older nurses tend to cumulate in the group of nurses working nights (Table 3). In contrast, health indicators reveal potential physical (lower general health) and psychological strain (higher burnout) among shift workers and especially nurses working nights only (Figure 5). Differentiated analysis reveals that this is mainly due to the low quality of sleep during work periods (not shown). Consequently, night shift may be appropriate for nurses who do not have sleeping problems during phases of work (about 75% of all nurses working nights).</td>
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Table 3. Proportion of participants aged 50 years and above by work schedule and country. Oldest group in each country marked grey (N=36,492; no data for UK).
Night work in nursing – possibility to combine work and private life

Those working many night shifts a month ('10 and more', 4.3% of all participants) were just as satisfied with their working hours with respect to their private life as those working days only (51.4%). This was the case for all age groups. It indicates that for a small but significant proportion of nurses, night work is a proper way to combine private and professional life. In contrast, those nurses who occasionally worked nights ('1 to 9 nights a month') were significantly less satisfied.

4. Shift schedule characteristics and intention to leave nursing (ITL)
The work schedule itself was not clearly associated with the frequency of considering leaving the nursing profession (intention to leave nursing; ITL). In the total sample, 15.4% of all participants frequently considered this step (frequently = at least several times a month). The proportion was highest among those working nights only, followed by nurses working shifts including night shifts. However, this pattern was not uniform for the different types of institutions and not for the participating countries.

ITL increased linearly with the number of nights worked per month (of those working 10 or more nights 20% considered this frequently).

Working split shift and getting up before 5 o'clock did not show pronounced associations with ITL. If swapping shifts was easy (45% of all respondents) the risk for ITL dropped significantly to 13%.

Working alternating shifts increased the risk for ITL somewhat (17%). It was also increased when working 3 or 4 weekends a month (ITL: 17 and 20% respectively).

Special risk groups for ITL seem to be the following: Those who 5 or more times a month had to take over shifts on short notice had a much higher risk for ITL (24%) compared to 13% (never). Of those who absolutely wanted to change shifts (11.7% of all respondents) 30% considered leaving nursing.

- Changing shifts

The longitudinal part of NEXT demonstrates the effect of changes of the shift pattern on ITL. Among the 689 participants who during the 12 month investigation period had changed shift system because they had asked for it, the proportion of those who frequently considered leaving nursing declined marginally from 18.1 to 17.1% (Figure 6). More obvious were the negative effects of those whose wish to change shift patterns was denied (n=290). Here, the proportion of ‘potential leavers’ increased from 20.3 to 27.9% (Repeated Measures ANOVA, p<.01). Also among those who were forced to change shift against their will (n=714) a significant increase of potential leavers was registered (from 18.7 to 22.3%; p<.05).

Policy implications

- Health care institutions should consider different shift patterns which take into account the nurses’ needs. Several examples show that satisfying shift work for nurses is possible.

- Health care institutions must consider that it is not so much the shift pattern which makes nurses want to leave the profession, but rather, the unpredictability and irregularity of the working hours.

- Health care institutions should acknowledge that the quality of leadership plays a central role for nurses’ satisfaction with their work schedule.

- The strongly moderating effect of sleep on physical and psychological health of nurses working nights implicates that sleeping problems in this groups should also be assessed in occupational health surveillances.
References


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Contact: www.next-study.net, next@uni-wuppertal.de June 2005
Nurses’ work home interference in Europe

Summary

- Among nurses in Europe, the Work to Family conflict (WFC) is more pronounced than the Family to Work conflict (FWC).
- Slovakian and Italian nurses experience the highest conflicts from work to family.
- Among nurses, the WFC is most pronounced at the beginning of the career and at between 30 and 40 years of age.
- High quantitative and emotional demands at work contribute to the WFC of nurses.
- In most countries, irregular working hours and unpredictability of overtime exacerbate WFC among nurses.
- WFC is one of the major factors leading to the intention to leave the profession.

Background

Work-home interference is a concept that describes the mutual interaction of the home and the work domain of employees. This relationship is bidirectional. When the work domain negatively affects private life, a Work Family Conflict (WFC) may develop. Accordingly, the negative impact of the private domain on work is called Family Work Conflict (FWC) (Figure 1). Among nurses, the WFC is more pronounced than vice versa. Therefore, we will – in this article – concentrate on this aspect of work-home interference.

Rationales for the WFC are role deficiencies:

- Strain based: WFC occurs when work stress constricts role fulfillment in the family domain (e.g. being too tired to play with children)
- Time based: WFC is based on a lack of time for the role in the family (e.g. working at weekends or overtime).

Although WFC is conceptualized in the direction from work to family life, factors outside the work domain such as marital status also play a significant role in the subjective recognition of WFC. Several studies – not only NEXT – have indicated that the WFC is one of the most relevant psychosocial stressors at work. It has a considerable influence on relevant health, attitudinal and behavioural outcomes.

![Figure 1: The concept of work-home interference: Work Family Conflict (WFC) indicating negative impact of work on family (or private life), Family Work Conflict (FWC) indicating negative impact of family or private life on work.](image)

In this chapter we analyse WFC with the following goals:
1. to describe the WFC among nurses in Europe
2. to investigate underlying work related factors for the WFC and, finally
3. to describe the association between WFC and intention to leave nursing.

NEXT results

Method

WFC was measured by a five-item-scale developed by Netemeyer et al. The scores were transformed from 0 ('no conflict') to 100 ('maximum conflict').

1. WFC among nurses in Europe

In the comparison of WFC in all countries under investigation three different patterns were observed: Italy had high (53) mean scores for WFC, medium high scores were observed in France, Belgium, Germany, Slovakia and Finland (39-46), and low WFC values in Poland, Norway and the Netherlands (27-32) (Figure 2).

In Finland (FIN), France (FR) and Italy (IT), WFC was lower for male nurses, than for female nurses (ANOVA, p<0.05). In all other countries, male nurses reported higher WFC means (ANOVA, p<0.05), however, this was not significant in Belgium (BE), Poland (PL) and Slovakia (SLK).

![Figure 2: Mean scores for Work Family Conflict (WFC) of nursing staff (including nursing aides) in Belgium (n=4,192), Germany (n=3,514), Finland (n=3,908), France (n=5,284), Italy (n=5,363), Norway (n=2,627), Netherlands (n=3,983), Poland (n=4,195) and Slovakia (3,185). Error bars indicate the 95% Confidence Intervals of the mean.](image)
The relationship between WFC and age was strongly affected by factors such as marital status or the number of working hours. We compared WFC for registered nurses with or without children (Figure 3). Unlike FWC – where nurses “living with children” always had a higher conflict potential (not shown) - WFC shows the following pattern:

- The maximum levels for WFC were found around 30 years of age. This was the case for nurses with and without children.
- Up to age 40 both nurses with children and those without reported the same level of WFC. Interestingly, in the 40 to 45 age group, nurses without children experienced considerably higher WFC than their colleagues with children.
- Within the age group 45+, nurses without children have a lower WFC than those with children.

These results may indicate that – contrary to common beliefs – children are not the central key factor in terms of the home domain of WFC for nurses, at least up to 45 years of age. This is supported by our observation that the WFC decreases with the number of children: nurses with one child had a somewhat higher WFC score (42) than those with children (41). Nurses with three or more children (40) were on the same level as nurses without children. It should be noted, however, that the WFC differences between the groups were small.

In summary, the above findings may indicate that many nurses with children actually do cope with work and that nursing work may provide an opportunity for parents to combine work and family life (see also the NEXT report on work schedules).

It was not surprising to find that single parents had the highest WFC at all age groups (not shown).

2. Work-related factors influencing WFC

Using linear regression analysis, we explored work related factors for WFC specific to each country. Table 1 gives an overview of these factors. Positive relations (+) indicate factors leading to WFC, whereas negative relations (-) indicate factors that may be preventive for WFC.

Four main aspects could be identified: Quantitative and emotional demands, being pressured to work overtime, and the shift pattern.

- Predictors of strain-based WFC
Quantitative demands was the only predictor of WFC which was identified in all countries. In some countries, this was exacerbated by emotional demands. Both aspects resulted in strain-based WFC.

- Predictors of time-based WFC
Being pressured to work overtime (but not the amount of overtime) was a strong predictor of WFC leading to a time-based WFC. This was observed in several countries and was accompanied by the type of shift work: Those working in regular shifts (‘regular day hours’, ‘day shift’) had lower WFC than those with irregular shift, as did those working ‘day and night shift’ (the majority of participants). Interestingly nurses working ‘night shift only’ had lower WFC than those working ‘day and night shift’.

Consequently, the indicators of time-based WFC emphasise the negative impact of irregularity and unpredictability of working hours on the WFC of nurses. The amount of working time only seems to play a minor role.

- WFC at an institutional level
In spite of similar work tasks in all hospitals, substantial differences can be found with respect to WFC in the different institutions. Figure 4 shows these differences in 16 German hospitals. This implies that there is organisational potential for improvement of WFC on institutional level. Figure 4 also illustrates the clear positive relationship between WFC and quantitative demands at the hospital level.

Figure 3: WFC of registered nurses with (n=10,818) or without (n=17,827) children by age groups in nine countries. Error bars indicate the 95% Confidence Intervals of the mean. WFC ranges from 0 (absent) to 100 (very high).

Figure 4: Mean values for WFC and quantitative demands in 16 German hospitals (n=2,351). Each ‘+’ characterises one hospital.
factor | BE | D | FIN | FR | IT | PL | SLK
--- | --- | --- | --- | --- | --- | --- | ---
Strain-based WFC | quantitative demands | + | + | + | + | + | + | +
| emotional demands | + | + | + | + | + | + | +
| quality of leadership | - | - | - | - | - | - | -
Time-based WFC | pressured to work overtime | + | + | + | + | + | + | +
| schedule: day & night shift | + | + | + | + | + | + | +
| schedule: day shift | + | + | + | + | + | + | +
| schedule: regular day work | + | + | + | + | + | + | +
| working hours/week | + | + | + | + | + | + | +
Individual | gender | - | - | - | - | - | - | -

Table 1: Strain- and time-based WFC in seven European countries (controlled for gender, n=27,603). Positive relations (+) are indicating factors leading to WFC, negative relations (-) are preventive factors for WFC.

3. WFC and ‘intention to leave nursing’
In all countries WFC was positively associated with the nurses’ intention to leave nursing (ITL) (r=0.17-0.28 p<0.01). Figure 5 describes WFC (mean values per hospital) and ITL (rates of nurse who frequently consider leaving nursing) in 16 German hospitals, indicating a clear relationship. Further detailed analysis on ITL showed that, among several work related factors influencing the decision to leave nursing, the WFC is one of the key factors.

![Figure 5: WFC and intention to leave the profession in 16 German hospitals (n=2,331). Each ‘+’ characterises one hospital.](image)

Policy implications
- National policies for the promotion of compatibility of work and family should be reviewed with a focus on nurses’ needs.
- Health care institutions should recognize the quantitative and emotional work demands as a burden on family life.
- Flexibility of working hours is a crucial factor in today’s working life – especially in nursing. The results indicate, however, that flexibility is not only a demand on nurses but also on the employers in health care: they may substantially reduce WFC by offering reliable, adequate and flexible work schedules to their nursing staff.

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Satisfaction with pay among nurses in Europe

Summary

- Between 5 and 44% of all nurses in each country reported economically tight living conditions. In all countries single parents were at special risk.
- In all countries, dissatisfaction with pay was most pronounced in relation to the pay of other professions. In this respect between 58 and 90% of all nurses were dissatisfied.
- NEXT data indicates that dissatisfaction with pay only marginally explains the 'intention to leave the nursing profession'.
- Low esteem reward and low status control reward are more relevant for nurses than perceived low financial rewards when considering whether to leave the profession.

Background

Satisfaction with pay is often considered to be a major source of dissatisfaction within the nursing profession. Furthermore it is often considered to be one of the major contributors to premature departure from the nursing profession. But does this association between pay and premature departure really exist? What is the real contribution of pay to turnover within the nursing profession? The NEXT-Study provides the opportunity to examine this issue.

Three aspects of (dis-)satisfaction with pay may be distinguished:

- (dis-)satisfaction in relation to the individuals’ needs,
- (dis-)satisfaction in relation to nurses in other institutions and
- (dis-)satisfaction in relation to the pay of comparable professions.

This differentiation considers the fact that individuals tend to evaluate experiences relative to some kind of norm or reference level.

In this document the following questions will be discussed:

1. How do nurses perceive their economic situation?
2. How satisfied are nurses with their pay?
3. How much is dissatisfaction with pay associated with the intention to leave the profession?

NEXT-Results

Satisfaction with pay was assessed by three single items covering the three aspects as indicated above and developed by NEXT. An overall score ‘satisfaction with pay’ was constructed summarising the three items. More about this scale used in NEXT can be found in Kuemmerling et al, 2003. The economic situation was assessed by one single question: “Is your economic situation -very strained, -strained, -neither good nor bad, -good, -very good?”.

In this analysis we limited the data analysis to registered nurses. Data from 31,426 nurses from seven countries have been included: BE 3,646; DE 3,060; FIN 2,413; FR 2,657; GB 2,049; IT 5,478; N 1,857; NL 3,534; POL 4,275; SLK 2,457.

1. How do nurses perceive their economic situation?

As Figure 1 indicates, the economic situation was perceived differently by participants in different countries. As expected, the proportion of nurses considering their economic situation to be strained was greatest in Poland (33%) and Slovakia (44%). In those countries, nurse wages are very low and are not sufficient to support a small family. Polish nurses earn approximately 320 Euro a month, about 60% of the mean salary. Hospital ward nurses in Slovakia earn about 220 Euro per month (gross) which is around minimum wage, the income of community nurses is even less (ca. 160 Euro).

A sizeable proportion of nurses in the UK (28%), Germany (25%) and Finland (21%) also reported strained economic situation. The country with the best economic conditions reported were The Netherlands with two thirds of all nurses reporting a good or very good economic situation. In all countries, single parents had roughly twice the risk of having a strained / very strained economic situation. 46.3% of the 1,868 participating single parents reported this vs. 18.6% of the remaining sample. Only 11.2% of all single parents lived in good or very good economic conditions (others: 36%).

Figure 1. Perceived own economic situation among registered nurses in ten European countries (n=31,881).

Summary

- Between 5 and 44% of all nurses in each country reported economically tight living conditions. In all countries single parents were at special risk.
- In all countries, dissatisfaction with pay was most pronounced in relation to comparisons with the pay of other professions. In this respect between 58 and 90% of all nurses were dissatisfied.
- NEXT data indicates that dissatisfaction with pay only marginally explains the ‘intention to leave the nursing profession’.
- Low esteem reward and low status control reward are more relevant for nurses than perceived low financial rewards when considering whether to leave the profession.
2. How satisfied are nurses with their pay?

Satisfaction with pay was low in all participating countries with some exceptions including France and the Netherlands. In Poland, Slovakia and Finland the perceived tight economic situation was reflected by a very pronounced dissatisfaction with pay. Also Italian nurses were to a very high degree dissatisfied with pay (Figure 2).

In all countries nurses were most dissatisfied with their pay in relation to the pay of other comparable professions (Figure 3).

Dissatisfaction was least pronounced when considering the pay of nursing colleagues in other institutions (Figure 5).

These findings confirm that satisfaction with pay reflects individuals’ needs only to a limited extent. In addition, this factor might reflect perceived injustice, especially an imbalance between what a nurse gives and what she or he receives (see below).

- Satisfaction with pay and age?

Nurses between 30 and 40 years of age were most dissatisfied with pay. In the NEXT sample, these age groups are most likely to report adverse work exposures and low job satisfaction and to consider leaving the nursing profession.

- Is further qualification rewarded with better pay?

In several countries (France, Italy and The Netherlands) specialised registered nurses were significantly more satisfied with pay than their less qualified colleagues. This indicates that in those countries, a professional career in nursing is rewarded by increased pay. In contrast, no financial reward for professional development seems to be more common in Germany and Belgium. German nurses often have the impression that ‘further qualification does not pay’.

The pay system in the British National Health Service is currently under revision. According to the new ‘Agenda for Change’ pay should be linked to performance and professional development.

3. Association between dissatisfaction with pay with the intention to leave the profession.

In all countries, participants who were dissatisfied with pay were more likely to frequently consider leaving the nursing profession (ITL) than were their satisfied colleagues (not shown). This association was expected. However, in the participating countries, satisfaction with pay statistically explained only between .9 (Norway) and 2.8% (Belgium) of the variance of ITL (Log. Reg., Figure 5). In other words, participants’ wish to leave the profession could only be very partially explained by dissatisfaction with pay.
We speculated earlier that dissatisfaction with pay only partly reflects actual need. It might instead indicate a perceived injustice: an imbalance between what a nurse gives (effort) and what she or he receives (reward).

The Effort-Reward model assesses such an imbalance. It offers the opportunity to compare three different types of reward and their association with ITL:

- financial reward,
- esteem reward and
- status control reward (career opportunities and job security).

Figure 6 shows that the financial reward component is considerably less strongly associated with ITL than the esteem reward and status control reward.

Thus, we conclude that perceived low esteem reward and low status control reward make nurses more likely to consider leaving their profession than perceived low financial rewards.

**Policy implications**

- Health policy makers should acknowledge the widespread dissatisfaction with pay among nurses, but they should also be aware that the shortage of nurses cannot be solved simply by increasing wages.
- Employers should consider pay systems which reward increases in individuals’ competencies and job content. Proposals for such systems exist.
- Health care providers should acknowledge nurses’ need for additional rewards such as esteem and status control. These are more closely related to the intention to leave the profession (and to the commitment to the institution) than financial rewards.
- Employers in Poland and Slovakia should consider the high proportion of nurses with a strained economic situation.
- Health care employers in all countries should consider the often strained financial situation of single parent nurses.

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The role of recruitment and retention nurses in England

**Summary**
- The aim of this report is to describe the work of senior nurses responsible for recruitment and retention in acute trusts in the National Health Service in England.
- Of the 156 trusts, 36 employed a senior nurse in this capacity and 29 were interviewed in depth.
- All were using a range of strategies to attract and retain nurses. They also worked closely with university staff to attract and retain student nurses.
- Most efforts to attract nurses were now targeted at local populations, with declining investment in overseas recruitment campaigns.
- None of the postholders had received any special preparation for their role, but all had extensive clinical nursing experience and reported high levels of job satisfaction.
- Further research is required to corroborate the findings of this exploratory study and to establish the effectiveness and cost-effectiveness of employing a nurse dedicated to address recruitment and retention issues.

**Background**
In the National Health Service (NHS) Plan the government stated that by 2004 an additional 20,000 nurses would be employed in the United Kingdom (UK). This target would be achieved by:
- Increasing throughput from training.
- Improving the working lives of staff, thus helping to increase retention (Working Lives Standard).
- Recruiting more nurses from overseas.

In September 2002 the government announced that 20,000 additional nurses had been employed. This has been achieved mainly by increasing the number of part-time nurses without permanent contracts of employment. There has also been an increase in numbers of nursing students, but efforts to attract nurses no longer practising back to the NHS have been less positive. However, many trusts are now operating schemes to encourage women with domestic responsibilities to remain in the NHS and there are anecdotal reports that in some localities these are successful. Some trusts have employed senior nurses with a specific remit to improve recruitment and retention, but little has been published about their important work or its success. Thus the findings presented below help fill this gap in the literature.

**Aims and methods**
The aims of the study were to:
1. Explore the role of senior nurses responsible for recruitment and retention in acute NHS trusts in England.
2. Describe the type of initiatives undertaken by senior nurses responsible for recruitment and retention.
3. Document postholders’ professional background; arrangements for continuing professional education; and managerial accountability.

**Methods**
Data were collected by telephone interview. In the summer of 2004, when the data were collected, there were 156 acute NHS trusts in England. The most senior nurse in each trust was contacted to determine if there was member of staff responsible for nursing recruitment and retention. Ninety two trusts employed a member of staff to address recruitment and retention. In 36 trusts, this was the responsibility of specialist recruitment and retention nurses. Twenty nine were interviewed. They represented trusts from all major regions in England and were from inner city, urban and rural areas.

**Analysis**
The tape-recorded interview transcripts were transcribed verbatim and analysed by content.

**Ethical considerations**
Permission to undertake the study was obtained from the multi-regional ethics committee and each of the local research ethics committees covering the trusts where the postholders were employed.

**NEXT-Results**

*Information about the post and postholders*
Seventeen of the 29 postholders undertook recruitment and retention as their sole responsibility. The remaining 12 were responsible for recruitment and retention initiatives as part of another full-time nursing role. They were unable to state the amount of time spent on staffing issues because it varied weekly. Postholders either reported to the most senior nurse in the trust, to a senior manager in the human resources (HR) department, or both. Their special knowledge of professional nursing issues complemented traditional HR expertise.
All postholders had a great deal of clinical nursing experience and many worked occasional shifts to maintain clinical competence. They had been addressing staffing issues for between three months and five years. Responsibility was primarily for nursing. However, eight postholders supported colleagues working with the professions allied to medicine. They worked closely with HR departments, but rather than overlapping with HR function. They used their professional nursing expertise which HR staff lacked.

**Recruitment and retention initiatives**

Postholders had expanded the role considerably since appointment. They were involved in three types of activities: international and national initiatives and locally targeted ways of attracting and keeping staff.

- **International activities**

  Twenty one postholders had been involved in international recruitment drives at some time since appointment. However, this aspect of their work appeared to have reached a plateau and only half were now actively involved in campaigns intended to bring overseas nurses into the UK. Campaigns were always organised through specialist recruitment agencies. When the new recruits arrived, postholders worked hard to enable them to settle into their new jobs and the wider community. In the UK the Nursing and Midwifery Council requires nurses qualified in most other countries to undertake a three month practice-based adaptation course before they are considered competent to practice. Postholders were responsible for arranging adaptation courses and always worked in the clinical areas with recruits during the adaptation period. Contact was maintained in a pastoral capacity long after the adaptation course ended. Often careers advice was offered and sometimes overseas nurses were encouraged to apply for promotion.

  Thirteen postholders were employed in trusts where future international campaigns were scheduled, but postholders expressed strongly held views about the morality of organised international campaigns. However, many had been able to offer employment to overseas nurses who had originally come to work in nursing homes and who were seeking second jobs in the UK. These nurses had often been unhappy in their first jobs and settling them into the NHS provided job satisfaction for the postholders.

- **Locally targeted activities**

  Postholders, especially those outside London and the south east, reported that the emphasis of recruitment and retention had shifted. More effort was being invested in initiatives intended to attract nurses in the local population to work in the trusts and once recruited, to encourage them to stay. Public relations exercises took place with schools, job centres and careers advisors to increase awareness of careers in the NHS. Once student nurses had been recruited by the local university, postholders usually saw them throughout the course and arranged visits to the trusts during the final year. They provided careers advice, explained how to complete job applications and interviewed nurses for their first posts. Once the newly qualified nurses had been appointed, they received high levels of support from the postholders, who were anxious to make them feel valued. They organised in-house programmes of continuing professional education (CPE), arranged for them to rotate around the trust so they had valuable experience in different clinical areas and provided careers advice. They offered support to new registrants, whose early clinical experience they considered to be stressful.

  Postholders representing trusts in different parts of the country claimed they no longer had vacancies for junior nurses but attracting and retaining experienced practitioners remained challenging. A range of approaches were used. Open days were held and advertisements were placed in local newspapers. Most postholders scrutinised exit questionnaires completed by nurses leaving their trusts to identify reasons for departure. A great deal of work was undertaken with individual nurses to improve retention. If clinical nurse managers reported that an experienced member of their team was becoming discontented, postholders would arrange to see them individually on an informal basis. Flexible working hours were offered where possible, working part-time had become increasingly common and careers advice was given by many postholders. Opportunities for CPE were offered as an incentive to stay.

  Nineteen postholders were involved in return to practice initiatives, but these were not generally successful. Returners who have not practised for five years or more must undergo a return to practice course with three months supervised practice. Numbers were disappointing. Similarly, there was little mention of schemes to encourage older nurses to delay retirement.

- **National activities**

  National campaigns to boost recruitment seemed less important than work at international or local level. Thirteen postholders helped place advertisements in the national press or attended national job fairs, but these methods were considered expensive and according to many postholders, had become unnecessary once they gained experience with staffing issues and used the approaches described above.

  Although they could describe their work in detail, none of the postholders could supply firm evidence of its success. They could not provide any evidence that their activities represented value for money and none could provide information about staffing levels as corroborating evidence of success.

**Qualifications, continuing professional education and plans for career progression**

None of the postholders had received any special preparation to enable them to undertake recruitment and retention initiatives, but some already held useful qualifications before they started. However, once appointed, all had developed additional, more specific skills, in particular expertise with information technology. There was a lack of career planning. Postholders appeared to enjoy considerable levels of job satisfaction and perceived themselves to be well-supported by managers, colleagues in their own trusts and wider, informal networks of individuals undertaking the same or related types of work elsewhere.
Discussion

This report provides a much-needed source of information about local initiatives to attract and retain qualified and unqualified nurses. A great deal has been written about the picture nationally, but there are few published accounts of locally targeted activity, so this research has begun to fill an important gap in the literature. It is likely that with growing concern about the morality and practicality of international recruitment and increasing evidence that there is no large existing population of experienced nurses keen to return to practice, managers will need to work closely with local education providers and employment agencies to attract recruits. Once appointed, creative methods of retention such as those described by the postholders will need to be put in place. Many of the approaches they describe are not new. They rely on providing opportunities and sources of support already known to be valued by staff, but which traditionally have not been available. For example, offering CPE is an important ingredient in most local strategies and is widely regarded as an important incentive to stay. Career counselling is also valued by student nurses and staff at different levels of seniority, but has not always been offered. More recently internal rotation through different clinical areas has emerged as a desirable and cost-effective means of increasing nurses' clinical experience and levels of job satisfaction.

Perhaps the most pleasing finding from this study is that in contrast to earlier work which has repeatedly demonstrated poor support and lack of consideration for nurses during training and later in their careers, there appears to have been a major change in attitude among managers. These people now appear to be highly valued by senior staff in the trusts and are perceived as individuals who require and deserve nurturing.

Despite their positive nature, the findings of this study should be interpreted with caution. The data were obtained from a research study originally designed to examine the type of work undertaken by senior nurses holding a specific remit for recruitment and retention rather than to obtain a picture of staffing issues nationally. The data do not provide reliable information about the extent to which these local initiatives were taking place elsewhere. It is plausible that in trusts where dedicated nurses are employed to address nurse staffing issues, more creative and effective strategies are being implemented. Thus there is a need to examine recruitment and retention strategies in other trusts. It will also be important to find a mechanism for sharing effective practice. The potential exists for sharing ideas at international level. Nursing shortages have been reported in most other western countries, but at present no other country appears to employ recruitment and retention nurses and few other countries appear to be tackling nursing shortfalls as aggressively as the UK.

A second criticism of the study is that its findings depend entirely on postholders' reports of their work and its success. All were very positive about their postholders' success and the lack of evidence to demonstrate the extent to which their activities were genuinely successful and if they offered value for money. This illustrates how little is known about postholders' success and the lack of evaluation both of their role and of recruitment and retention initiatives per se. These are important topics for future research.

Implications for other countries

- Nursing recruitment and retention can be improved by applying the strategies advocated by the government in the UK. These include: international recruitment; improving working lives, especially for women with domestic commitments; and increasing the number of nurses training.
- Employing dedicated recruitment and retention nurse specialists is emerging as a potentially valuable means of increasing and retaining unqualified and qualified nurses.
- Recruitment and retention nurses can effectively develop locally-targeted strategies to increase the nursing workforce.
- When recruitment and retention nurse appointments are made, candidates should be selected on the basis of interpersonal skills, knowledge of the locality and its workforce and clinical nursing expertise.

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Policy implications of the NEXT-Study: A framework

Summary
Based on a synthesis of the NEXT-Study results, this chapter sets out to establish a few priorities, as clearly as possible, in order to challenge decision makers and to start a dialogue with them. We propose six axes for reform:

1. Dealing with a changing health system
2. Knowing supply and demand in nursing
3. Developing nurses’ competencies and professional autonomy
4. Improving team work
5. Enhancing organisational support
6. Managing nursing workload

Our final recommendation would be to create a room for an effective and socially relevant dialogue between researchers and policymakers. We underline that a global vision is needed for building integrated policy reforms, leading to effective change.

Background
Formulating policy recommendations implies that the message to policymakers and managers should be informative and useful. The level of this message should be general, not detailed and operational, because the responsibility of scientists is to provide a reliable picture of a problem and propose solutions, whereas the responsibility of policymakers, managers and professionals is to convert solutions into lines of action. So, this chapter sets out to establish a few priorities, as clearly and consistently as possible, in order to challenge decisionmakers and start a dialogue with them.

The problem to address is a matter of
• improving recruitment and retention of professional nurses
• through the improvement of working conditions, in the broadest sense
• and within the constraint of maintaining the quality and efficiency of healthcare organisations.

This problem is what theoreticians of organisational performance call "a legitimisation alignment", i.e. a form of organisation which promotes organisational cohesion and ethos and, at the same time, demonstrates its effectiveness in achieving the missions of the organisation and reaching its objectives. A priori, it is not easy to improve working conditions under the pressure of efficiency: at a first glance, such goals seem incompatible. But most of us would agree that nurses’ well-being cannot be improved at the cost of quality of care or efficiency. Conversely, it would be unacceptable to improve efficiency to the detriment of nurse job satisfaction. This is exactly this tension that needs to be addressed: how to achieve the best balance between employee well-being and organisation public utility, through the levers of policy, organisational and professional change.

Please note that we are not claiming that the solution is simply to increase the amount of resources devoted to health services.

Scope of the report
Firstly, sound policymaking needs evidence-based data and arguments. Scientists should inform policymakers; policymakers should at least listen to scientists. Secondly, dialogue, however, is hard because scientists do not always succeed in identifying the policy implications of their results. Finally, as sociologists of science have shown, scientists and decisionmakers interact as members of distinct social groups. The scientist tries to convince, the decisionmaker tries to guess the intentions. The scientist aims to have his/her research taken seriously (which often means that it is funded), while the decisionmaker hopes to have his/her decisions legitimised by the scientist. This dialogue should become a partnership, which implies that both partners need to make a step towards each other.

There is accumulating evidence about the needs and demands of nurses. Instead of applying shortsighted policies, which can bring temporary relief but sometimes lead to unanticipated adverse effects, building integrated policy reforms is needed. While some individual regulations, rules, laws may be justified, taken in aggregate, they may ruin a system. Integrated policy reforms should relate to
• recruitment and retention of nurses,
• transformation of the management of healthcare organisations,
• and the place of nurses and nursing within the health system.

Finally, the scientist-policymaker dialogue is difficult, because priorities are different for the scientist, obsessed by methodological rigour, and the policymakers, who is decision-oriented. The scientist tests hypotheses, which may seem microscopic, and designs highly focused observational plans, whereas the decisionmaker is thinking within a political context and takes into account a number of influences before deciding on action. This document tries to simplify, without distorting, the messages from the NEXT-Study. It is not intended to dictate what policymaker should do. Our recommendations are based on observations, not on experiments. We learned from observations that improvements are possible, but there are still many grey areas.
This document proposes 6 axes for reform:

1. **Dealing with a changing health system**

   Do we need to remind ourselves that population health is a major collective and political responsibility? Health should be viewed as the wealth of a Nation, not as a sector which swallows billions of Euros. The Ministry of Health is not the wealthiest member of the political family, and is often subordinated to the Budget. However, there is a lack of tools - and maybe a lack of a vision too - to deal adequately with a changing health system. Change is challenging, and it is happening. Among current areas of change are:
   - an epidemiological transition (change in chronic diseases and conditions)
   - population ageing (partly responsible for the epidemiological transition)
   - changing rights of healthcare users,
   - a changing economic context.

   Such changes leave the health system ill-equipped, even in the most developed countries, particularly in terms of continuity and integration of care for patients with chronic conditions and functional problems, e.g. older patients. Some reports also highlight deepening health inequalities. Health status distribution, health determinants, and health needs of European citizens remain largely undocumented. What are the health goals in the next decade? Instead of late and "patchwork" reactions to phenomena that are already foreseeable, decision-makers should anticipate new needs, adjust the health system, and then plan the supply of health services and professional manpower. This is a prerequisite.

2. **Knowing supply and demand in nursing**

   As said earlier, sound policymaking needs evidence-based data and arguments. Surprisingly, however, things as simple as nursing manpower are not documented accurately. For example, it is hard to be clear about the so-called nursing shortage, because of a lack of data. A political "vision" should be supported by data. Data about nursing manpower should be continuously collected and analysed:
   - Supply (nursing schools, nursing education):
     - attractiveness of nursing education, applications, graduation rate, specialisation
   - Employment of graduates and nurses
     - migration
     - attractiveness of the various sectors of activity (health settings)
     - activity rate
     - general employment conditions (full- and part-time, absenteeism, long-term absence, continuing education, turnover, "natural" departures, etc.)

   This requires a set of indicators and an effective information system to analyse data and provide grounds for decisions and policymaking. Aggregate data at the EU level could allow international comparisons, benchmarking and meta-policymaking.

3. **Developing nurse competencies and professional autonomy**

   Professionalisation and development of professional autonomy is a third axis of improvement. Firstly, emphasis should be placed on competencies:
   - development of nurses' own knowledge and skills (this is mainly the profession's responsibility, but the political option of "levelling down" the basic nursing education acts as a negative incentive to professional development)
   - recognition of knowledge and skills of nurses
   - use of competencies (nursing science, expertise, relational skills, etc.)
   - institutional support for the development of competencies (financing or rewarding continuing education)
   - promotion of nursing research through collaboration with universities and research centres. For example, nurses could succeed in health services research and nursing administration research. Initiatives such as the Canadian FERASI program (www.ferasi.umontreal.ca) are able to promote the image of quality nurse-researchers dealing with relevant research questions. Such initiatives require specific and significant financial support from funding agencies.

   Secondly, emphasis should be placed on the decisional autonomy of nurses, i.e.:
   - promoting true autonomy in patient care, and increasing influence at work
   - encouraging nurses to participate in decision-making at all levels of health care
   - reviewing the position of nursing managers within organisations (to empower nursing CEO's)

   Education of executives is the stepping stone for a higher nurse professional autonomy and a better positioning of the nursing department within health services. All nursing hierarchical levels are concerned with education.
After a sound clinical training, executives should also be trained to deal adequately with their new roles: leadership, conflict management, relational abilities, human resource management, team building, etc. In addition, the role of head nurses should be clarified: do they have a management or a clinical role, and what are their most desirable abilities? The NEXT-Study showed that s/he has a key-function for employee job satisfaction and perceived health. We also know that s/he indirectly has a key role in patient satisfaction.

4. Awareness of the obligatory "interdependence of complementarity" between nurses and physicians The division of work in the healthcare field has resulted in task specialisation and hierarchical organisation of health professionals (Eliot Freidson³). Professional independence and condescension jeopardise co-ordinated care, and damage the quality of care as well as team spirit. Physicians and nurses, with other caregivers, should regain an understanding of their complementarity, which is the origin of their reciprocal dependence, and coordinate their functions. This could lead to a wider recognition of nurses' knowledge and abilities. This implies:

- mutual respect of knowledge and competency, with a common commitment to quality care
- recognising and valuing nurses' knowledge and clinical judgement throughout the health system
- collective decision-making in the management of health services, resource acquisition, and patient care.

Awareness of interdependence also requires a clarification - and perhaps a redistribution - of roles and responsibilities. Sharing decisions also means sharing accountability. Organisational innovations, such as clinical pathways or case-management, which are patient-centered and designed to develop evidence-based, pluridisciplinary patient care (at least in some areas of health care), can contribute to increasing levels of cooperation, delegation, coordination, and mutual recognition between nurses and physicians. This kind of innovation can also benefit health services, because it leads to gains in efficiency and quality of care improvements.

5. Development of "organisational support" According to Eisenberger, "employees form general beliefs concerning how much the organisation values their contributions and cares about their well-being, and based on the norm of reciprocity, employees reciprocate such support with emotional commitment to the organisation, work effort in standard job activities, and extra-role performance such as innovative problem-solving". Indeed, we have to accept that today's employee is more individualistic, s/he does not simply rent out his/her labour. Today's employee aspires to self-actualisation, s/he looks for meaning in work, social identity, a feeling of affiliation. To increase organisational support:

- healthcare organisations should define coherent and long-term strategies, which employees can trust, and that fit employees' values
- organisations should aim for demonstrable fairness in managerial practices, especially in human resources management
- organisations should provide the resources to achieve high quality care
- organisations should allow employees to find the best balance between their professional and private lives.

Moreover, careful attention should be directed towards either end of the career spectrum, because needs, expectations and problems are specific:

- in newcomers: socialisation, link with the organisation, mastering knowledge and competencies, etc.
- in older nurses: health maintenance, work pace and load, susceptibility to stress factors are key factors, though compensatory mechanisms are provided by experience.

6. Managing workload is the sixth axis Proper workload management requires the availability of reliable and valid measurement instruments (linked to nursing care planning and nursing records). Once instruments are available, accepted and used, adaptation of nursing workload would be possible to follow daily/weekly variations. Stable "flying staff", with a strong feeling of belonging to the organisation, can be allocated according to need, and can also help to buffer workload peaks. Normative staff allocation - most often legal - should be made more flexible.

Managing nursing workload is feasible if the following conditions are met:

- quantitative and qualitative staff allocation is adequate, especially in the context of work intensification seen in hospitals (decrease in length of stay) and long-term care (increase in patient dependence)
- adequate help from logistic, clerical, hospital transport, etc., personnel allows nurses to concentrate on their clinical role

Conclusions and implications Rather than "one-off policies" or "point actions", an on-going dialogue between scientists and policymakers should be useful and credible. Our final recommendations would be:

- launching a culture of the evaluation of policies of recruitment and retention of nurses and policies of promotion of workplace well-being

- creating room for an effective and socially relevant dialogue between scientists and policymakers, for example based upon the model of the Canadian Health Services Research Foundation (www.chsrf.ca/home_e.php), which "supports the evidence-based management of Canada's healthcare system by facilitating knowl-
edge transfer and exchange - bridging the gap between research and healthcare management and policy”.

Finally, caution and a global vision are needed for effective change. It is clear that the problems of the nursing profession are inter-related: so are the solutions to these problems. This implies that implementation of solutions requires a high degree of coordination and should consider the interactions of the nursing profession with the other healthcare professionals.

References


Belgian nursing profession: current challenges
- Lack of national plan for health policy
- Ad hoc measures instead of long-term strategy
- Two levels of government involved in health care (federal and regional)
- Obsolete nursing manpower databases
- Shortage of qualified nurses to be expected in the future
- Negative evolution of nursing training attractiveness
- High number of students from France or Luxembourg, coming back in their country to practice
- Low activity rates of nurses in health care sector (Figure 1)
- High amount of part-time workers (34.8% for all – 44.4% for female workers)
- Governmental initiatives to reduce working hours after 45 years old and to favour breastfeeding and parental breaks

Belgian nursing profession: state of the art
- Highly motivated and committed professional group (Figure 2)
- Stable "flying staff", with a strong feeling of belonging to the organisation
- Availability of reliable and valid measurement instruments
- Organisations should tend to the highest fairness in managerial practices, especially in human resources management
- Collective decision-making in the management of health services, resource acquisition, and patient care

Future perspectives of Belgian nursing profession
- Expected shortages in medical and nursing staffs leads to think about changing skill-mix among professionals
- Educational reforms will in the near future be implemented (Bologna process)

Belgium: Consequences and implications of NEXT findings

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>Old people homes</th>
<th>Home Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal rate</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Maximal rate</td>
<td>13.1%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>

Table 1: Turnover rates by sector

Figures 4 and 5: Organisational features and outcomes in attractive institutions

Knowing supply and demand in nursing
Supply (nursing schools, nursing education): attractiveness of nursing education, applications, graduation rate, specialisation Employment of nurses: migration, attractiveness of the various health settings, activity rate, general employment conditions

Professionalisation and development of professional autonomy
Development and recognition of the own knowledge and abilities of nurses Use of competencies (nursing science, expertise, relational abilities,...) Institutional support of competencies development (financing or rewarding continuing education) Promotion of nursing research through collaboration with universities and research centres

Awareness of the mandatory "interdependence of complementarity" between nurses and physicians
Mutual respect of knowledge and competency, with a common commitment to quality care Recognition and valuation of nurses knowledge and clinical judgement throughout the health system Collective decision-making in the management of health services, resource acquisition, and patient care.

Organisational support
Organisations should tend to the highest fairness in managerial practices, especially in human resources management Organisations should provide the means to achieve high quality care Organisations should allow employees to find the best balance between their professional and private lives

Managing workload
Availability of reliable and valid measurement instruments Stable "flying staff", with a strong feeling of belonging to the organisation Normative staff allocation -most often legal- should be made more flexible.

For living
- For living
- Interest of work
- Passion for nursing, altruism
- Working with others

- Men
- Women

Figure 1: Activity rates by age groups

Figure 2: Main reasons to work as a nurse

Figure 3: Nurses intent to leave

Table 2: Turnover rates by sector

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Figure 3: Nurses intent to leave
Current national situation in nursing

- Demand greater than supply in the public health care services.
- The increasing proportion of aged citizens increases the need for care.
- In the near future, many employees in the health care services will reach retirement age -> a need to increase the number of trainees in nursing.
- The attraction of the nursing profession seems to be decreasing among young people.
- The doubts about coping with the present job in the long run have increased.

NEXT findings

Many work-related factors predicted low professional commitment:

- lack of meaningfulness of work
- weak possibilities for development
- low level of influence
- experience of bad workplace atmosphere
- poor job promotion prospects
- dissatisfaction with physical working conditions
- high number of night shifts

Low affective commitment strongly predicted intent to leave.

Intent to leave predicted leaving the organization.

Only a few nurses gave up their profession; almost all of them reported intention to leave the profession already in the beginning of the study.

The nurses, who wanted to leave the profession, were mainly:

- young,
- male,
- temporarily hired,
- perceiving their economic situation strained,
- those with decreased work ability or experience of burnout

Nurses in long-term care institutions most often considered leaving the organization.

Most frequently nurses wanted to change to hospitals or out-patient care institutions; least attractive organization was health centre ward.

Implications

Special attention should be paid to:

- the quality of nurses' working conditions: possibilities to put one's knowledge and abilities to full use, possibility to develop skills at work, continuous professional training, physical conditions
- young nurses' frequent thoughts of leaving the profession
- the nursing work in health centre wards, in order to make them more attractive for the nurses
The NEXT-Study is funded by the European Commission QLK6-CT-2001-00475

France

In France, the dissatisfaction about psychological support has the leading position (expressed by 66.1% of HCWs versus 50.3% in Europe). And in Europe, it’s in relation to need for income that comes in first place.

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Dissatisfaction by importance order

<table>
<thead>
<tr>
<th>Dissatisfaction with Psychological support at work</th>
<th>very dissatisfied</th>
<th>dissatisfied</th>
<th>moderate satisfied</th>
<th>very satisfied</th>
<th>perfect</th>
<th>very satisfied</th>
<th>dissatisfied</th>
<th>perfect</th>
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</thead>
<tbody>
<tr>
<td>1 Psychological support at work</td>
<td>&lt; 1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2 Handover shifts</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3 Physical working conditions</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4 Opportunities to give patients the care they need</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5 Pay in relation to need for income</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6 No influence on schedule and day of work</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7 Work prospects</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8 The way abilities are used</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

More than the half of HCWs complained about the lack of psychological support with respect to the emotional demand of job, ethical aspects, violence etc... This difficulty is major in Italy, France, Germany and Slovakia (respectively 77.4 %, 66.1 %, 62.6 % et 60.8 % of HCWs are dissatisfied).

Frequency of worries among registered and specialised nurses differs very much according to countries participating in the NEXT study. 4 countries have more than 30% of registered nurses who often worry and 5 countries have less than 20% of reg. nurses who often worry.

Frequency of worries about making mistakes among registered and specialised nurses differ very much according to countries participating in the NEXT study. 4 countries have more than 30% of registered nurses who often worry and 5 countries have less than 20% of reg. nurses who often worry.

Priorities appeared with the initial data set and reinforced by the follow up study

1. More team work, discussion and psychological support
2. Better sharing of information between paramedical HCWs and with physicians
3. Longer handover when changing shifts with precise use (education, discussion about organisation, staffs...)
4. More support from supervisors
5. Development of tutor positions, and of nurses experts
6. An architecture which values real needs, and not an "architecture of the envelope"
7. Choices integrating safety, such as non slippery floors with acoustic properties....
8. Ergonomic participatory trials for hospital furniture and equipments
9. Respect of chronobiological knowledge and controller-measures for specific compensation
10. Cost / efficiency studies integrating quality of life at work
11. Support for housing, sport and hobbies

Reasons that have contributed in the early departure of the institution (QEx retired excluded)

-About 40% more intent to change institution or to leave nursing when difficulties with work family imbalance
- Respectively 72% and 56% more intent to change and leave nursing when harassment from superior
-About 40% more if worry about making mistakes
-35% and 76% more if mental disorder treated
-47% and 2.3 times more if dissatisfaction with work prospects

The follow up committee was created in the spring of 2002. The committee helped in the elaboration of the information material at each step. It monitored the sample selection, the response rate, the analysis of results, the reports and publications. It promotes national diffusion of results and their use.

The French national symposium was held in front of 300 persons and implementations of diffusion of results and their use.

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German nursing profession: current challenges
- Demographic change calls for societal and professional response:
  - Health Care Reform with main issues:
    - Implementation of Diagnoses Related Group System
    - Integrated Care Models with Disease Management Systems
    - Financial gap in Long-term care insurance
- Organisational restructuring (downsizing) in health care
- Current job insecurity and unemployment (also among nurses)
- Ageing
  - of population (proportion aged 65+ increase from 16% (2000) to 26% 2030)
  - of nursing work force
- Shortage of qualified nurses to be expected in the future

German nursing profession in a crisis
- Highly motivated and committed professional group (Figure 1)
- Perception of professional image low (Figure 2)
- Very high effort-reward imbalance (Figure 3)
- Low health and work ability (even in youngest age groups)
- Dissatisfaction with working conditions makes nurses leave profession (Figure 4)

Future perspectives of German nursing profession
- 18.5% of nurses want to leave the profession, mainly younger (Figure 5) and better educated nurses
- Main reasons for considering leaving are: (Figure 6)
- Germany nurses are very pessimistic about the professions’ future attractiveness (Figure 7)

Further aspects
- Attractive institutions exist
- Educational reform has recently been implemented

Germany: Consequences and implications of NEXT findings:

European Policy level
- Provision of regular European benchmarking concerning nurses’ work & health to promote discussions on national level.
- Monitoring system on inner European migration.

National Health Policy level
- Workforce planning strategies to be developed and implemented.
- Implementation of a continuous survey system for current and future supply of health care staff.
- Development of effective measures for recruitment and retention of nurses.
- Implement nursing in regular occupational education system.
- Implement monitoring on needs and resources for nursing care which has to be provided by professionals.

Institutional level
- More benchmarking: ‘attractive institutions’ exist. What can be learned?
- Improvement of retention measures: More attention to working conditions of nurses.
- Improvement of retention measures: More attention to ‘work home conflict’ and ‘possibilities for development’.
- Improvement of recruitment strategies: Attract more middle aged (38-45 years) former nurses back to nursing.

Nursing Science level
- Developing and analysing nationwide nurses’ monitoring and panel systems.
- Matching patients’ needs for care with supply of professional nursing.
- Investigating degree of nurses’ professional autonomy (possibilities and limits).

Nursing profession level
- Nationwide nursing registration and monitoring systems necessary.
- Fundamental rethinking of nurses’ tasks and responsibilities.
- Professional development shall be part of continuous education and certification process.
- Taking active role in improving own working conditions.

Figure 1: “Why are you working in nursing?”

Responses to an open question

Figure 2: Bad perception of nurses’ image in Germany

Figure 3: Germany: Very high effort reward imbalance

Figure 4: Nurses who have changed to other profession: Reasons for leaving the nursing profession (deviation of causes from all other leave categories, only Germany)

Figure 5: Especially young nurses want to leave the profession

Figure 6: Main reasons for considering leaving nursing profession

Figure 7: In 10 years: “attractiveness of nursing career to young people” - German nurses are pessimistic.
Italian nursing profession: current challenges

Demographic changes call for societal and professional response.
- Health Care Reform main issues:
  - Local decentralization and rationalization of National Healthcare System (LEA – Essential Levels of Care), general downsizing in the healthcare public sector
  - Big-size hospitals more devoted to acute patients’ care and implementation of Diagnoses Related Group system
  - Displacement of the core healthcare policies for chronic illnesses towards the territory and financial gap in Long-term care insurance
  - Implementation of Integrated Care Models with patient-centred management systems

- Current nursing situation
  - Shortage of qualified nurses to be expected in the future
  - Unattractiveness of nursing among the young and vacancies of even permanent contract nursing posts
  - Recent reformation of basic nursing education and continuing vocational training system
  - Limited possibilities for career progression and low wage diversification
  - Strong feminisation of medical workforce and moderate masculinisation of nursing staff applicants

Future perspectives of Italian nursing profession

- 20.6% of nurses wants to leave the profession, mainly younger (Figure 5)
- Very low job satisfaction mainly in the younger and the older nurses
- Dissatisfaction makes nurses wish to leave the profession but do not increase the risk of actual leaving

Further aspects

- Very rare part-time work and temporary work contracts in nursing with very high work to family conflict
- Current changes in healthcare system and nursing (different nurses’ needs, new technologies, etc.) are further work demand factors themselves

Statement by...:

- To improve nursing science development, university teaching posts in nursing should be held by nurses and not only by physicians.
- The NEXT-Study is funded by the European Commission QLK6-CT-2001-00475
Dutch nursing profession: current challenges

- Demographic change calls for societal and professional response:
  - Health Care Sector’s main issues:
    - Labour market as a whole is declining while employment in health care sector is still on the rise
    - Increasing waiting lists
    - Scarcity of funds
    - Societal ageing
  - More competition and the rise of private hospitals, a new phenomenon in the Netherlands
  - Increase in scale, changes in funding structures, new insights concerning the quality of healthcare and the impact of an expanding European Union
  - Ageing
    - of population (proportion aged 65+ increase from 13.9% (2005) to 23.5% 2050)
    - of nursing work force
  - Shortage of qualified nurses to be expected in the (near) future

Dutch nursing profession in a nutshell

- Highly motivated and committed professional group (Figure 1)
- Nurses’ job satisfaction is high (see Figure 4)
- High quantitative and emotional demands in all areas of nursing
- Average amount of hours work per week: 24.17
- 93.8% has a permanent work contract.
- Highly quantified work capacity
- Average number of working days per week
- Average number of patients per day
- Average number of patients per shift
- 81.7% is (highly) satisfied with work prospects
- 75.3% is (highly) satisfied with physical working conditions
- 78.4% is (highly) satisfied with the way one’s abilities are used
- 71.7% is (highly) satisfied with psychological support at workplace
- 67.0% is (highly) satisfied with opportunities for given care needed by patients
- 87.9% is (highly) satisfied with job overall
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Future perspectives of Dutch nursing profession

- 8.9% of nurses want to leave the profession, mainly nurses in their thirties and nurses without health care training
- Main reasons for considering leaving are: (Slide 4)
- 66.2% of nurses have not participated in continuing professional development over the past 12 months. Future employability might be at stake!
- Mobility rate is very low: 60.4% of nurses works for more than 5 years for present employer. Future employability might be at stake!
- Many measures are taken aimed at the maintenance of nursing staff (see framework below)

The Netherlands: Consequences and implications of Findings

European Policy level

- Provision of regular European benchmarking concerning nurses’ work & health to promote discussions on national level.
- Monitoring system on inner European migration.

National Health Policy level

- Convention Labour Market Policy for the Health Care Sector.
- Intensification of regional cooperation, improving the image of the health care sector.
- Intensive supervision and special labour policy of employers in order to prevent sickness absenteeism and turnover to disablement insurance.
- Enlarging educational capacity and increasing the amount of training centres in order to increase the amount of nurses.

Institutional level

- Dutch Association of Nurses and Care workers (AVVV), The Netherlands Centre for Excellence in Nursing (LEVV), Sting:Professional Association for the Nursing Sector.
- Health Care Policy on the position of nurses and health care workers, Content development of professional practice.
- Quality of care, multi-disciplinary collaboration.

Nursing Science level

- Academic Development of Nursing: Nurse Practitioner (NP) and Physician Assistant (PA).
- To advance efficiency by transferring certain doctors’ tasks, to reduce waiting lists, to improve quality of nursing care, to improve career prospects of nurses.

Nursing profession level

- Employers are endeavouring to retain their staff by offering them training tracks with prospects of interesting careers within their own organizations.
- POP: Personal Development Plans in the HRM policies of Health Care Organizations.
- From instrumental leadership towards ‘people Management’, towards broadening knowledge and skills instead of ‘experience concentration’ or ‘job hopping’, more intensive relationship with and social support from direct supervisor (see Boerlijst, Van der Heijden & Van Assen, 1993: Van der Heijden, 1998)
Polish nursing profession: current challenges

- Difficult financial situations of Polish health care institutions (some of them are threaten with bankruptcy).
- Further deep changes in Polish health care system are expected. However, they have not been defined clearly yet being still the subject of political and social disputes.
- Territorially imbalanced job market for the nursing profession: frequent cases of unemployment in small towns, a personnel deficit in large cities.
- Small number of candidates for nursery studies.
- Possible migration of Polish nurses to the EU states and the USA.

Work and health of the Polish nurses

- Work overload, e.g.: number of hours, number of patients on a shift (figure 1).
- Low level of work rewards (low pay – figure 2; low job security – figure 3).
- The lowest degree of job satisfaction among the researched countries (figure 4).
- The lowest work ability index of hospital nurses among the countries researched (figure 4).
- Low level of work rewards (low pay – figure 2; low job security – figure 3).
- Work overload, e.g.: number of hours, number of patients on a shift (figure 1).
- Quite strong commitment to profession and commitment to organisation in relation to the low degree of job satisfaction and high degree of stress (figure 6).

Future perspectives of Polish nursing profession

- 10% of nurses frequently consider leaving the profession.
- Main reasons of leaving are: (Figure 7).
- Perception of job perspectives is very low among the Polish nurses.
- Possible migration of Polish nurses to the EU states and the USA.
- Territorially imbalanced job market for the nursing profession: frequent cases of unemployment in small towns, a personnel deficit in large cities.
- Small number of candidates for nursery studies.
- Further deep changes in Polish health care system are expected. However, they have not been defined clearly yet being still the subject of political and social disputes.

Polish Consequences and implications of NEXT findings:

European Policy level

- Regulations at the European level as regards the reimbursement of cost of nurses education in the countries “exporting” personnel.

National Health Policy level

- Planned reform of the national health service in Poland should include the improvement of nurses remuneration and the job security.
- Implementation of nurses education systems fully compatible with the education systems in the EU states (that ensure automatic qualification recognition).
- Elaboration of effective methods of gaining new candidates for nursing studies.
- Development and implementation of the data collection system on the nursing profession and its dynamics.

Institutional level

- Organising a regular exchange of information among health service units so as to enable to promulgate “good practice” units management, in particular pertaining to the nursing personnel.

Nursing profession level

- Creation of nationwide nurses and midwives registry in Poland.
- Clarification and monitoring of the roles and tasks of nurses in health services outlets in relation to other medical professions.
- Activities aimed at improvement of interpersonal relations among the management, doctors and nurses.

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- Organising a regular exchange of information among health service units so as to enable to promulgate “good practice” units management, in particular pertaining to the nursing personnel.

Nursing profession level

- Creation of nationwide nurses and midwives registry in Poland.
- Clarification and monitoring of the roles and tasks of nurses in health services outlets in relation to other medical professions.
- Activities aimed at improvement of interpersonal relations among the management, doctors and nurses.

Poland: Consequences and implications of NEXT findings:

European Policy level

- Regulations at the European level as regards the reimbursement of cost of nurses education in the countries “exporting” personnel.

National Health Policy level

- Planned reform of the national health service in Poland should include the improvement of nurses remuneration and the job security.
- Implementation of nurses education systems fully compatible with the education systems in the EU states (that ensure automatic qualification recognition).
- Elaboration of effective methods of gaining new candidates for nursing studies.
- Development and implementation of the data collection system on the nursing profession and its dynamics.

Institutional level

- Organising a regular exchange of information among health service units so as to enable to promulgate “good practice” units management, in particular pertaining to the nursing personnel.

Nursing profession level

- Creation of nationwide nurses and midwives registry in Poland.
- Clarification and monitoring of the roles and tasks of nurses in health services outlets in relation to other medical professions.
- Activities aimed at improvement of interpersonal relations among the management, doctors and nurses.
Slovak nursing profession: current challenges

- Demographic change calls for societal and professional response:
  - Health Care Reform with main issues:
  - Organisational restructuring (massive downsizing) in health care
  - Current job insecurity and unemployment (in healthcare workers)
  - Ageing
    - of population (proportion aged 65+ increase from 12% - 2005 to 22% - 2030)
    - of nursing work force (population mean age 36, nurse mean age 40)
  - Shortage of qualified nurses is currently reported in all hospitals and expected in the future
  - Restructuring of educational system in nursing

Slovak nursing profession in a crisis

- Highly motivated and committed professional group (Figure 1)
- Worst perception of professional image (Figure 2)
- The highest mean von Korff disability score (Figure 3)
- The highest proportion of nurses getting up before 5’ clock to get to work (Figure 4)
- The highest proportion of shift work with nights (Figure 5)
- The highest overcommitment (Figure 6)

Future perspectives of Slovak nursing profession

- 5% of nurses think very often of leaving the profession, mainly younger (Figure 7) and better educated nurses
- Real number of leavers is seven times higher than presented official numbers
- Main reasons for considering leaving are: low commitment to institution, job dissatisfaction, low age, Effort-Reward imbalance, personal burnout, bad economic situation, (Ordinal regression with pseudo R²=0.21)

Further aspects

- Educational reforms has recently been implemented
- Woman dominance in nursing profession in both NAS countries (98% in SLK)
- Restructuring of educational system in nursing
- Shortage of qualified nurses is currently reported in all hospitals and expected in the future
- Organisational restructuring (massive downsizing) in health care
- Demographic change calls for societal and professional response:
  - Health Care Reform with main issues:
  - Restructuring of educational system in nursing

Slovak: Consequences and implications of NEXT findings:

European Policy level

- Provision of regular European benchmarking concerning nurses’ work & health to promote discussions on national level
- Support of regulation of profession and the unity of educational level and job opportunities on national level

National Health Policy level

- Workforce planning strategies to be developed and implemented.
- Monitoring system for the evaluation of the working conditions of nurses and of their health status to be introduced
- Legislation adjustments to promote retention of nurses in the system to be introduced.
- An effective system securing retention of highly qualified nurses to be expanded.
- Legislation adjustments to promote retention of nurses in the system to be introduced.
- Monitoring system for the evaluation of the working conditions of nurses and of their health status to be introduced
- Workforce planning strategies to be developed and implemented.

Institutional level

- Supporting the retention of the nurses by improving the working conditions and its control
- Improving the work organisation
- Monitoring and controlling the right use of all individual resources of workforce
- Introducing of the system changes in the work evaluation of nurses

Nursing Science level

- Matching patients’ needs for care with supply of professional nursing.
- Studying migration and immigration patterns of nursing workforce

Nursing profession level

- Registration system for collection of evidence based argumentation to initiate systematic changes on national level (nurse migration, legislation) to be worked out.
- Research targeted to living and working condition of nurses to be supported (grants, financial support)
- Broad national discussion about the nurses’ problems to be initiated
Current situation

- There is no flight from the nursing profession in Sweden.
- Three of four registered nurses (RN), up to the age of 65 years, remain active in health care.
- Increasing number of applicants to nursing college.
- The turnover rate for RN is rather stable (9% in geriatric care and 5% in other sectors) and mainly a circulation between institutions.
- Geriatric health care has problems recruiting and retaining RNs.
- Corresponding data were not found for assistant nurses (AN).

Some reports tell about a decrease of applicants for training courses as well as number of training places and AN-students, and the risk of a future shortage.

Swedish NEXT – a part of the HAKuL-study

- 9000 employees in the public sector throughout Sweden were followed for 3 years.
- At baseline 86% of 2664 nurses answered a questionnaire.
- Altogether 3879 nurses worked at least three months at the participating institutions during the 3-years of follow-up.
- 21% of the RNs and 15% of the ANs ended their job.
- All "leavers" received an "Exit"-questionnaire, 355 individuals answered it (51%).

Predictors for ending the job (see table)

- Younger than 50 years.
- Employed in geriatric care.
- Possibility to get a new job.
- Exclusion at work: a feeling that superiors and/or workmates to some degree excluded them by not greeting them, not answering their questions, or excluding them from information.
- Physical strenuous work.
- Self-reported doubt about future work ability.
- Reduced vitality or high vitality.

Contributing factors to the decision to leave (see figure)

- Unsatisfactory salary contributed most to both registered nurses and assistant nurses’ decision to leave the workplace.
- Work-related factors seemed to contribute somewhat more for ANs than for RNs to their decision to leave.

Present activity for those who left

- Around 80% of he leavers ended their job voluntarily.
- Roughly 85% of the RNs and 65% of the ANs stayed in nursing.
- Roughly 5% and 10% respectively, got jobs outside nursing.
- More ANs than RNs left the labour market.
- For those not working, health problems and early retirement were the most common reasons.

Consequences and implications of NEXT findings in Sweden

National Health Policy level
- The main challenge is to promote retention of nurses in geriatric health care.
- More resources to geriatric health care.

Institutional level
- Insufficient rewards in nursing contribute to turnover.
- Reasonable pay and possibilities for professional development are core parts of sufficient reward.
- Intervention activities to improve working conditions.

Nursing profession level
- Professional development as a continuous education process.
- Taking active role in improving own working conditions.

Table: Estimated associations between different factors and leaving the job expressed as odds ratios (OR) with 95% confidence intervals (CI), calculated by multivariate logistic regression analysis adjusted for all factors in the models.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>All nurses (n=3879)</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td></td>
<td>1.10</td>
<td>0.94-1.28</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td>1.20</td>
<td>1.01-1.44</td>
</tr>
<tr>
<td>≥50 years of age</td>
<td></td>
<td>1.00</td>
<td>0.97-1.03</td>
</tr>
<tr>
<td>&lt;50 years of age</td>
<td></td>
<td>1.40</td>
<td>1.36-1.44</td>
</tr>
<tr>
<td>Assistant nurses</td>
<td></td>
<td>1.51</td>
<td>1.35-1.69</td>
</tr>
<tr>
<td>Registered nurses</td>
<td></td>
<td>1.91</td>
<td>1.59-2.30</td>
</tr>
<tr>
<td>Hospital care</td>
<td></td>
<td>1.00</td>
<td>0.88-1.13</td>
</tr>
<tr>
<td>Psychiatric care</td>
<td></td>
<td>1.20</td>
<td>0.92-1.57</td>
</tr>
<tr>
<td>Primary care</td>
<td></td>
<td>1.20</td>
<td>0.91-1.59</td>
</tr>
<tr>
<td>Elderly care</td>
<td></td>
<td>2.04</td>
<td>1.63-2.56</td>
</tr>
</tbody>
</table>

Additional for the nurses who answered the baseline questionnaire (n=2293)

To get a new job - limited possibilities | 1.00 | 1.20-1.64 |
- great possibilities | 1.86 | 1.42-2.44 |
No feeling of exclusion | 1.00 | 0.97-1.03 |
A feeling of exclusion from superior/workmate | 1.71 | 1.12-2.62 |
Physically non-strenuous work | 1.00 | 0.97-1.03 |
Physically strenuous work | 1.45 | 1.06-1.98 |
Believe in future work ability | 1.00 | 0.97-1.03 |
Doubt about future work ability | 2.91 | 1.52-5.56 |
OK vitality | 1.00 | 0.97-1.03 |
Reduced vitality | 1.57 | 1.16-2.12 |
High vitality | 1.35 | 1.01-1.80 |

Bar chart: Mean values for different factors.

The leavers were asked to indicate to what extent different statements have contributed to their decision to leave, 1 did not contribute at all to 5 contributed to a considerable extent to the decision to leave the workplace. The results were categorised in to seven different domains. Mean values with 95% CI of the mean. * Significant difference between RNs and ANs (T-test p-value <0.05). (n=300)