The ideal attributes of Chief Nurses in Europe: A Delphi Study for WHO:Europe

Project commissioned by
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ABSTRACT

Advancing the role of the Chief Nurse in member countries of WHO: Europe will necessitate the systematic selection and recruitment of suitable post-holders, together with a critical pathway for development both of new recruits and existing personnel. To inform this process, it is essential that the attributes considered to be important in a Chief Nurse are identified. To this end, a Delphi study was initially undertaken of 22 member states. Consensus was reached by the second round, in which 12 countries participated. Sixteen qualities were deemed to be important and these are listed in rank order below:

2. Team-working 10. Personal qualities
3. Strategic thinking 11. Promotion of nursing
4. Professional credibility 12. Good management
5. Leadership 13.5 Conflict resolution
6. Political astuteness 13.5 Information handling
7. Decency/integrity 15. Research skills
8. Innovation 16. Physical characteristics

Of the 9 countries for which statistical analysis of the degree of agreement was possible, 8 demonstrated a significant level of accord (Belgium, Denmark, Netherlands, England, Iceland, Sweden, Hungary and Switzerland), with only Finland showing no intra-country accord.

The qualities identified can be used to inform the future development of the Chief Nurse role in Europe.

Keywords

NURSE ADMINISTRATORS – standards
PROFESSIONAL COMPETENCE
DATA COLLECTION
EUROPE
THE IDEAL ATTRIBUTES OF CHIEF NURSES IN EUROPE: A DELPHI STUDY FOR WHO:EUROPE

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# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>The Delphi Technique</td>
<td>4</td>
</tr>
<tr>
<td>- Anonymity of response</td>
<td>5</td>
</tr>
<tr>
<td>- Cost</td>
<td>6</td>
</tr>
<tr>
<td>- Obtaining large data sets</td>
<td>6</td>
</tr>
<tr>
<td>- Validity of the technique</td>
<td>6</td>
</tr>
<tr>
<td>- Sampling criteria</td>
<td>7</td>
</tr>
<tr>
<td>- Sample size</td>
<td>7</td>
</tr>
<tr>
<td>- Validity of results</td>
<td>7</td>
</tr>
<tr>
<td>- Reducing bias</td>
<td>7</td>
</tr>
<tr>
<td>Method</td>
<td>8</td>
</tr>
<tr>
<td>- Design</td>
<td>8</td>
</tr>
<tr>
<td>- Materials</td>
<td>8</td>
</tr>
<tr>
<td>- Sample</td>
<td>9</td>
</tr>
<tr>
<td>- Procedure</td>
<td>9</td>
</tr>
<tr>
<td>Results</td>
<td>11</td>
</tr>
<tr>
<td>Discussion</td>
<td>14</td>
</tr>
<tr>
<td>References</td>
<td>16</td>
</tr>
<tr>
<td>Annex 1</td>
<td>18</td>
</tr>
</tbody>
</table>
Background

Several World Health Assembly resolutions have urged its Member States to

“encourage and support the appointment of nursing/midwifery personnel to senior leadership and management positions to facilitate their participation in the planning and implementation of their countries health activities”. (Tornquist, 1997 p82)

Furthermore,

“Member states have (also) been urged to strengthen managerial and leadership capabilities and reinforce the position of nursing and midwifery personnel in all health care settings” (ibid p2)

Despite this, few countries in Europe have nurses playing a full part in making policy decisions at all levels of the health services and many nurses believe that they have to continually fight to have their voices heard. Nearly all countries find it difficult to ensure that nursing issues are taken seriously (Tornquist, 1997).

One means by which the nursing profession can make itself more prominent is through having representation on the most senior government bodies. For example, many governments appoint chief nurses to their Ministries of Health. A number of countries in Europe (for example Belgium, Denmark, Iceland, Turkey, Portugal, the Netherlands and the UK) have actually established the Chief Nurse’s position as a formally recognized role. These nurses advise on nursing and midwifery issues and frequently carry out a range of other functions. Their roles are, however, diverse and may include working in a nursing or human resources or education department; similarly, they may work full, or part-time and they may have a very large budget, or none at all. Not only does there appear to be no standard practice between countries, but moreover, the picture changes frequently. Tornquist (1997) notes that in some countries the government does not

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see policy-making as an appropriate nursing role and in others the role is limited to providing advice on nursing issues only. Nevertheless the nurses themselves are beginning to demand a much more active policy role.

In order to capture a snapshot of the current position with regard to both nursing representation at senior and government levels in Europe, as well as the development of nursing care and midwifery nationally, the Ministry of Social Affairs and Health in Finland and the Regional Office for Europe of the World Health Organization conducted a survey early in 1999 (Ministry of Social Affairs and Health, 1999). The questionnaire was sent to all 51 Member States of the World Health Organization European Region and twenty-seven countries responded. The questionnaire had a number of sections. Of particular relevance to this Delphi study was the section on nursing management. Questions in this part referred to the existence of a nurse manager’s post, the nurse manager’s involvement in the decision-making process, the nurse manager’s independent decision-making power and the existence of a national strategy for the promotion of nursing development.

Overall, the results suggested that seventeen of the 28 countries had a nurse manager’s post at central government level. In 11 countries these nurse managers are involved in decision-making as the head of nursing units in Central Government. In 13 countries, the nursing managers have independent decision-making power at central government level about nursing services, and in seven countries they have responsibility for personnel; seven other countries claimed that they had no independent decision-making power. Generally, nurses at this level also claim that they have few opportunities to make a contribution about other health service policy or economic administration.

The data also demonstrated geopolitical variations. For example, the senior nurses in the governments of the countries of Central and Eastern Europe (CCEE) have very different roles in the national policy decisions. In 1997, Hungary instituted a new ministry of nursing department with 11 staff, responsible for all nursing affairs except education. The Ministry of Education covered the latter. Hungary’s Nursing Department was the second largest Ministry Nursing Department in Europe (Tornquist, 1997).

Furthermore, at the time of the survey, the Newly Independent States (NIS) did not acknowledge that nurses had a legitimate role in policy-making or management. There were few recognized nurse leaders and
very few formal educational opportunities for senior nurses. They appeared to lack professional knowledge and had few skills in management and leadership. This limited their ability both to contribute to policies that changed or modified the health system and to develop nursing care. Despite this, in some of the NIS countries the Ministers and the nurses themselves recognized the need to have nurses in policy-making positions. Further geopolitical variations in the policy-making role of nurses were found in the countries of Western Europe. In some countries, for example the UK, nurses were actively involved and took the lead in policy-making about the nursing profession. In others e.g. France and Italy, nurses only had a consultative function. In Austria, Germany, Italy, Malta, Norway, Sweden, Switzerland and elsewhere, the nursing function at ministry level was limited. Some of the reasons for this include nurses being dispersed through different directorates; the federal government structure which diminishes the role of nurses at the centre; and the perception that nursing is simply not seen as important enough to be represented.

Clearly, the picture of leadership in nursing throughout Europe is a disparate one, founded on multiple understandings of the role of senior nurses and their impact on policy and practice. If nursing, as a profession, is to be advanced and developed systematically in an international context, then it would be useful to have a shared perception of the role of government senior nurses in Europe and the attributes that are required of such a post-holder. Moreover, this information could be used to create a critical pathway for development of Chief Nurses across Europe. To this end, a Delphi study was undertaken to collect views of salient stakeholders in European member states, in order to arrive at a consensus position regarding the most important qualities for Chief Nurse posts. The results of this study can then be used to guide and inform subsequent critical pathway development.
The Delphi Technique

The aim of the Delphi Technique is to arrive at agreement amongst experts within a particular field of research, using a systematic tiered approach to gathering opinion. It is defined by Bowles (1999) as:

‘a multiple iteration survey technique that enables anonymous, systematic refinement of expert opinion, with the aim of arriving at a combined or consensual position’ (p32)

The method has been adapted and varied since its inception in the 1950s, but all variants on the approach have the following features in common:

- A panel of experts is used as the respondents
- Exercises are conducted in writing, using sequential questionnaires
- There is an attempt to reach a consensus of opinion
- The respondents’ identities and their statements are guaranteed anonymity
- There is use of iteration and controlled anonymous feedback
- Agreement is sought using a series of rounds of questionnaire distribution; each round presents a summary of previous findings to the experts for their comment.

(Beretta, 1996)

Although the technique has undergone numerous transformations, the basic principles of the procedure remain the same. Experts in an identified field are sent a survey form which invites their opinions on a given topic. The comments on the returned forms are distilled by the researcher to a list of the most frequently expressed themes. These are then sent back to the original respondents, asking them to express their level of agreement with these themes. The responses from this round are further distilled and returned to the sample, in successive iterations, until consensus has been achieved within the panel of experts.

Its use within health care research has been extensive (see Bowles, 1999; Crisp et al, 1999; Williams and Webb, 1994; Jones and Hunter, 1995), since it is a particularly appropriate means of capturing expert opinion to inform policy and decision making in areas where insufficient information or empirical data are available. Moreover, the Delphi method has the
capacity to motivate respondents to promote change through what has been termed 'catalytic validity' (Bowles, 1999).

Of particular relevance to the present study are those Delphi studies that have sought to establish essential characteristics of the roles of groups of health care professionals. The following are some examples of its use in this way:

- Kirk et al (1997) - the changing role of the nurse teacher following the implementation of Project 2000 in the UK
- Sentell and Finstuen (1998) - a forecast of leadership skills and associated competencies of naval hospital administrators in the USA
- Novak (1998) - the core competencies of the role of the nurse case manager in the USA
- Macdonald et al (2000) - the requirements for occupational medicine training in Europe
- White and Wilkes (1999) - the role of the specialist breast care nurse in Australia.

The research noted above demonstrates not only the viability of the Delphi technique for establishing core attributes for various occupational roles in the health care domain, but also its international applicability. For these reasons it was deemed to be the most appropriate methodology for collating expert opinion on the most salient competencies required of Chief Nurses in European countries.

The acknowledged advantages of the Delphi technique are as follows:

**Anonymity of response**

While the outcomes of other consensus methods, such as focus groups, can be distorted by the influence of a single, powerful, vociferous individual on group opinion, the Delphi method is conducted anonymously by post. This affords respondents the opportunity to present their views without inhibition, pressure or intra-group conflict. The range of languages of the experts used in the present study would have precluded the use of other group consensus methods.
Cost

Because the Delphi uses postal questionnaires, no interviewers or meetings are required and no travelling is involved; hence it is a low-cost methodology. In this regard, it has the advantage over other consensus methods. The European perspective essential to the current study would have incurred significant resource allocation had alternative forms of data collection been used.

Obtaining large data sets

The Delphi Technique is particularly suited to collecting subjective, rather than objective, assessments on a given topic. Moreover, because the respondents are all experts, but have a diverse range of qualifications and experience, the quality and richness of the database are maximized. To obtain a comparable wealth of information using other consensus methods would be impossible from a practical perspective.

Validity of the technique

While the technique cannot be subjected to the same statistical rigour as formal experimental methods, it nonetheless fulfils essential psychometric criteria. Content validity is established through the use of a panel of experts (Goodman, 1987), while face validity and high concurrent validity are achieved when consensus has been reached following successive iterations (Williams and Webb, 1994). It should, though, be noted that the technique’s reliability is difficult to establish, since one of the commonest ways of establishing methodological and outcome reliability is through replication studies which are not normally appropriate for Delphi methods. To have developed an alternative valid and reliable data collection tool for the present study, would have invoked the use of other, less suitable, methodologies and would also have been impossible within the time frame.

The above advantages of the Delphi study made it a clear choice for the present study, where the overarching intention was to capture expert views on the attributes of the ideal national-level Chief Nurse. There are, however, methodological design issues that must be considered prior to its implementation. These are outlined below, together with the ways in which each was addressed in the present study. Full details of the exact methodology and the sampling used in this study will be presented in the section entitled ‘Method’.
**Sampling criteria**

Usually no criteria are stipulated for panel membership, apart from the assumption of expertise in the given field. Decisions about the membership of the panel are usually agreed through discussion with key stakeholders in the research (Crisp et al, 1999). In the current study, 'expert' was agreed with senior personnel at WHO:Europe to mean appropriate stakeholders in the government-level health departments, and included a range of health professionals and executive officers of national organisations e.g. Nursing Association, and other people acknowledged as having an important perspective on this subject.

**Sample size**

There are no formal recommendations about appropriate sample size and indeed Bowles (1999) notes that studies have used anything between 7 and 1,685. Given that the number of experts, as defined above, is of necessity limited for the present study, it was decided following discussion with the Regional nurse advisor for WHO:Europe that 15 respondents should be targeted in each of 22 European countries (N = 330). The selection of these countries incorporated WHO's classification of the Newly Independent States, Countries of Central and Eastern Europe and Western Europe, as well as the conventional geo-political classifications of Scandinavia, Eastern and Western Europe, and the Mediterranean countries (see Sampling section).

Attrition of the sample over successive rounds of the Delphi can be problematic, but can be reduced by targeting named individuals at each iteration (Beretta, 1996). This expedient was employed in the present study.

**Validity of results**

The content, face and concurrent validity of the Delphi method have been addressed already. Outcome validity is also affected by response rate, with high initial responses and low attrition being related to greater validity.

**Reducing bias**

Because the researcher typically has no direct contact with the respondents, there is no opportunity for influencing the opinions sought. There is, though, potential for researcher subjectivity when distilling responses to common conceptual themes. Independent classification of
responses with subsequent analysis for degree of agreement can be used to minimise this source of bias and was a procedure used in the present study.

Moreover, as with other elements of the Delphi, no guidelines regarding the definition of consensus exist within this context. Typically, researchers adopt an arbitrary and retrospective definition. To avoid this source of bias, the Delphi method employed here used a quantitative measure of agreement in the second round, on which statistical analysis could be conducted. It was decided at the outset that the study would be discontinued as soon as a statistically significant level of agreement (p< 0.05) was reached across all countries.

Method

Design
A Delphi survey was conducted (see description above) of 22 WHO:Europe member states, to identify the attributes deemed to be essential to a Chief Nurse.

Materials
First round: an open ended questionnaire was developed that provided an outline of the study and its purpose, and which asked respondents to provide as many attributes, skills and competencies as they considered relevant to an ideal government chief nurse. Examples were provided that covered personal qualities, technical skills, physical qualities and intellectual abilities.

Second round: a distillation of the responses from round one was used to compile a more structured questionnaire. This invited respondents to register the extent of their agreement/disagreement on an unmarked visual analogue scale for each of the 16 thematic characteristics that had been derived from round 1.

Both questionnaires were translated by WHO into the most appropriate language for the receiving country and each was accompanied by a letter explaining the purpose of the project.
Sample

Round 1: Fifteen questionnaires were sent to each of 22 countries (Belgium, Czech Republic, Croatia, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom) with the request that these should be distributed to the key expert stakeholders in national health care system (N = 330). The experts were defined in a covering letter as senior stakeholders in government-level health departments, to include a range of health professionals.

In this way, the WHO classification of European countries were covered by the survey i.e.: the Countries of Western Europe, the Newly Independent States (NIS) and the Countries of Central and Eastern Europe (CCEE). In addition, conventional geopolitical groupings of Scandinavia, Western Europe, Eastern Europe, and the Mediterranean were also represented.

Round 2: Fifteen copies of the second questionnaire were returned to the same link person in each of the countries that had responded in the first round, with a request to distribute these to the same experts as had been used previously. Twelve countries had responded in round 1 (Belgium, Denmark, Czech Republic, The Netherlands, Greece, England, Finland, Hungary, Iceland, Russia, Switzerland and Sweden), so consequently 180 questionnaires were distributed at this stage. The details of the response rate, overall and by country will be provided in the Results section.

Procedure

The round 1 questionnaires were sent to a WHO:Europe link person for translation into an appropriate language for the receiving country. The copies of the questionnaire were then sent to the link person identified by WHO:Europe in each of the 22 member states outlined above, with a covering letter, explaining the purpose of the project and providing guidance on the identification of the experts. The respondents were

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2 CCEE countries include Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, the former Yugoslav Republic of Macedonia, Yugoslavia. The NIS include Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan. The CWE include France, Belgium, the Netherlands, Germany, Switzerland, Austria, Italy, Spain, Portugal, Iceland, Ireland, England, Greece and Scandinavia.
asked to provide as many attributes as they considered appropriate (see Materials section above) and to return the questionnaire as soon as possible to the linkworker in their country. All questionnaires were completed anonymously, but the respondent’s country was recorded. The questionnaires were translated back into English and returned to the researchers.

Four thousand two hundred and seventy three attributes were recorded onto a spreadsheet and the researchers independently categorized these into emerging semantic themes. No restriction was placed on the number of themes used. The themes and their content were then compared across researcher to establish a degree of accord. While one researcher identified 19 themes and the other 16, there was agreement on the classification of 3659 items, which constitutes an 85.6% level of agreement. The smaller number of themes was used for the second round of the questionnaire for the following reasons:

- the semantic similarities of the 3 additional labels enabled the themes to be conflated with the other 16
- categories with distinct meaning would minimize any ambiguity that might compromise their translation
- the smaller number meant that the task involved in the second round would be more manageable for the respondents.

These themes were as follows:

- Political astuteness
- Leadership
- Communication
- Strategic thinking
- Conflict resolution
- Good management
- Professional credibility
- Research skills
- Decision-making/problem solving
- Physical characteristics
- Decency/integrity
- Personal qualities
- Innovation
- Promotion of nursing
- Team-working
- Information handling
Each of these attributes was included in the second round questionnaire, with an unmarked visual analogue scale attached to each. In accordance with convention the visual analogue comprised an unmarked 10 cm line with the left hand pole labelled 'not at all important' and the right hand pole labelled 'extremely important'. Every attribute had a number of exemplars included to illustrate the nature of the quality under consideration. The respondents were asked to consider these qualities in relation to their relevance for the ideal Chief Nurse. They were instructed to make a mark along the analogue scale according to how important they deemed each quality to be in this regard.

The responses were again returned by the linkworker to WHO:Europe for translation, and then returned to the researchers for analysis. Because the second round responses were quantifiable (each measure of importance being the distance between the left hand end of the scale and the mark made), the responses could be analysed using techniques of inferential statistics (the Kendall Coefficient of Concordance) to assess the degree of within-total sample agreement, and the degree of within-country agreement. If no statistically significant level of agreement was found in this round, the iterative process would be repeated until there was accord. If, however, significant agreement was obtained, the study would conclude at this stage.

Results

First round: 75 responses were returned from a total of 12 member countries, which generated 4273 attributes. This constitutes an individual stakeholder return of 23% and a country return of 54.6%. The 12 countries included Belgium (n = 6), Denmark (n = 10), Czech Republic (n = 1), The Netherlands (n = 1), Greece (n = 1), England (n = 3), Finland (n = 4), Hungary (n = 9), Iceland (n = 7), Russia (n = 1), Switzerland (n = 9) and Sweden (n = 11). The attributes were allocated to the 16 themes identified above, with an 85.6% degree of overlap/agreement.

Second round: 63 responses were obtained from each of the 12 countries, with a further 8 being returned from a further 3 countries too late for inclusion (Belgium = 4, Finland = 1, England = 3). This constitutes a 84% individual return from the first round sample and a 100% return from the countries. The responses were analysed by total sample and by individual
country using a series of Kendall Coefficients of Concordance. The results are presented below.

**Table 1: Results of the Kendall Coefficients of Concordance by Country and Total Sample**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>N</th>
<th>W</th>
<th>DF</th>
<th>X²</th>
<th>P</th>
<th>IMPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELGIUM</td>
<td>6</td>
<td>0.57</td>
<td>5</td>
<td>51.3</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
<tr>
<td>DENMARK</td>
<td>10</td>
<td>0.23</td>
<td>9</td>
<td>34.5</td>
<td>&lt;0.01</td>
<td>agreement</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>1</td>
<td>na*</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>GREECE</td>
<td>1</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>CZECH REPUB.</td>
<td>1</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>ENGLAND</td>
<td>3</td>
<td>0.67</td>
<td>2</td>
<td>30.15</td>
<td>&lt;0.02</td>
<td>agreement</td>
</tr>
<tr>
<td>HUNGARY</td>
<td>9</td>
<td>0.36</td>
<td>8</td>
<td>48.6</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
<tr>
<td>ICELAND</td>
<td>7</td>
<td>0.3</td>
<td>6</td>
<td>31.5</td>
<td>&lt;0.01</td>
<td>agreement</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>1</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>9</td>
<td>0.36</td>
<td>8</td>
<td>48.6</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>11</td>
<td>0.3</td>
<td>10</td>
<td>49.5</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
<tr>
<td>FINLAND</td>
<td>4</td>
<td>0.36</td>
<td>3</td>
<td>21.6</td>
<td>ns</td>
<td>no agreement</td>
</tr>
<tr>
<td>ALL</td>
<td>63</td>
<td>0.17</td>
<td>160.65</td>
<td>15</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
</tbody>
</table>

* na = not applicable. Statistical analysis was irrelevant where only one response was received.

These results clearly demonstrate a significant level of agreement across all 12 countries and within all countries except Finland. Because of the significant level of within sample accord, the Delphi could be discontinued at round 2. The characteristics that the sample agreed were most salient in a Chief Nurse are listed in order of importance below:

1. Communication
2. Team-working
3. Strategic thinking
4. Professional credibility
5. Leadership
6. Political astuteness
7. Decency/integrity
8. Innovation
9. Decision-making/problem solving
10. Personal qualities
11. Promotion of nursing
12. Good management
13. Conflict resolution
13.5 Information handling
15. Research skills
16. Physical characteristics

The qualities deemed to be most important by overall sample and by individual country are presented graphically in Figures 1-13 (see Annex 1).

Further analysis, using the Kendall Coefficient of Concordance, was conducted using the WHO:Europe classification of countries i.e. CCEE, NIS and CWE. Because only one country (Russia) returned the questionnaire from the NIS grouping, the analysis was only performed on the remaining two groups. The results are presented in Table 2 and Figures 14 and 15 (see Annex 1).

Table 2: Results of the Kendall Coefficients of Concordance by WHO Country Grouping

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>W</th>
<th>$X^2$</th>
<th>DF</th>
<th>P</th>
<th>IMPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCEE</td>
<td>2</td>
<td>0.34</td>
<td>51</td>
<td>1</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
<tr>
<td>CWE</td>
<td>9</td>
<td>0.19</td>
<td>148.2</td>
<td>8</td>
<td>&lt;0.001</td>
<td>agreement</td>
</tr>
</tbody>
</table>

The above results demonstrate that there is significant agreement within the CCEE and CWE groupings. The rank orders of these qualities are presented in Table 3 below.

Table 3: Rank Orders of Qualities by WHO Country Grouping

<table>
<thead>
<tr>
<th>QUALITY</th>
<th>CWE</th>
<th>CCEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Team-working</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Leadership</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Strategic thinking</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Political astuteness</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Professional credibility</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Decency/integrity</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Innovation</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Personal qualities</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Decision-making/problem solving</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>Promotion of nursing</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Good management</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Research skills</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Information handling</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Physical characteristics</td>
<td>16</td>
<td>11</td>
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</table>
Discussion

There is a surprisingly high level of within-total sample agreement regarding the qualities required of the ideal Chief Nurse. In addition, of the 8 countries whose returns could be statistically analysed, 7 showed highly significant within-country agreement, although the rank ordering of the characteristics did not necessarily completely agree with the total-sample response (see Annex 1).

These results suggest that there is sufficient agreement within the sample for the emerging attributes to be considered to be a consensus view of the ideal nurse. Therefore, should it be deemed important for all countries to select and develop nurse leaders according to a single internationally agreed template, then the 16 qualities identified could be used to inform this process. Alternatively, if specific national perspectives and positions are considered to be critical in the identification of a Chief Nurse, then, with the exception of Finland, the individual countries have a high level of internal agreement.

The 16 qualities approximate to the qualities identified in successive studies of leadership skills and therefore the findings are corroborated to a degree both by extant empirical research and theoretical perspectives (e.g. Lorentzon, 1992; Cook, 2001; Cunningham and Kitson, 2000). For example, although there is considerable debate surrounding the attributes of a good leader, three characteristics have achieved a high degree of consensus in the research literature: social influence (the extent to which someone can change, manage and resolve the attitudes and behaviours of others and direct these towards a specific outcome); leadership behaviours, which include strategic planning, decision making and team-working; and authority (the personal and professional credibility to achieve a set of target outcomes). Other studies have found that leaders tend to be intelligent and knowledgeable (Lorentzon, 1992), to possess personal attributes such as warmth, trust, decency and integrity (Tremblay, 2000), have skills of innovation and creativity (e.g. Tremblay, 2000), be able to make policy decisions, be good managers and be politically astute (McCormack and Hopkins, 1995). In these regards, the characteristics identified above by the responding countries have a logical appeal. Perhaps what is more concerning is the fact that in an evidence-based health care culture, research and information handling are given a very low priority. If the nursing research agenda is to be led from the front, then research-commitment may need to be given a higher
profile. Of major interest and perhaps disappointment is the relatively low ranking awarded to the promotion of 'nursing as a profession for the benefit of society'. This could be viewed as a key function for Government Chief Nurses and possibly provides additional legitimacy for the position. It is possible that government chief nurses to date have not been able to influence others about the benefits to the health of society of good nursing care. Of course the low ranking may also reflect either an assumption that this concept is already of sufficiently high profile, or alternatively, that the profession should accept a less significant focus in the health care agenda.

The results overall present a clear, logical and potentially useful profile of the characteristics that are considered to be essential in a Chief Nurse. Not only can these be used to form a protocol for selection, but they can also be used to inform critical pathways for development of post-holders, so that a more consistent and international profile of Chief Nurses across Europe can be obtained.
References


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Annex 1

Figure 1  All Countries - Rank Order of Characteristics

- Political Astuteness
- Leadership
- Communication
- Strategic Thinking
- Conflict Resolution
- Good Management
- Professional Credibility
- Research Skills
- Information Handling
- Decision Making/Problem Solving
- Physical Character
- Decency/Integrity
- Personal Qualities
- Innovation
- Team Working

Figure 2  Belgium - Rank Order of Characteristics

- Political Astuteness
- Leadership
- Communication
- Strategic Thinking
- Conflict Resolution
- Good Management
- Professional Credibility
- Research Skills
- Information Handling
- Decision Making/Problem Solving
- Physical Character
- Decency/Integrity
- Personal Qualities
- Innovation
- Team Working
Figure 3 Denmark - Rank Order of Characteristics

Figure 4 Netherlands - Rank Order of Characteristics
Figure 5  Greece - Rank Order of Characteristics

1. Polit. Astuteness
2. Leadership
3. Communication
4. Strategic Thinking
5. Conflict Resolution
6. Good Management
7. Prof. Credib
8. Research Skills
9. Information
10. Docn. making
11. Physical Cha.
12. Decency/Integrity
13. Pers. Qualities
14. Innovation
15. Prom. Nursing
16. Team working

Figure 6  Czech Republic - Rank Order of Characteristics

1. Polit. Astuteness
2. Leadership
3. Communication
4. Strategic Thinking
5. Conflict Resolution
6. Good Management
7. Prof. Credib
8. Research Skills
9. Information
10. Docn. making
11. Physical Cha.
12. Decency/Integrity
13. Pers. Qualities
14. Innovation
15. Prom. Nursing
16. Team working
Figure 7 United Kingdom - Rank Order of Characteristics

1. Polit. Astuteness
2. Leadership
3. Communication
4. Strategic Thinking
5. Conflict Resolution
6. Good Management
7. Profession. Credib
8. Research Skills
9. Information
10. Decn. making
11. Physical Cha.
12. Decency/Integrity
13. Pers. Qualities
14. Innovation
15. Prom. Nursing
16. Team working

Figure 8 Finland - Rank Order of Characteristics

1. Polit. Astuteness
2. Leadership
3. Communication
4. Strategic Thinking
5. Conflict resolution
6. Good Management
7. Profession. Credib
8. Research Skills
9. Information
10. Decn. Making
11. Physical Cha.
12. Decency/Integrity
13. Pers. Qualities
14. Innovation
15. Prom. Nursing
16. Team working
Figure 11  Russian Federation - Rank Order of Characteristics

Figure 12  Switzerland - Rank Order of Characteristics
Figure 13: Sweden - Rank Order of Characteristics

- Political Astuteness
- Leadership
- Communication
- Strategic Thinking
- Conflict Resolution
- Good Management
- Professional Credibility
- Research Skills
- Information Handling
- Decision Making/Problem Solving
- Physical Change
- Decency/Integrity
- Personal Qualities
- Innovation
- Promotion of Nursing
- Team Working

Figure 14: Countries of Western Europe

- Political Astuteness
- Leadership
- Communication
- Strategic Thinking
- Conflict Resolution
- Good Management
- Professional Credibility
- Research Skills
- Information Handling
- Decision Making/Problem Solving
- Physical Change
- Decency/Integrity
- Personal Qualities
- Innovation
- Promotion of Nursing
- Team Working
Figure 15 - Countries of Central and Eastern Europe

1. Polit. Astuteness
2. Leadership
3. Communication
4. Strategic Thinking
5. Conflict Resolution
6. Good Management
7. Profession. Credibility
8. Research Skills
9. Information
10. Decision making
11. Physical Char.
12. Decency/Integrity
13. Pers. Qualities
14. Innovation
15. Promotion Nursing
16. Team working
Advancing the role of the Chief Nurse in member countries of WHO: Europe will necessitate the systematic selection and recruitment of suitable post-holders, together with a critical pathway for development both of new recruits and existing personnel. To inform this process, it is essential that the attributes considered to be important in a Chief Nurse are identified. To this end, a Delphi study was initially undertaken of 22 member states. Consensus was reached by the second round, in which 12 countries participated.