

## **Report of key findings of RCN's survey of the Information Needs of Nurses, Health Care Assistants, Midwives and Health Visitors.**

v.1.6 20/04/05

### **Executive Summary**

This report communicates the key results from the information needs analysis conducted by RCN Library and Information Services with a wide range of RCN learning and information colleagues from across the UK, including Learning Representative leads and Learning Representatives.

In August 2003 it was agreed to research the up to date information needs of nurses. The information needs analysis aimed to investigate:

- Information or knowledge to improve practice in the clinical area
- Information needed to support lifelong learning and formal study.

Our aim was to find out the current information needs of all the nursing community not only RCN members.

**Methodology.** A literature review of similar projects was undertaken. A questionnaire was then developed with input from a variety of RCN colleagues from across the UK and NHS Librarians, and designed using the expertise of RCN Institute researchers, and a statistician. RCN Learning representatives and NHS health librarians distributed the questionnaire to registered nurses, midwives, health visitors and health care assistants. 129 champions distributed and returned 1715 completed questionnaires. This makes the exercise one of the largest ever undertaken. The forms were coded and entered into an SPSS database.

The profile of nurses returning forms was 43% from NHS hospitals; 20% from NHS Community/General practice and 15% from the independent sector. 80% forms were returned by registered nurses, 6% health care assistants, 2% health visitors and 3% midwives. 36% of those who returned forms did some night shifts; 3% had moved to the UK in the last 2 years; 5% did not have English as their first language. 2.4% stated they had a disability which affected their ability to find evidence. 77% of those who returned forms were RCN members and 23% were not members.

The results of the information needs analysis have been divided into three main sections: General access to information; Information or knowledge to improve practice; Information needed for lifelong learning.

General access to information. Access to computers and the internet. A significant number of nurses reported that they do not have access to computers when they need to at work. This is a particular issue in the independent care homes and hospices. There are regional differences reported in accessing computers and the internet at work, with best access in South East and South West England, and poorest access in Northern Ireland and Wales.

General access to information. Access to a health library. A high percentage of respondents use their local health libraries regularly. Nurses working in NHS hospitals had easiest access to a Library, NHS community staff had more difficulties, and the independent sector had the most difficulties. Part-time staff had more difficulties than full-time staff. Again there were regional differences with South West and North West England staff reporting that they were least likely to have easy access to a Library.

General access to information. Awareness of resources. Currently a larger percentage of nurses report that they access the RCN website than any of the NHS e-libraries. The reasons for this need to be investigated, and could be because the RCN e-Library has been tailored towards the busy nurse, needing to find relevant information quickly and easily.

General access to information. Information skills training. There was a high demand for information skills training at all levels and from all sectors.

General access to information. Respondents asked for better access to computers and the internet, and better training on how to find information. They wanted more time to study in working hours. Frequent requests included a list of useful websites for their field of practice, an email summarising news in their areas, and critical appraisal of new research and guidance on how new research could change practice.

Information or knowledge to improve practice. Employers' attitudes have a huge impact on nurses' information seeking habits. Respondents who were encouraged to search for evidence for practice in working hours, were more likely to also continue searching in their own time. Respondents most likely to change practice as a result of evidence had better access to the internet, a library, and more support at work. Nursing colleagues were cited as being the most useful source of practical information.

Information needed for lifelong learning. Respondents who change practice as a result of research are more likely to study during working hours, and more likely to continue studying in their free time. There is strong evidence of the link between a positive attitude from employers, and the hours respondents are prepared to spend on lifelong learning. It would appear that given access to appropriate resources, and given time to access information, nurses are then more likely to pursue lifelong learning and apply their learning to practice.

Conclusion. Several conclusions can be drawn from the report:

- Nurses with best access to information are more likely to change practice as a result of research, which is likely to lead to improved patient care
- Employers' attitudes are crucial
- Significant numbers are still reporting that they have no or limited access to computers at work
- Nurses in the independent sector are more likely to report that they have less access to information
- Local and regional differences are reported in accessing information and the internet
- There is a high demand for value added services to help busy nurses find up to date, good quality, relevant evidence in manageable amounts
- Respondents want a hybrid service – physical and electronic libraries, librarians as well as online services.
- There is a very high demand for more information skills training.

### **The aim, rationale and methodology of the RCN Information Needs Survey:**

The survey aimed to find out what information nurses and other allied health professionals need for practice and lifelong learning. This was a UK wide study.

A comprehensive literature review of nurses' information needs was carried out<sup>a</sup>. A questionnaire was developed in consultation with RCN Library and Information Services (LIS) and other RCN colleagues and designed with the help of colleagues from RCN Institute (Oxford) and an independent statistician. The questionnaire investigated:

- Information or knowledge to improve practice in the clinical area.
- Information needed to support lifelong learning and formal courses of study.

With the help of RCN staff across the UK, RCN Learning Representatives and Health Service Librarians were recruited, on a voluntary basis, to act as local champions to distribute the questionnaire. The target group for the survey was registered nurses, midwives, health care assistants and health visitors - not just RCN members. The survey was carried out between the 1<sup>st</sup> June 2004 and 16<sup>th</sup> July 2004. Although the questionnaire took each respondent an average of 30 minutes to fill in, the 129 local champions successfully distributed and returned 1715 questionnaires.

We would like to thank colleagues from across LIS, as well as RCN staff in other departments, regions and boards, whose help proved invaluable throughout this survey.

The report has been divided into 3 sections: General access to information; Information or knowledge to improve practice in the clinical area; Information needed to support lifelong learning and formal courses of study.

## **Part One – General access to information**

### **Section 1: Profile of respondents**

An analysis of the profile of the respondents showed that we had managed to include a good cross-section of our target audience. For example, we had enough responses from each RCN board and region to be able to analyse the data for any regional variations<sup>b</sup>. A key variable was work sector. As expected, the largest group, 43.5% of our sample work in NHS hospitals<sup>1</sup>. However, we also had a good representation from other sectors. For example, 20% worked in NHS community/General Practice, 8% in NHS other, 15% worked in the Independent Sector (this figure excludes bank/agency, as it was considered that this group could conceivably have worked in both the NHS and independent sectors – had we included them the figure rises to 18%).

We also got responses from all the job grades – with the majority being D,E,F,G and H. 80% of our respondents were registered nurses, 6% were Health Care Assistants, 2% health visitors, 3% midwives, 6% students and 3.5% other (which were a mix of management and academic). 16% of respondents always worked night shifts and another 20% sometimes worked night shifts.

Of our qualified respondents, 5% had received their training outside of the UK, and just over 3% had moved to the UK within the last two years. 5% said that English was not their first language. Just 2.4% (39 respondents) reported that they had a disability that they considered did affect their ability to search for and find information.

77% of respondents said they were members of the RCN, 23% said they were not members.

As a first step in finding out about respondents' access to information to improve practice in the clinical area and information for lifelong learning and formal courses of study, we first needed to know about respondents' general access to computers and the Internet, libraries and other sources of information.

---

<sup>1</sup> Where this report cites "NHS", this has also been used to mean the NHS equivalents in Scotland, Wales and Northern Ireland.

## **Section 2: Access to a computer and the Internet**

We asked a number of general questions around access to computers and the Internet. The following section summarises the findings in this area.

### **Respondents were asked if they had access to a computer at work and how many people they shared the computer with**

15% of respondents had no access to a computer at work.

Of those respondents who did have access to a computer at work, we asked how many people they shared the computer with. For all respondents, on average (mean = 6.2; median = 3) respondents had to share a computer with 6 other people<sup>2</sup>. There was a wide variation in the number of people they shared a computer with, with some respondents sharing a computer with 100 or more other people (standard deviation = 10.99; Variance = 120). A significant number of respondents shared a computer with more than 30 other people.

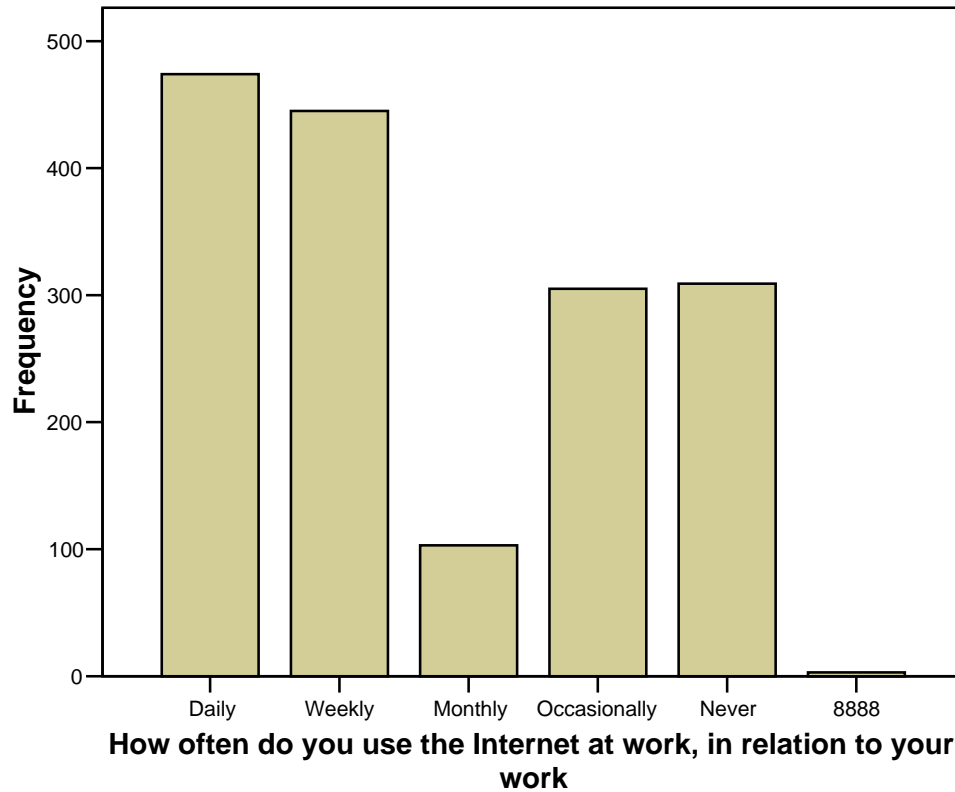
### **In response to the question “How often do you use the Internet at work in relation to your work?”<sup>c</sup>**

- 19% of respondents reported that they **never** used the Internet at work in relation to their work.
- 29% used the Internet on a daily basis, 27% on a weekly basis, 6% used the Internet monthly and 19% occasionally.

---

<sup>2</sup> If people stated 20-30 or 10-15 etc – the mid-point of the two figures given was used, but rounded up if a decimal, the one that was coded. E.g. for 10-15, the mid-point was 12.5, this was rounded up and 13 was entered into SPSS

### How often do you use the Internet at work, in relation to your work



### How often do you have access to the Internet at work when you need it?

49% of respondents said they could always get access to the Internet at work when they needed it. 20% said they could usually get access when they needed it; 14% said they could sometimes get access. 17% of all respondents said they could NEVER get access to the Internet at work when they needed it.

### How easy is it for you to obtain the necessary username and passwords to be able to access the Internet at work?

11% of respondents said it was difficult or complicated to obtain a username and password to be able to access the Internet at work.

### Variations in access to the Computer and Internet by work sector

We analysed the responses further to see if there were any differences in work sector.

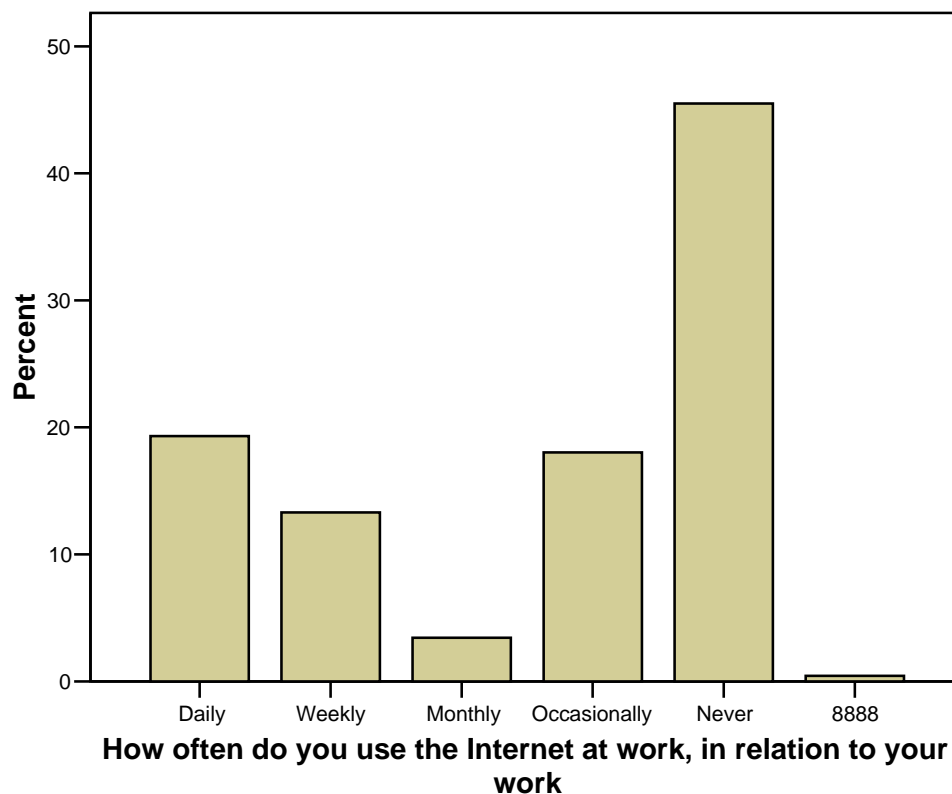
### Access to a computer at work

38% of respondents who worked in the Independent sector reported that they had NO access to a computer at work.

### In response to the question “How often do you use the Internet at work in relation to your work?”

For respondents who worked in the **Independent Sector** the percentage who never used the Internet at work in relation to their work was significantly higher than for the whole sample. **45.5%** of those who work in the Independent sector never use the Internet at work in relation to their work. This figure rose to **56%** for those who worked in **independent care homes or hospices**.

#### Independent Sector only

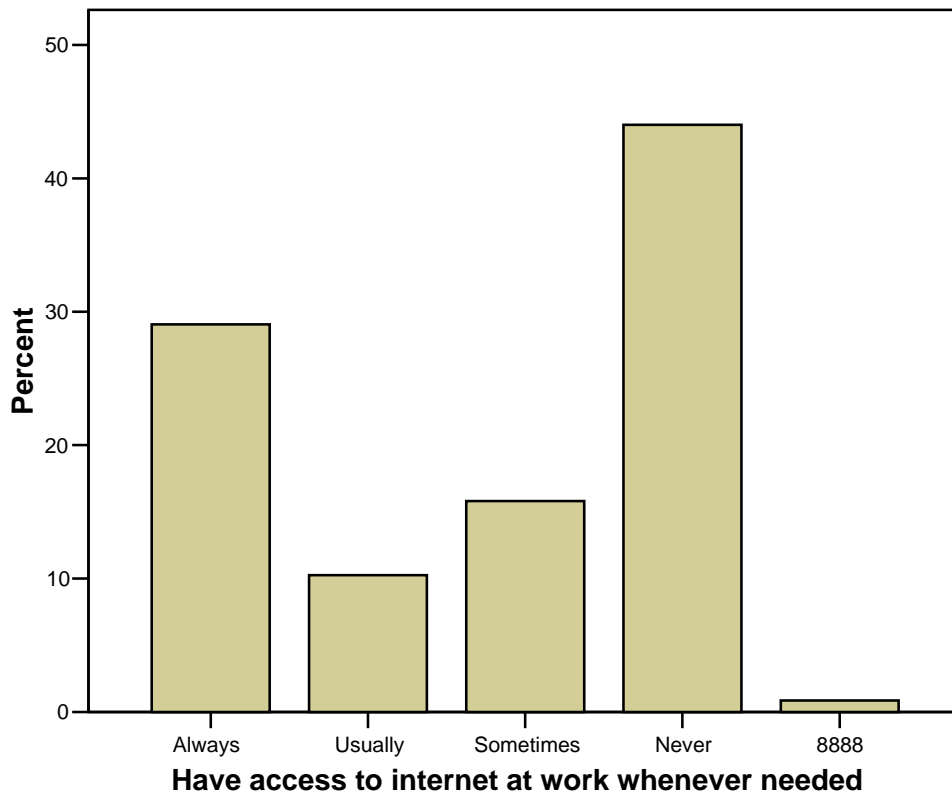


For respondents who worked in **NHS Hospitals**, **14.5%** never used the Internet at work in relation to their work. The same percentage was true for those who worked in the NHS community. For those who work in **NHS care homes or hospices**, the percentage which never used the Internet at work in relation to their work rose to **18%**.

**How often do you have access to the Internet at work when you need it?**

When we looked at how those people who worked in the Independent sector responded to this, the percentage which could never get access to the Internet when they needed it increased from 17% to 44%. The percentage who said they could always get access also decreased from 49% to 29%. The graph below shows the results for the Independent sector.

**Independent Sector Only**



## Comment

A significant number of nurses do not have access to computers when needed, or have difficulties in accessing them. This is a particular problem in independent care homes and hospices.

## Regional variations in access to computers and the Internet

We analysed the data by regions to check for any variations. It is important when considering this data to bear in mind that the composition of the samples from the regions varied from the whole UK sample in terms of proportions in the various work sectors and types of health care professional. This is likely to have an impact on the results on access to the computers and the Internet.

For example, two regions (Eastern 42.9% and South East 54.9%) have comparatively high levels of community in their samples. Two regions (Northern Ireland 25% and Yorkshire & Humber 23.7%) have comparatively higher levels of Independent sector. Northern Ireland has the lowest level of respondents from the NHS (51.9%). Similarly Wales has the highest proportion of Health Care Assistants in its sample (13.2%) and the highest proportion of students by far (26.9% of its sample).

## Respondents with no access to a computer at work (percentages)

<b>All respondents</b>	<b>14.7</b>
<b>East Midlands</b>	<b>12.8</b>
<b>Eastern</b>	<b>14.4</b>
<b>London</b>	<b>12.8</b>
<b>North West</b>	<b>7.9</b>
<b>Northern</b>	<b>6.0</b>
<b>Northern Ireland</b>	<b>37.4</b>
<b>Scotland</b>	<b>12.4</b>
<b>South East</b>	<b>7.0</b>
<b>South West</b>	<b>18.4</b>
<b>Wales</b>	<b>29.9</b>
<b>West Midlands</b>	<b>10.4</b>
<b>Yorks &amp; Humber</b>	<b>13.3</b>

The high percentage of respondents in Northern Ireland who do not have access to a computer at work may be partially explained by the relatively high percentage of responses from the independent sector and lower proportion of NHS in that region.

Wales also has a relatively high percentage of respondents with no access to computers at work. This may be partly due to the high level of students in their sample.

**How often do you use the Internet at work in relation to your work?  
(percentages)**

	Daily	Weekly	Monthly	Occasionally	Never
<b>All respondents</b>	28.9	27.1	6.3	18.6	18.8
<b>East Midlands</b>	23.9	28.3	7.6	21.7	18.5
<b>Eastern</b>	27.3	23.2	5.1	21.2	23.2
<b>London</b>	32.5	29.2	2.5	21.7	14.2
<b>North West</b>	42.0	31.8	7.6	9.1	9.5
<b>Northern</b>	28.7	33.3	8.0	17.3	10.7
<b>Northern Ireland</b>	24.5	19.4	6.1	12.2	37.8
<b>Scotland</b>	34.6	27.9	2.9	16.2	18.4
<b>South East</b>	21.7	25.6	10.9	24.8	16.3
<b>South West</b>	28.4	25.7	4.1	25.7	14.9
<b>Wales</b>	18.4	20.9	3.9	23.8	33.0
<b>West Midlands</b>	24.1	30.8	9.8	18.0	17.3
<b>Yorks &amp; Humber</b>	27.7	24.1	6.3	21.4	20.5

**How often do you have access to the Internet at work when you need it?  
(percentages)**

	Always	Usually	Sometimes	Never
<b>All respondents</b>	48.6	20.1	14.4	16.7
<b>East Midlands</b>	46.2	16.5	17.6	19.8
<b>Eastern</b>	45.8	21.9	16.7	15.6
<b>London</b>	50.0	21.2	18.6	10.2
<b>North West</b>	62.1	18.9	8.3	10.2
<b>Northern</b>	61.0	19.2	10.3	9.6
<b>Northern Ireland</b>	27.8	11.3	20.6	40.2
<b>Scotland</b>	55.5	19.7	10.2	13.9
<b>South East</b>	54.6	21.5	14.6	9.2
<b>South West</b>	46.5	22.5	18.3	12.7
<b>Wales</b>	32.5	19.7	16.7	31.0
<b>West Midlands</b>	45.1	24.1	17.3	12.8
<b>Yorks &amp; Humber</b>	46.1	22.6	13.0	8.3

The regions where the highest numbers of respondents report never using the Internet at work in relation to their work, and never having access to the Internet at work when needed are Northern Ireland, which has a relatively high level of independent sector among its respondents and Wales which has a relatively high number of health care assistants and students.

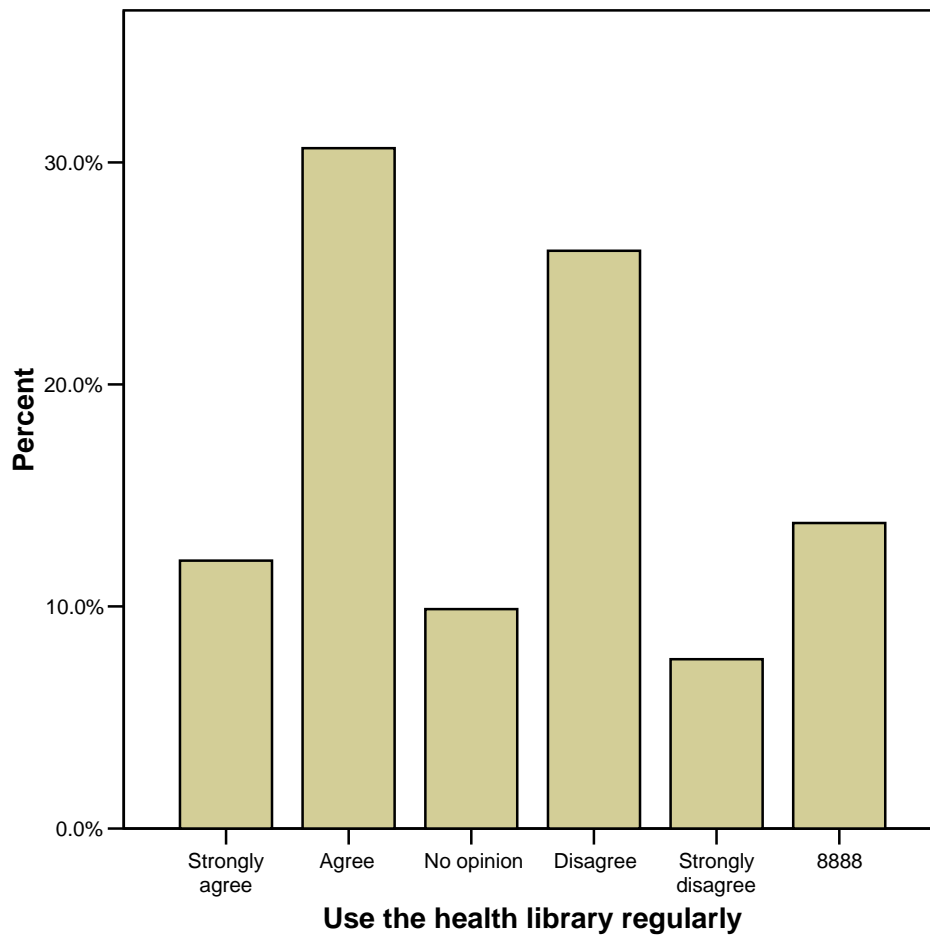
### **Section 3: Access to a Health Library**

We asked about access to local health libraries (e.g. trust libraries and university libraries, **not** RCN libraries).

**Responses to statement “I use the Health library regularly”**

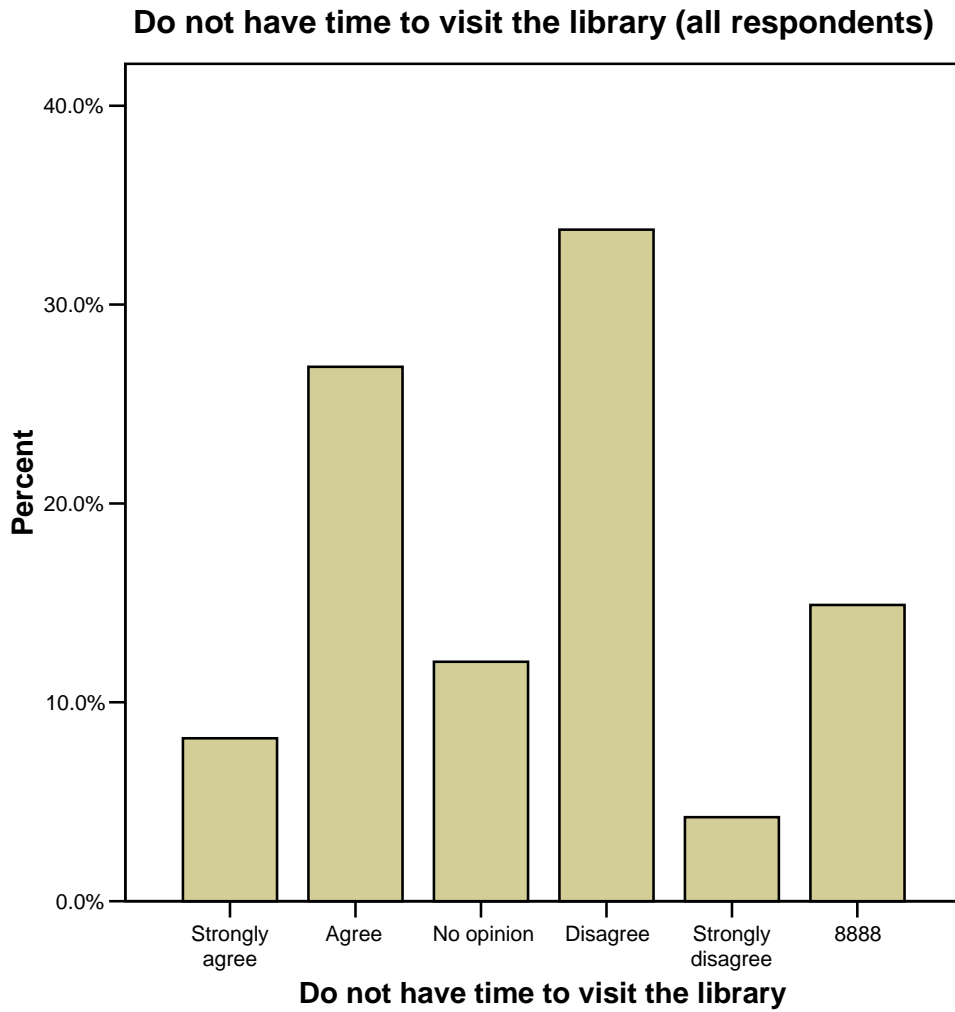
For all respondents, the percentage that said they strongly agreed or agreed that they used the health library regularly was 42.7.

**Use the health library regularly (all respondents)**



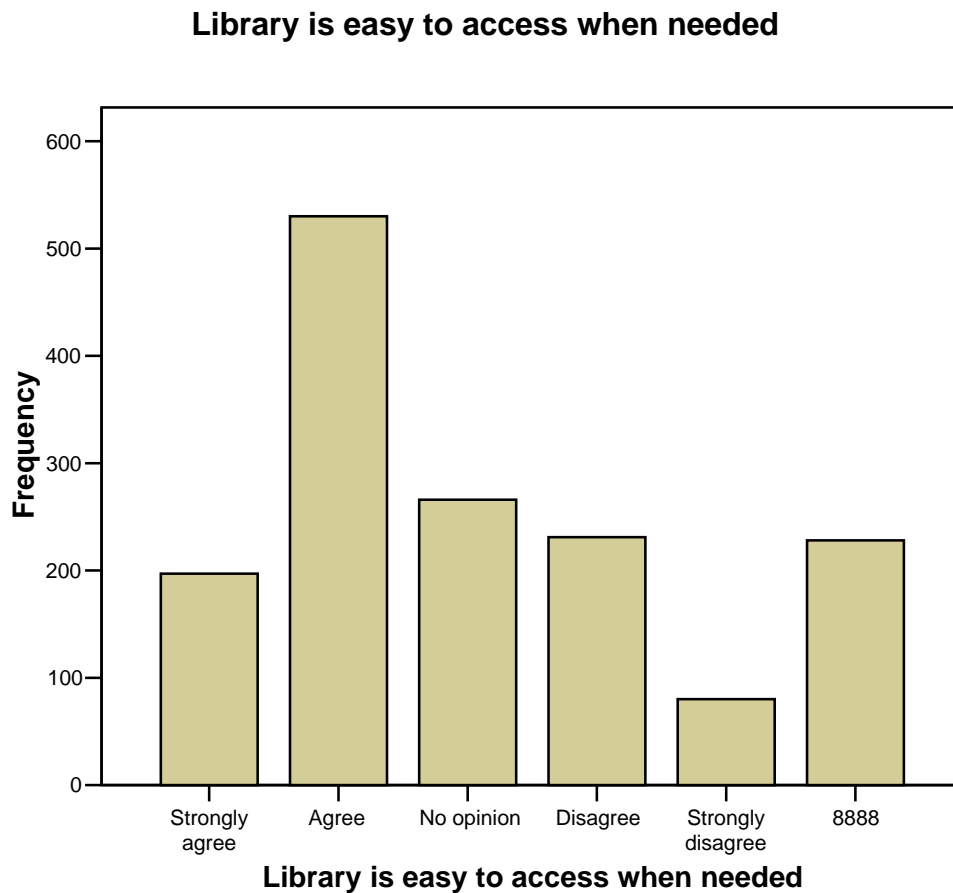
**We asked the respondents if they agreed or disagreed with the statement: “I do not have time to visit the library”**

35% of all respondents either disagreed or strongly disagreed with the statement “I do not have time to visit the library. They therefore felt that there was time to visit the library.



**Respondents were asked if they agreed with the statement: “The health library is easy to access when I need it”.**

Overall, less than half of the respondents, 47.5% either strongly agreed or agreed that the library was easy to access when they needed it.



**Respondents were asked if they agreed with the statement: “The library is open at convenient times”.**

Of those respondents who answered the question, 53.4% either agreed or strongly agreed that the library was open at convenient times, with 16.3% disagreeing or strongly disagreeing with the statement.

**Where respondents did have access to a library, they were asked a series of questions about the resources and facilities offered by their health library**

66.5% of all respondents agreed or strongly agreed that their health library did offer relevant electronic databases for nurses. Only 2.7% disagreed or strongly disagreed.

When asked if they agreed with the statement: “There is not much information specifically for nurses”, 56.7% disagreed or strongly disagreed with this statement. Only 8.9% agreed. This suggests that nurses who use Health libraries do find that the libraries have relevant information for them.

A similar response was elicited from the question “Do you agree with the statement that the library offers a good selection of relevant text and reference materials”. 57.8% agreed or strongly agreed with this statement, 8.7% disagreed or strongly disagreed.

63.6% of respondents who used health libraries strongly agreed or agreed that library staff are helpful and approachable.

49.5% of respondents who used health libraries strongly agreed or agreed that library staff were knowledgeable about nursing related information, although a further 29% said they had no opinion on this.

### **How use of and access to a health library affects, or is affected by, other variables**

Respondents who work part-time were less likely to agree that the library was open at convenient times<sup>3</sup>, and less likely to agree that that the library was easy to access when they needed it<sup>4</sup>. This is clearly an issue for health libraries to address.

### **Variations in access to local health library by work sector**

Further analysis of these questions showed that there were differences depending on the sector in which the respondents worked.

### **Responses to statement “I use the Health library regularly**

For respondents who worked in **NHS Hospitals**, **48.7%** strongly agreed or agreed that they used the health library regularly. Of respondents who worked for the NHS within the **community**, a lower percentage of **39.8%** strongly agreed or agreed that they used the health library regularly.

However, for respondents who worked in the **Independent sector**, only **17.4%** either strongly agreed or agreed that they used the health library regularly.

---

<sup>3</sup> Chi-squared analysis of association gave a value of 18.1 with 8 degrees of freedom and a p-value of 0.02. Reject the null hypothesis of no association. There is statistical evidence that whether or not the library is open at convenient times and the number of hours a nurse works is related

<sup>4</sup> Chi-squared analysis of association gave a value of 19.2 with 8 degrees of freedom and a p-value of 0.01. Reject the null hypothesis of no association. There is statistical evidence that the library is easy to access when I need it and number of hours worked are related.

### **Responses to statement “I do not have time to visit the library”**

Further analysing the responses by work sector, those who worked in **NHS Hospitals** were most likely to think they did have time to visit the library (**43.8%**). A lower percentage, **32.8%** of those respondents who worked in **NHS community** sector had time to visit the library. For those who worked in the **Independent sector**, **20.2%** thought they did have time to visit the library.

### **Responses to statement: “The library is easy to access when I need it”.**

For those respondents who worked in **NHS Hospitals**, the percentage which strongly agreed or agreed rose from 47.5 to 59.5%. A lower percentage of those who work in the **NHS community** sector, **37.8%**, strongly agreed or agreed with this statement.

Of those respondents who work in the **Independent sector**, only **17.3%** agreed that that the library was easy to access when they needed it<sup>5</sup>.

### **Responses to statement: “The library is open at convenient times”.**

The responses from those who work in **NHS hospitals** show that **64.2%** strongly agreed or agreed that the library was open at convenient times. For those that work in the **NHS community** sector this percentage decreased to **47.7%**. For those working in the **Independent sector**, only 26.3% agreed that the library was open at convenient times<sup>6</sup>

### **Regional variations in access to local health library**

There is no statistical evidence of an association between having time to visit the library and RCN region, or the library being open at convenient times and RCN region.

### **Responses to statement “The library is easy to access when I need it”**

There does appear to be a regional difference in response<sup>7</sup> to the above statement, though care needs to be taken to ensure that the differences are not due to the profile of the respondents in each area. The results showed that respondents in the South West were least likely to strongly agree or agree that the library was easy to access when they needed it (41%). They were also the most likely to strongly disagree or disagree with the statement (37.5%). The next region where the respondents were

---

<sup>5</sup> Chi-squared analysis of association gave a value of 97.6 with 16 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is easy to access when I need it and work sector are related.

<sup>6</sup> Chi-squared analysis of association gave a value of 54.3 with 16 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that whether or not the library is open at convenient times and the sector a nurse works in is related.

<sup>7</sup> Chi-squared analysis of association gave a value of 67.0 with 48 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is easy to access when I need it and RCN region or country are related

most likely to say that the library was NOT easy to access it when they needed it was the North West.

The top two regions were respondents were most likely to agree that the library was easy to access when they needed it were Wales followed by Yorkshire & Humber.

### The library is easy to access when I need it – responses by region

	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree
East Midlands	16.2	43.2	14.9	20.3	5.4
Eastern	13.9	37.5	19.4	22.2	6.9
London	17.6	36.3	24.2	13.2	8.8
North West	16.1	31.3	20.7	23.0	8.8
Northern	13.7	48.1	16.0	16.0	6.1
Northern Ireland	22.8	32.9	21.5	17.7	5.1
Scotland	16.3	40.4	22.1	13.5	7.7
South East	9.1	39.4	27.3	20.2	4.0
South West	3.6	37.5	21.4	30.4	7.1
Wales	20.2	46.0	19.6	10.4	3.7
West Midlands	10.4	44.3	26.4	13.2	5.7
Yorks & Humber	14.4	51.1	11.1	18.9	4.4

## Section 4: Awareness of electronic information sources

Respondents were asked which of a range of websites they had seen, and which they use regularly

### The RCN website:

41.8% of respondents had seen the RCN website and 31.3% had seen it and use it regularly. There was no significant difference in these percentages when the responses were analysed by work sector e.g. NHS Hospital, Independent sector.

For those respondents who were members of the RCN, the percentages rise to 44.5% have seen the RCN's website and 38.3% have seen it and use it regularly

### The RCN Learning Zone:

29.1% of respondents had seen the RCN Learning Zone and 12.4% of respondents had both seen it and used it regularly. Again, there was very little difference in response when the results were analysed by work sector.

For those respondents who were members of the RCN, the percentages rise to 33.4% have seen the RCN's Learning Zone part of the website and 15.5% have seen it and use it regularly

**The NMAP website (developed by a partnership between RCN and Nottingham University, which guides nurses to quality assured websites):**

Only 12.2 % of respondents had seen the NMAP website and only 3.7% had seen it and use it regularly

**The Department of Health's website (DH was DOH):**

20.5% of respondents had seen the Department of Health's website and 36.7% had seen it and use it regularly.

**Have you seen your own organisation's website (Internet or Intranet)?**

17.9% of all respondents had seen their own organisation's Internet or Intranet, 47% of respondents had both seen it and used it regularly.

**National health service e-libraries**

**The National Electronic Library for Health (NeLH) website (now known as NLH, National Library for Health):**

13 % of respondents had seen the NeLH website and 10.2% had both seen it and used it regularly.

There was some difference between work sectors, with only 6.6% of respondents who work in the Independent sector reporting that they had seen the NeLH site and another 6.6% stating they had seen it and used it regularly.

As the NeLH website is aimed at those working in England, the response of those who work in the English regions was analysed – 14.6% had seen the NeLH website and 12.8% used it regularly.

**Scotland's E-library (e-lib) website:**

Just looking at those respondents who work in Scotland, 23.2% of respondents who work in Scotland had seen the E-lib website and 29% has both seen it and use it regularly.

**The Scottish Executive's website:**

26.1% of respondents who work in Scotland had seen the Scottish Executive's website, 42% had both seen it and use it regularly.

**The HONNI website:**

Just looking at those respondents who work in Northern Ireland, 14.6% had seen it and 17.5% had both seen it and use it regularly.

### **Northern Ireland's DHSSPSNI website:**

Just looking at those respondents who work in Northern Ireland, 23.3% had seen it, and 28.2% had both seen it and use it regularly.

### **The Welsh HOWIS website:**

Just looking at those respondents who work in Wales, 15% had seen it, and 19.6% had both seen it and use it regularly.

## **Section 5: Where do respondents actually access different types of information?**

We wanted to know how and where respondents got access to various information sources.

The most popular place to obtain books was from the respondent's local health library. Journal articles were obtained from the local health library and from the Internet at both home and work. The most usual place to access electronic databases was via the Internet – both at home and at work.

The RCN's Library and Information services were most commonly accessed via the Internet – at both home and work, as were other RCN resources.

Respondents most frequently accessed their own organisation's information from the Internet when they were at work.

The table below gives more detail.

### **Where do respondents access different types of information –all respondents (Percentages)**

	<b>At my local health library</b>	<b>Via the Internet at work</b>	<b>At my local RCN resource centre</b>	<b>At an RCN Library</b>	<b>Via the Internet at home</b>
<b>Books</b>	61.2	15.1	4.4	8.4	20.9
<b>Journal articles or reports</b>	42.6	40.5	5.8	7.5	48.7
<b>Electronic databases e.g. Cinahl, Medline</b>	22.7	41.7	2.3	3.0	40.5
<b>Websites on the Internet</b>	13.5	47.6	1.9	2.6	61.0
<b>RCN Library and Information service</b>	6.5	20.2	6.5	7.7	23.2
<b>Other RCN resources</b>	5.7	17.1	5.9	5.2	19.5
<b>Own organisation's publications</b>	18.2	32.4	1.3	1.2	8.6

Respondents were also given the option of specifying other places they access information. Anything below 1% is not recorded. 5.5% accessed books by purchasing them. 5.4% accessed books via their college or university. 6.9% accessed journals by personal subscription. 2.7% accessed electronic databases at their college or university. 1.6% gained access to websites via their college or university

## Section 6: Training to help find information more effectively

We asked respondents if they would gain from several different levels and types of training. Their responses are summarised below.

### Basic computer skills training (including using email and Internet)

29.9% of respondents felt that they would gain from a basic computer skills course (including using email and the Internet). 55.6% of respondents had already completed a basic computer skills course

In the independent sector, the percentage who felt they would benefit from basic computer skills training rose to 41.2%.

**Training in Basic computer skills - Independent sector only**

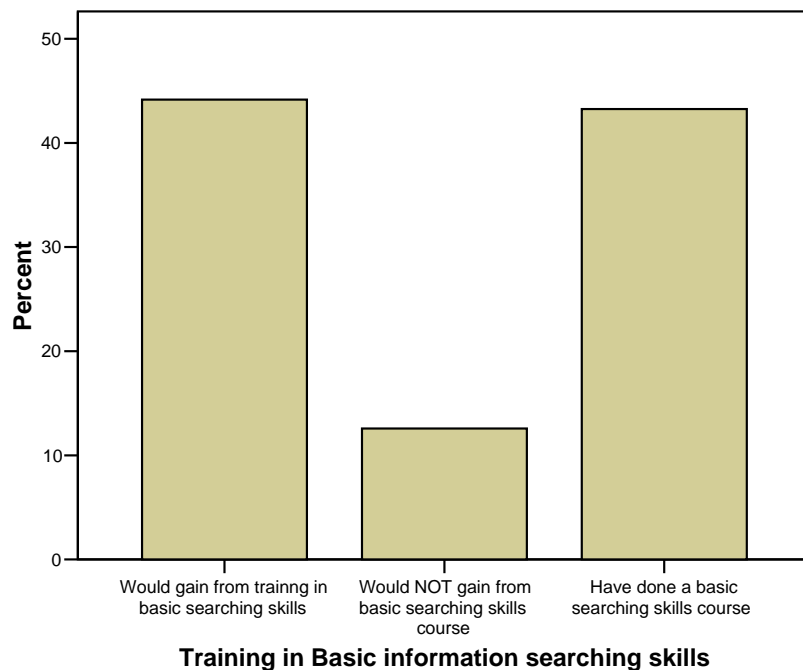


### Basic information searching skills

44% of respondents felt they would gain from training in basic information searching skills. 43.1% had already undertaken training in basic information searching skills.

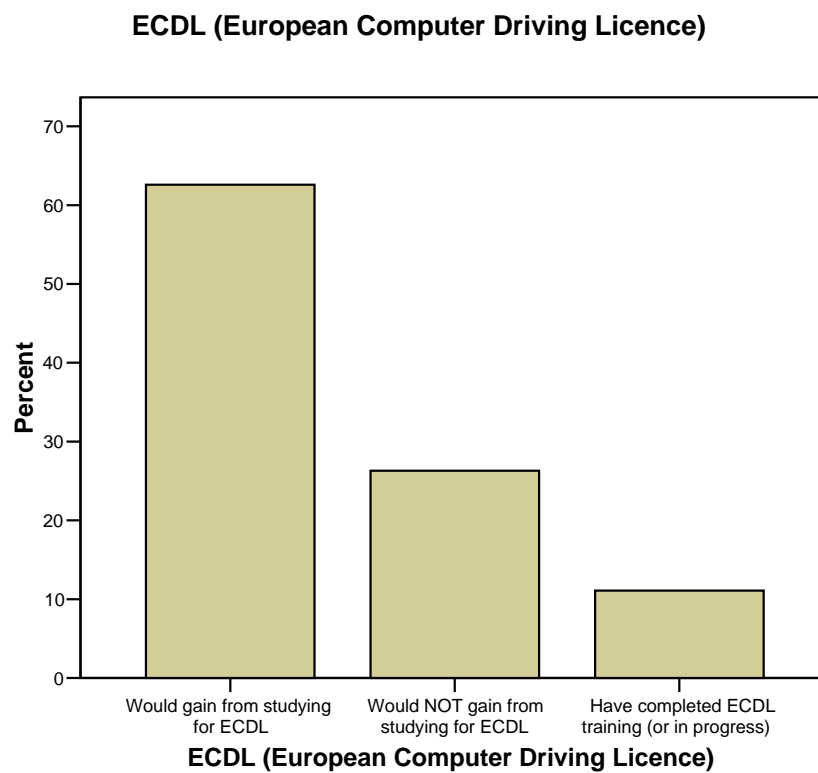
There was some variation in the response depending on work sector. 42.8% of those who worked in NHS hospitals felt they would benefit, 46.5% of those who work in NHS community felt they would benefit and 55.4% of those who worked in the Independent sector felt they would benefit.

#### Training in Basic information searching skills - all respondents



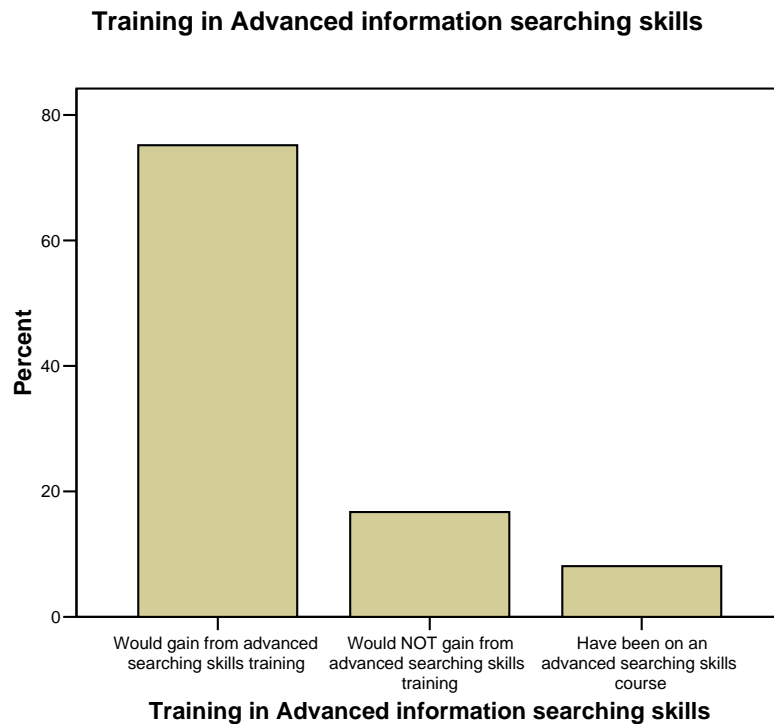
## European Computer Driving Licence (ECDL)

61.7% of all respondents felt they would gain from ECDL training. 11% have got their ECDL.



## Advanced information Skills

74.2% of respondents felt they would gain from training in advanced information skills. Just 8% had already undertaken a course in advanced information skills.



## Format of training for improving information skills

Respondents were offered a range of choices of training format and asked to tick as many as were appropriate:

- 45.8% chose “one to one” training
- 45.7% chose a one day training event.
- 35.1% chose a training guide or manual (posted or emailed to them)
- 31.4% chose a half day training event
- 27.2% chose an on-line interactive tutorial via the web
- 30% chose an on-line interactive tutorial via a CD ROM (posted to them)

- 16.4% chose a short training session at a RCN event they were already attending
- Finally, and the least favourite, 6.4% chose training over the telephone

### **Section 7: What improvements in information services would respondents like to see?**

Respondents were offered a range of options for support in general information-seeking activities. The section below summarises the findings in this area.

#### **How often would you like more help to identify the most appropriate articles and reports?**

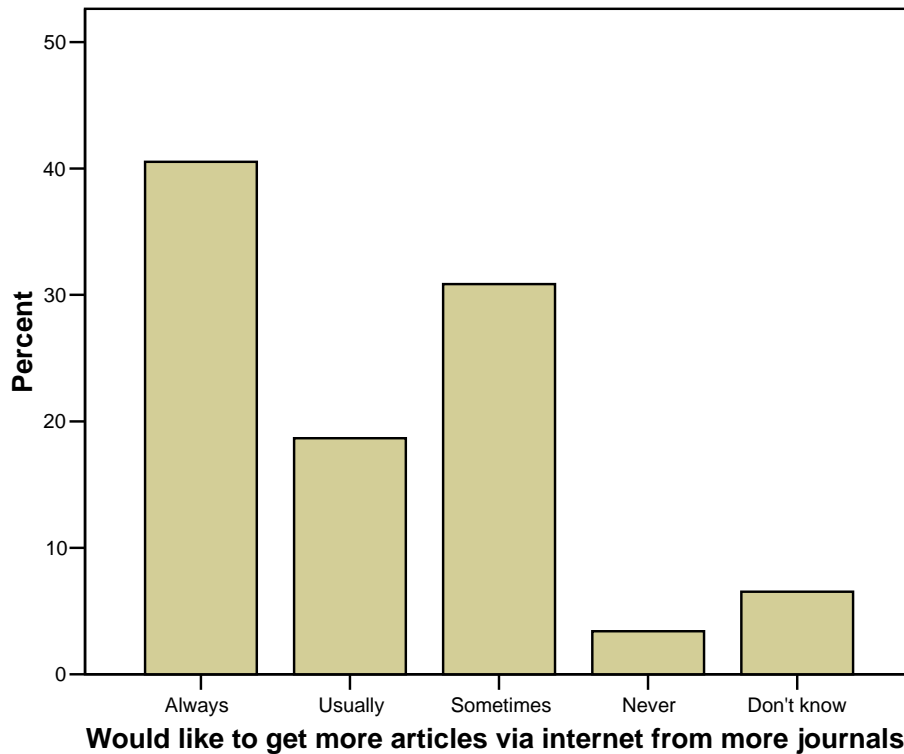
When asked if they require more help to identify relevant articles or reports, 13% said they always require more help. 22.1% said they usually required more help and 52.6% said they sometimes required more help. Only 9% said they never required more help to identify the most appropriate articles and reports.

#### **How often would you like to get more full text via the Internet from a wider range of journals?**

40% of respondents said they would always like to be able to get more full text articles via the Internet for more journals. 19% said they usually wanted more, 31% said they sometimes wanted access to more full text articles via the Internet.

The graph overleaf illustrates these findings.

**Would like to get more full text articles from a larger number of journals via the Internet**



**How often would you like someone to do a literature search for you**

17.6% of respondents would always like someone to do a literature search for them. 16% said they would usually want someone to do a literature search for them. 44.6% said they would sometimes want someone to do a literature search for them. 16% said they would never need such a service.

**How often would you like more help with literature searching**

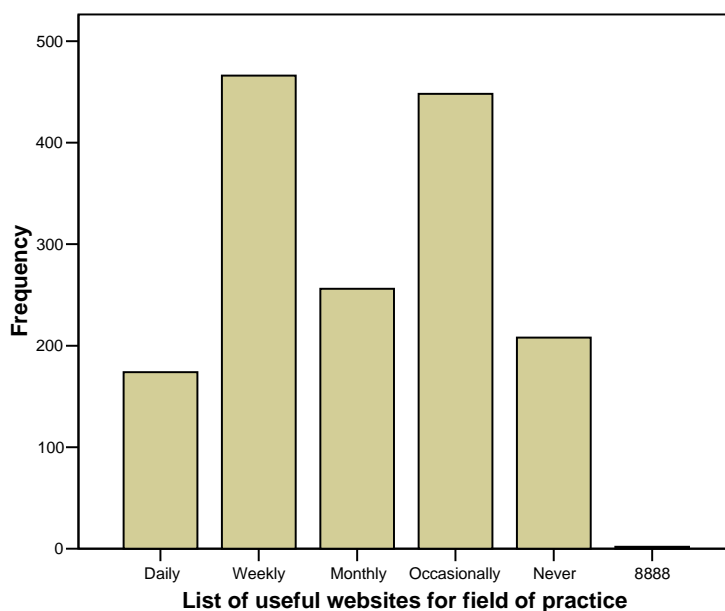
15.1% of respondents said they would always like more help with literature searching. 16.5% said they usually would like more help with literatures searching. 47.2% said they sometimes wanted more help with literature searching. 16.9% said they never wanted any help with their literature searching.

The following section shows a list of suggestions for services and how often respondents said they would use such services if they were available.

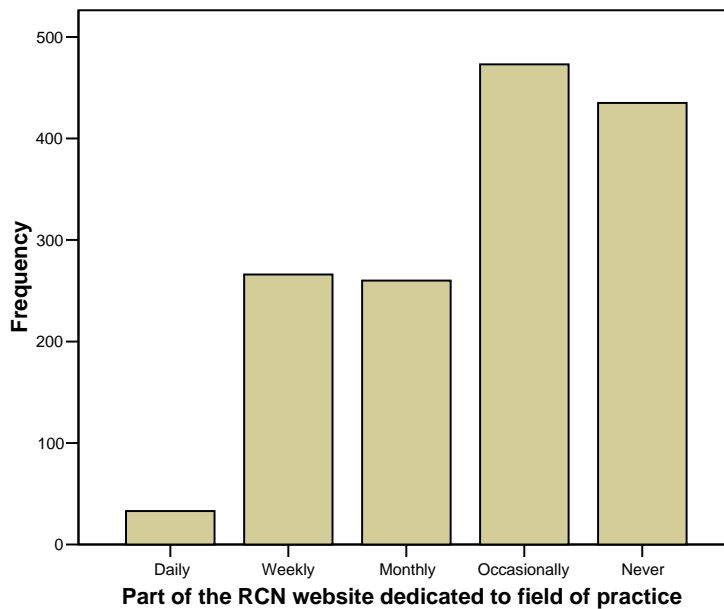
### How often would you use the following services (all respondents)

All figures in percentages	Daily	Weekly	Monthly	Occasionally	Never
Ability to email an expert with a question	9.9	13.1	9.3	37.5	30
A list of useful websites for your field of practice	11.2	30	16.5	28.8	13.4
An email discussion list for your field of practice	4.6	12	13.3	25.3	44.6
Part of the RCN website dedicated to your field of practice	2.2	18	17.6	32	29.5
Information about courses and funding available	2.2	13.9	22.2	41.4	19.9
Information about careers	1.7	11.7	15.8	43.7	26.6
An email newsletter summarising the news in your field of practice	2.6	18.3	25.3	23.2	30.1
An email newsletter summarising general nursing news	2	14.4	25.3	26	31.9
Critical appraisal of new research relevant to your practice	2.7	18.6	27.7	31.2	19.3
Regular guidance on how new research could change your nursing practice	2.7	16.8	29.3	32.6	17.6

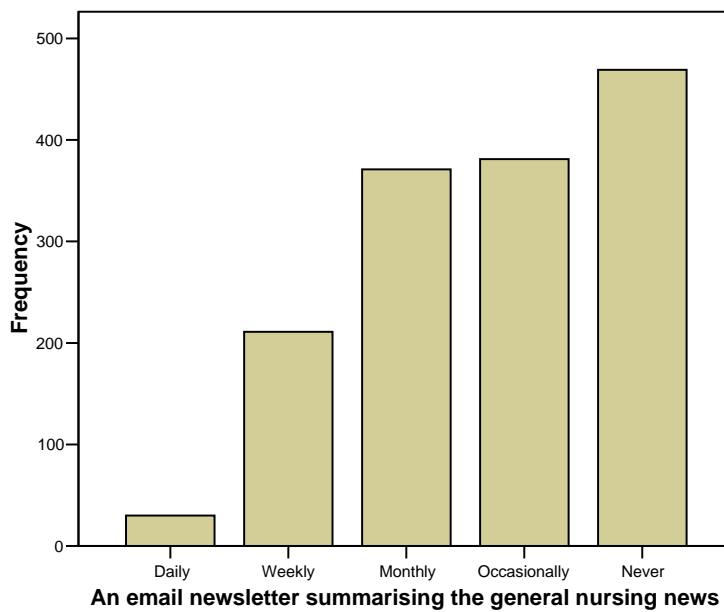
List of useful websites for field of practice



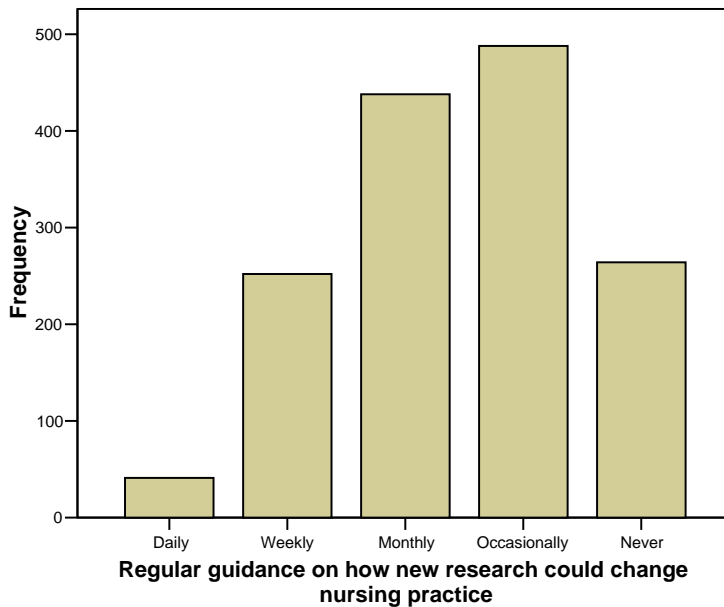
### Part of the RCN website dedicated to field of practice



### An email newsletter summarising the general nursing news



### Regular guidance on how new research could change nursing practice



### What one improvement in information services would respondents most benefit from?

The questionnaire asked respondents to consider the whole questionnaire and describe the improvement that they would most benefit from. This question involved no prompting – just an empty box for respondents to write in

1036 of the respondents wrote at least one most important improvement, 339 made two suggestions as the most important, and a further 66 respondents made three suggestions for improvements.

For the purposes of analysis, all of the suggestions have been added together – as those that gave more than one choice did not indicate the priority of each of their suggestions. The top five choices are listed here:-

- The top choice - 320 respondents said the most important improvement was **better access to computers and the Internet**
- The second most popular unprompted choice, 260 respondents, said the most important improvement was to **receive training – in using the Internet, or basic searching, or what information is available and where it is.**
- The third most popular choice for most important improvement, 156 respondents, said the most important improvement was **dedicated / protected time to study – or just “more time” to study**
- The fourth, 105 respondents said the most important improvement was **better access to more full text journals – at no extra cost**

- 99 respondents said the most important improvement would be to **have a list of useful websites recommended to them for their specialist area**

### **Disability issues**

39 respondents (2.4%) ticked “yes” in response to the question “Do you consider that you have a disability that affects your ability to search for and find information”.

Of these 39, 19 put down a suggestion in reply to the question: “Is there anything you can think of that would make information searching and retrieval easier for you?”

### **The suggestions were:**

Dyslexia (7 respondents); Larger print size on computer screen (2 respondents); Ergonomically designed computer workstations/ computers at right level (2 respondents); Laptop with special software (2 respondents); better access to computers (1); Make buildings more accessible (1); voice activated software (1); a person to help (1); failing eyesight (1); computers and journals available in workspace to minimise travel (1); and RCN website needs auditing as it does not comply with legal requirements of DDA

## **Part Two: Information or knowledge to improve practice in the clinical area**

In addition to probing respondents’ general access to information we also investigated two particular types of information need: information or knowledge to improve practice in the clinical area and information needed to support lifelong learning and formal courses of study. The following sections summarise our findings in these areas.

### **Section 1: Searching for evidence to support nursing practice and using the evidence in practice**

#### **Employers’ attitudes to searching for evidence to support nursing practice**

We wanted to find out how much support and encouragement respondents were given by their organisations for this type of information-seeking, and whether this had an impact on employees’ willingness both to search for such information and to use it to improve their practice.

The tables overleaf summarise our findings in this area and show the differences between work sectors.

**Responses to statement “I am encouraged to search for evidence to support my practice during working hours”**

	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
<b>All respondents</b>	44.7%	35.1%	19.7%
<b>NHS Hospitals</b>	39.4%	39%	20.8%
<b>NHS Community</b>	48.1%	36.1%	15.5%
<b>Independent sector</b>	42.7%	27%	29.4%

**Responses to statement “I am encouraged to search for evidence to support my nursing practice during my own (non-work) time”**

	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
<b>All respondents</b>	32.4%	48.9%	17.8%
<b>NHS Hospitals</b>	29.2%	51.3%	18.3%
<b>NHS Community</b>	27.5%	54.6%	17.5%
<b>Independent sector</b>	36.3%	42.2%	20.1%

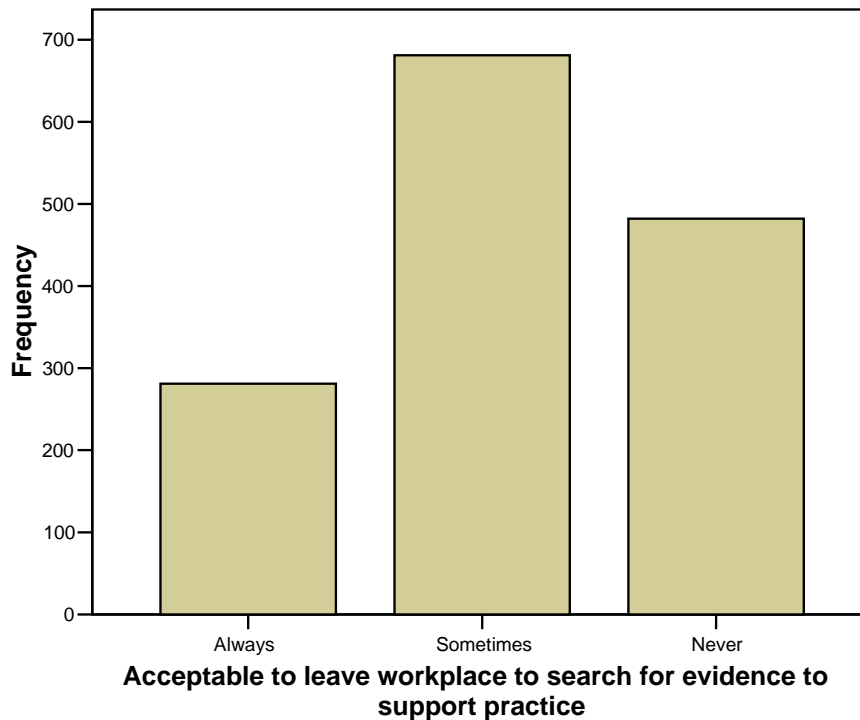
**Responses to statement “There is a process at work where I can have input into changing nursing practice”**

	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
<b>All respondents</b>	33.8%	50.4%	14.4%
<b>NHS Hospitals</b>	31.5%	52.3%	14.8%
<b>NHS Community</b>	36.1%	53.8%	9%
<b>Independent sector</b>	44.4%	35.7%	17.9%

**Responses to statement “It is acceptable for me to leave my workplace to search for evidence to support my practice”**

	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
<b>All respondents</b>	19.3%	46.7%	33%
<b>NHS Hospitals</b>	17.9%	44.1%	37.1%
<b>NHS Community</b>	18.8%	58.4%	21.8%
<b>Independent sector</b>	18.9%	37.3%	42.3%

### Acceptable to leave workplace to search for evidence to support practice



#### Comment

The attitude of a respondent's employer to their searching for evidence to support their practice clearly affects both the respondent's attitude to searching for evidence and their actual use of information sources.

- Respondents who were always or sometimes encouraged to search for evidence to support their nursing practice during working hours, were more likely to search for evidence to support their practice during their own free time<sup>8)</sup>
- Respondents who were encouraged to search for evidence during working hours were less likely to state that they did NOT have time to visit their local health library. Those who were never encouraged to search for evidence to support their practice during working hours were more likely to agree that they did NOT have time to visit the library<sup>9)</sup> and less likely to agree that the library was easy to access when they needed it<sup>10)</sup>

<sup>8</sup> Chi-squared analysis of association gave a value of 37.6 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that being encouraged to search for evidence to support practice during working hours and searching for evidence to support practice during free time are related.

<sup>9</sup> Chi-squared analysis of association gave a value of 54.2 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having time to visit the library and being encouraged to search for evidence during working hours is related

- Respondents who said it was NEVER acceptable for them to leave their workplace to search for evidence to support their practice were also more likely to agree that there was not enough time to visit their local health library<sup>11</sup>, and less likely to agree that the library was easy to access when they needed it<sup>12</sup>
- Respondents who felt there was a process at work where they could have an input into changing practice were more likely to say that they did have time to read journal articles and reports<sup>13</sup>

### Using evidence to change nursing practice

We asked respondents similar questions.

#### Responses to statement “I search for evidence to support my practice during working hours”

	Always	Sometimes	Never
All respondents	24.5	56.5	18.3
NHS Hospitals	21.4	60.6	16.8
NHS Community	23.6	61.7	13.7
Independent sector	21.2	42.8	35.1

Responses to this question were tested against other areas.

Those respondents who said they always or sometimes searched for evidence to support their practice during working hours, were more likely to have:-

- better access to the Internet - 79% always or usually had access to the Internet when they needed it
- better access to a library - 53% said that the Health library was easy to access when they needed it
- better information skills - 70% always or usually felt confident when searching for information on the Internet
- and more support at work when accessing information - 38% said there was always or usually someone available at work to help them with finding the

<sup>10</sup> Chi-squared analysis of association gave a value of 68.9 with 8 degrees of freedom and a p-value of 0.01. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is easy to access when I need it and being encouraged to search for evidence during working hours are related

<sup>11</sup> Chi-squared analysis of association gave a value of 46.8 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having time to visit the library and whether a nurse felt it was acceptable to leave the workplace to search for evidence is related.

<sup>12</sup> Chi-squared analysis of association gave a value of 102.0 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is easy to access when I need it and is it acceptable to leave workplace to search for evidence are related.

<sup>13</sup> Chi-squared analysis of association gave a value of 32.6 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is strong statistical evidence that not having time to read journals/reports and whether or not there is a process at work where practice can change is related

best information on the Internet and 60% said that there was help available when they were searching electronic databases

Comparing this to respondents who said they NEVER searched for evidence to support their practice during working hours:

- 32% always or usually had access to the Internet when they needed
- 31% said that the Health library was easy to access when they needed it
- 45% always or usually felt confident when searching for information on the Internet
- 18% said there was always or usually someone available at work to help them with finding the best information on the Internet
- 38% said there was help available when they were searching electronic databases
- Respondents who NEVER search for evidence to support their practice during working hours were also more likely to agree that there was not enough time to visit the local health library<sup>14</sup>

### Responses to statement “I search for evidence to support my nursing practice in my own (non-work) time”

	Always	Sometimes	Never
All respondents	29.7	63.1	6.5
NHS Hospitals	28.5	63.8	6.7
NHS Community	25.4	69.4	5.2
Independent sector	33.3	57.3	8.0

- Respondents who search for evidence to support their practice in their own (non-work) time are much more likely to find it easy to identify which journal articles or reports are most relevant than those who never search for evidence to support their practice in their own (non-work) time<sup>15</sup>
- Respondents who said they always or sometimes searched for evidence in their own time were also more likely to agree that the local health library was open at convenient times<sup>16</sup>; those who said they NEVER searched for evidence in their own time were less likely to agree that the library was easy to access when they needed it<sup>17</sup>

<sup>14</sup> Chi-squared analysis of association gave a value of 68.2 with 12 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having time to visit the library and nurses who search for evidence during working hours is related.

<sup>15</sup> Chi-squared analysis of association gave a value of 51.9 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

<sup>16</sup> Chi-squared analysis of association gave a value of 28.5 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that searching for evidence in own time and the library is open at convenient times are related.

### Responses to statement “I change my nursing practice as a result of research”

	Always	Sometimes	Never
All respondents	27.8	65.9	5.2
NHS Hospitals	23.4	69.9	5.5
NHS Community	31.8	66.6	1.6
Independent sector	31.1	58.4	8.1

Those respondents who said they always or sometimes changed their nursing practice as a result of research were more likely to:-

- have better access to the Internet - 72% always or usually had access to the Internet when they needed it
- better access to a library - 50% said that the Health library was easy to access when they needed it
- better information skills - 66% always or usually felt confident when searching for information on the Internet
- and more support at work when accessing information - 35% said there was always or usually someone available at work to help them with finding the best information on the Internet, and 58% said they there was help available when they were searching electronic databases

In contrast, of those respondents who said they NEVER changed their nursing practice as a result of research:-

- 41% always or usually had access to the Internet when they needed it
- 35% said that the Health library was easy to access when they needed it
- 49% always or usually felt confident when searching for information on the Internet
- 25% said there was always or usually someone available at work to help them with finding the best information on the Internet
- 37% said they there was help available when they were searching electronic databases
- Respondents who said they NEVER changed their nursing practice as a result of research were also less likely to agree that the library was open at convenient times<sup>18</sup>, and less likely to agree that the library was easy to access when they needed it<sup>19</sup>

<sup>17</sup> Chi-squared analysis of association gave a value of 32.1 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that library is easy to access when I need it and search for evidence in own time are related.

<sup>18</sup> Chi-squared analysis of association gave a value of 28.6 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is open at convenient times and changing practice as a result of research are related

<sup>19</sup> Chi-squared analysis of association gave a value of 34.9 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that the library is easy to access when needed and change practice as a result of research are related

### Responses to statement “New research affects my nursing practice”

	Always	Sometimes	Never
All respondents	33.9	61.2	3.7
NHS Hospitals	32.1	63.4	3.2
NHS Community	37.4	61.0	1.3
Independent sector	27.8	63.6	6.2

#### Comment

Respondents who search for evidence during working hours or in their own time or report changing their practice as a result of research are much more likely to find a whole range of information resources useful both for improving clinical practice and lifelong learning. Below are a few examples of this:-

- Respondents who search for evidence to support their practice in their own (non-work) time are much more likely to get full-text copies of articles and reports via the Internet than those who never search for evidence to support their practice in their own (non-work) time.<sup>20</sup>
- Respondents who search for evidence to support their practice in their own (non-work) time are much more likely to find journal articles and reports useful for finding out the latest information about their field of practice or for keeping up-to-date with the latest evidence than those who never search for evidence to support their practice in their own (non-work) time.<sup>21</sup>
- Respondents who search for evidence to support their practice in their own (non-work) time are more likely to find electronic databases useful for finding out the latest information about their field of practice or for keeping up-to-date with the latest evidence than those who never search for evidence to support their practice in their own (non-work) time.<sup>22</sup>
- Respondents who change their nursing practice as a result of research are much more likely to get full-text copies of articles via the Internet than those who never change their practice as a result of research.<sup>23</sup>

### Section 2: Information sources to improve practice in the clinical area

For **finding out “how to do something”**, respondents cited a wide range of sources to be very useful. It was this type of information problem where nursing colleagues

<sup>20</sup> Chi-squared analysis of association gave a value of 25.9 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

<sup>21</sup> Chi-squared analysis of association gave a value of 35 with 4 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

<sup>22</sup> Chi-squared analysis of association gave a value of 17.3 with 4 degrees of freedom and a p-value of 0.002. Reject the null hypothesis of no association. There is strong statistical evidence that these two are related.

<sup>23</sup> Chi-squared analysis of association gave a value of 41.4 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related

were cited as being very useful – more often than for other types of questions. The table below gives more detail.

### Usefulness of sources for finding out “how to do something”

Source	% of respondents identifying as very useful
Books	38
Journal articles or reports	65.2
Documents or publications from your own organisation	45.2
RCN Library and Information Service	21.7
Other RCN resource e.g RCN direct, RCN website, RCN publications	32.6
Electronic database e.g. Medline, Cinahl	40.4
Websites on the Internet (not RCN)	44.5
Local health library e.g. Trust library, university library, postgraduate medical centre	34.1
Nursing colleague (peer)	43.8
Nursing Colleague (supervisor or manager)	40.2
Other medical /health professional – Doctors, consultants, GPs, surgeon	24.7

Respondents were asked to choose the best place to access information to improve practice in the clinical area. The table below summarises the responses.

Percentages	My own desk/ Ward	Quiet room close to my own ward/ desk	Cyber-café	RCN Library	Other Health Library	At home
To find “how to do” type information	48.7	27.3	1.8	10.7	20.5	39.3
To find research as evidence for nursing practice	45.3	29.2	1.9	17.5	29.4	46.8

Although respondents were given the option of specifying another place for each category of information, few opted to do this - none accounted for more than 1%.

They were also asked to specify how far they were prepared to travel from their workplace to get to a place where they could access such information. The table below summarises their responses.

Percentages	Not prepared to leave workplace	Less than 5 minutes	Up to 15 minutes	Up to 30 minutes	Up to one hour	More than one hour
To find “how to do” type information	11.1	11.1	27.5	29.6	12.7	7.3
To find research as evidence for your nursing practice	8	8	24.3	32.4	17	9.8

### Part Three: Information needed to support lifelong learning and formal courses of study

The second type of information need with which we were concerned was information to support lifelong learning and formal courses of study.

#### Section 1: Hours of Study

In order to assess the importance given to lifelong learning and formal courses of study we asked respondents to tell us how many hours they actually studied during working hours and in their own time.

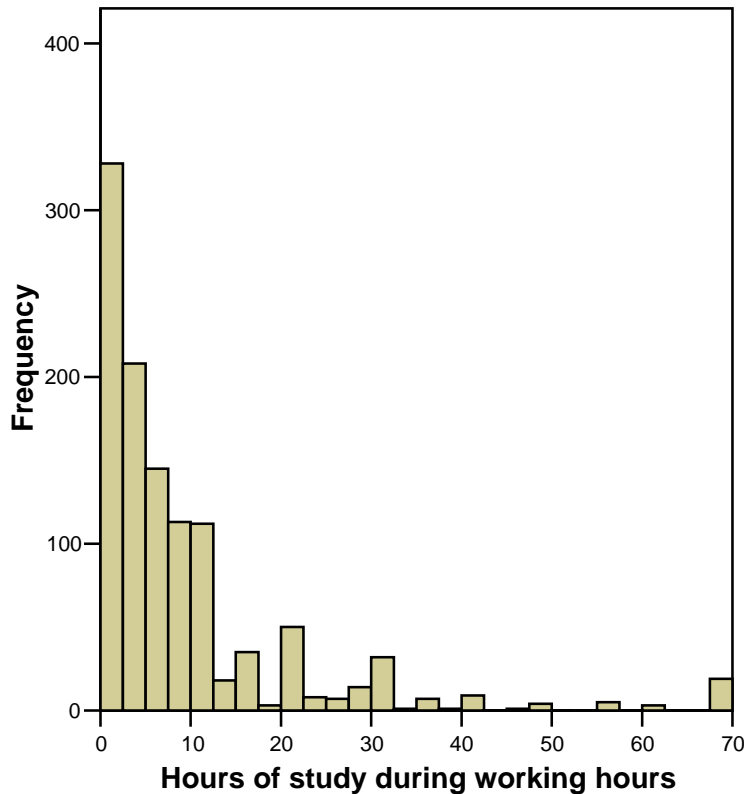
#### How many hours do you study per month during working hours i.e. when being paid?<sup>24</sup>

The average (the mean) number of hours respondents studied per month during working hours was 8.9. However, the histogram overleaf shows that there is a wide variation in the number of hours<sup>25</sup>.

<sup>24</sup> The histogram excludes students and “other” as per question 7 – where respondents were asked if they were a registered nurse, health care assistant, health visitor, midwife, student or other. All fractions of hours were rounded up. All hours over 70 hours were coded as 70 – as there were very few – though the original data is available.

<sup>25</sup> Figures exclude students. Mean=8.9173; Median=5; Standard deviation=13.9516. 9 respondents said they studied more than 70 hours per month during working hours, in order to display the histogram in a meaningful manner – the 9 respondents were all re-coded as 70 - where 70 mean equal to or greater than 70. The original data was used to calculate the mean, median etc

### Hours of study per month during working hours (excluding students)



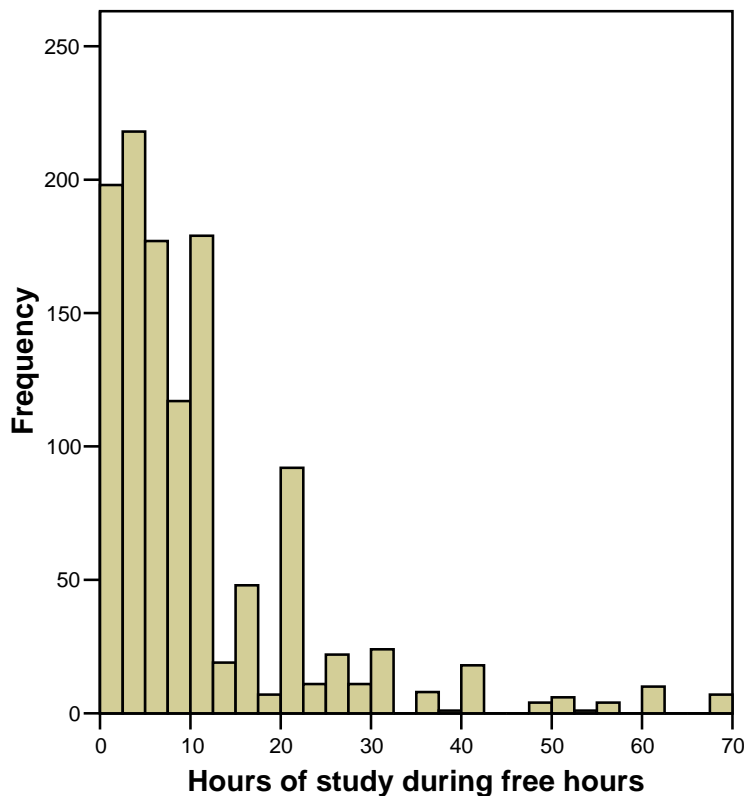
### How many hours do you study per month during free time (i.e. when not being paid) <sup>26</sup>

The average (the mean) number of hours respondents studied per month during their free time i.e. while not being paid, was 10.79. However, the histogram below shows that there a wide variation in the number of hours <sup>27</sup>

<sup>26</sup> The histogram excludes students and “other” as per question 7 – where respondents were asked if they were a registered nurse, health care assistant, health visitor, midwife, student or other. All fractions of hours were rounded up. All hours over 70 hours were coded as 70 – as there were very few – though the original data is available.

<sup>27</sup> Figures exclude students. Mean=10.7927 ; Median= 7; Standard deviation= 12.97. 6 respondents said they studied more than 70 hours per month during working hours, in order to display the histogram in a meaningful manner – the 6 respondents were all re-coded as 70 - where 70 mean equal to or greater than 70. The original data was used to calculate the mean, median etc

### Hours of study per month during own time / non-working hours (excluding students)



In order to carry out the correlations below the hours of study were grouped<sup>28</sup>.

- Not surprisingly respondents who worked full time studied more hours during working time<sup>29</sup>

#### Comment

There is an obvious link between the effects of a positive attitude towards using evidence to change clinical practice and the amount of hours respondents were prepared to spend on studying and lifelong learning. In particular:-

- Being encouraged to search for evidence increases the number of hours that nurses study during working hours<sup>30</sup>

<sup>28</sup> Code 0 = zero hours of study; code 1 = 0.1-10 hours per month; code 2 = 11-40 hours per month and code 3= 41 or more hours per month

<sup>29</sup> Chi-squared analysis of association gave a value of 25.7 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying at work and number of hours they work is related.

- Respondents who said they did change their practice as a result of research were more likely to study more hours during work time<sup>31</sup>.
- Respondents who said they, always or sometimes, changed their nursing practice as a result of research, were also more likely to study more hours in their free time<sup>32</sup>.
- Respondents who said they were always or sometimes encouraged to search for evidence to support their practice in their own time were more likely to study more hours per month in their own time<sup>33</sup>.
- Respondents who said they always or sometimes searched for evidence to support their practice in their own time, were more likely to study in their own time<sup>34</sup>.
- Respondents who said it was always or sometimes acceptable for them to leave their workplace to search for evidence to support their practice, were more likely to study more hours in their own time<sup>35</sup>.
- Respondents who felt that research did affect their practice (always or sometimes) were also more likely to study more hours in their own time<sup>36</sup>.
- Respondents who felt there was never a process at work where they can have an input into changing nursing practice were more likely to study less hours during working hours<sup>37</sup>.

## Section 2: Access to computer and the Internet

In addition to gauging respondents' general access to the Internet we were particularly interested in knowing whether Internet access coincided with when people actually had time to study.

---

<sup>30</sup> Chi-squared analysis of association gave a value of 51.1 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying at work and whether or not they are encouraged to search for evidence is related

<sup>31</sup> Chi-squared analysis of association gave a value of 27.8 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying at work and whether or not a nurse changes her practice is related.

<sup>32</sup> Chi-squared analysis of association gave a value of 26.4 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying during free time and whether or not a nurse changed her practice is related.

<sup>33</sup> Chi-squared analysis of association gave a value of 20.9 with 6 degrees of freedom and a p-value of 0.02. Reject the null hypothesis of no association. There is strong statistical evidence that number of hours spent studying during free time and whether or not a nurse is encouraged to search for evidence is related

<sup>34</sup> Chi-squared analysis of association gave a value of 137.0 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying during free time and whether or not a nurse searches for evidence to change practice in own time is related.

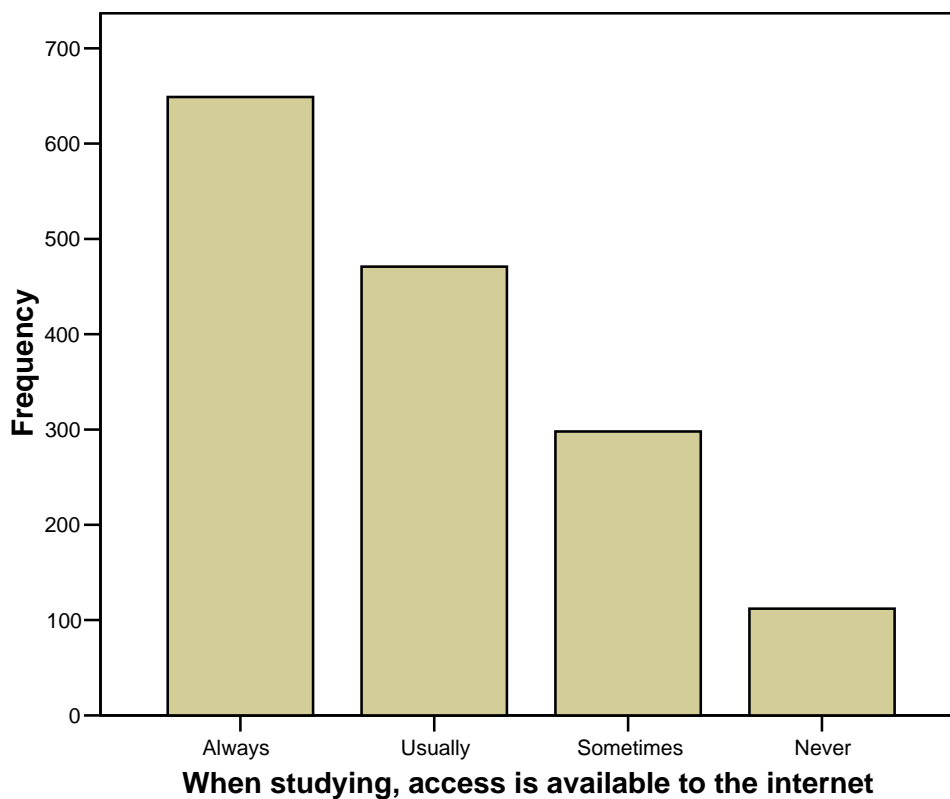
<sup>35</sup> Chi-squared analysis of association gave a value of 18.5 with 6 degrees of freedom and a p-value of 0.05. Reject the null hypothesis of no association. There is statistical evidence that number of hours spent studying during free time and whether or not a nurse felt it was acceptable to leave the workplace to find evidence is related.

<sup>36</sup> Chi-squared analysis of association gave a value of 25.6 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that number of hours spent studying during free time and whether or not a nurse felt that research affected her practice is related.

<sup>37</sup> Chi-squared analysis of association gave a value of 21.9 with 6 degrees of freedom and a p-value of 0.01. Reject the null hypothesis of no association. There is statistical evidence that number of hours spent studying at work and whether or not there is a process at work by which the nurse can change nursing practice is related.

- When asked if they could get access to the Internet when they have time to study, 42% said they always could, 30% said they could usually get access, 19% said they could sometimes get access and only 7% said they could NEVER get access to the Internet when they had time to study. For those who work in the Independent sector, 13% could NEVER get access to the Internet when they had time to study.
- Those who worked night shifts were less likely to have access to the Internet when they had time to study<sup>38</sup>

### When studying, access is available to the internet



<sup>38</sup> Chi-squared analysis of association gave a value of 54.3 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse works night shifts is related.

## Comment

Again, there was a strong correlation between positive attitudes towards using evidence to change practice and access to the Internet when respondents had time to study. For example:

- Respondents who were encouraged, always or sometimes, to search for evidence to support their nursing practice during working hours, were also more likely to have access to the Internet when they had time to study<sup>39</sup>
- Respondents who are encouraged, always or sometimes, to search for evidence to support their nursing practice, during their own/free time, were also more likely to be able to get access to the Internet when they had time to study<sup>40</sup>
- Respondents who NEVER search for evidence to support their practice during working hours are less likely to have access to the Internet when they have time to study<sup>41</sup>
- Respondents who always have access to the Internet when they have time to study are more likely to search for evidence to support their nursing practice in their own /free time<sup>42</sup>
- Respondents who state that there is no process at work where they can have an input into changing nursing practice, are more likely to never have access to the Internet when they have time to study<sup>43</sup>
- Respondents who never have access to the Internet when they have time to study are more likely to report that it is never acceptable for them to leave their workplace in order to search for evidence to support their practice<sup>44</sup>
- Respondents who said they NEVER changed their nursing practice as a result of research were less likely to have access to the Internet when they have time to study<sup>45</sup>

---

<sup>39</sup> Chi-squared analysis of association gave a value of 141.5 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse is encouraged to search in working hours is related.

<sup>40</sup> Chi-squared analysis of association gave a value of 19.9 with 6 degrees of freedom and a p-value of 0.03. Reject the null hypothesis of no association. There is strong statistical evidence that having access to the internet when studying and whether or not a nurse is encouraged to search in own free-time is related.

<sup>41</sup> Chi-squared analysis of association gave a value of 147.5 with 9 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse searches for evidence to support nursing practice is related.

<sup>42</sup> Chi-squared analysis of association gave a value of 27.6 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse searches for evidence to support her practice in her own time is related.

<sup>43</sup> Chi-squared analysis of association gave a value of 106.9 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not there is a process at work to have input into changing practice is related

<sup>44</sup> Chi-squared analysis of association gave a value of 109.8 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse felt it was acceptable to leave the workplace when researching for information is related.

<sup>45</sup> Chi-squared analysis of association gave a value of 74.5 with 6 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and whether or not a nurse changed her practice in light of research is related.

## Regional Variations in access to the Internet when the respondent has time to study

There does appear to be some regional differences in these results. There is very strong statistical evidence that being able to get access to the internet when a respondent has time to study and which RCN region the respondent works in is related.<sup>46</sup> Respondents from Northern Ireland were most likely to say that they could never get access to the Internet when they had time to study (18.2%)<sup>47</sup>, followed by respondents from overseas (13%) and then respondents from Wales (11.8%). By contrast only 2.5% of respondents from the South East and 3% of respondents from the Northern region said they could never get access to the Internet when they had time to study.

Respondents in the South West were most likely to say they could always or usually get access to the Internet when they had time to study (86%).

The table below gives more detail.

	Always	Usually	Sometimes	Never
East Midlands	40.2	29.9	20.7	9.2
Eastern	39.8	37.6	14.0	8.6
London	46.2	30.2	17.0	6.6
North West	53.9	24.4	16.1	5.5
Northern	43.0	37.3	16.9	2.8
Northern Ireland	37.5	22.7	21.6	18.2
Scotland	45.0	35.7	12.4	7.0
South East	37.8	38.1	22.0	2.5
South West	52.4	33.3	11.1	3.2
Wales	31.7	30.1	26.3	11.8
West Midlands	34.9	27.0	29.4	8.7
Yorks & Humber	44.5	27.3	23.6	4.5

## Section 3: Information sources for lifelong learning and formal courses of study

The most useful sources of information for **completing an assignment when on a formal course of study** were journal articles and reports, followed by books, then websites and electronic databases.

<sup>46</sup> Chi-squared analysis of association gave a value of 89.2 with 36 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that having access to the internet when studying and the RCN region is related

<sup>47</sup> Care needs to be taken in interpreting these regional differences. A first analysis of the profile of respondents within each region does not appear to give a reason for the differences, although Northern Ireland did have a higher percentage of respondents from the Independent sector.

Source for completing an assignment	% of respondents identifying as very useful
Books	57.4
Journal articles or reports	79.3
Documents or publications from your own organisation	34.9
RCN Library and Information Service	29.5
Other RCN resource e.g. RCN Direct, RCN website, RCN publications	33.8
Electronic database e.g. Medline, Cinahl	51.9
Websites on the Internet (not RCN)	52.2
Local health library e.g. Trust library, university library, postgraduate medical centre	47
Nursing colleague (peer)	23.5
Nursing colleague (manager or supervisor)	21
Other medical /health professional - Doctors, consultants, GPs, surgeons	7.5

The most useful source of information for finding out the latest information, and keeping up to date with the latest news, in the respondent's own field of practice were journal articles and reports. RCN Library and Information Services are an important source of information.

Source for keeping up to date with latest specialist news	% of respondents identifying as very useful
Books	25.9
Journal articles or reports	76
Documents or publications from your own organisation	43.3
RCN Library and Information Service	24.5
Other RCN resource e.g. RCN Direct, RCN website, RCN publications	30.6
Electronic database e.g. Medline, Cinahl	39.5
Websites on the Internet (not RCN)	46.5
Local health library e.g. Trust library, university library, postgraduate medical centre	30.9
Nursing colleague (peer)	37.7
Nursing colleague (manager or supervisor)	35.4
Other medical /health professional – Doctors, consultants, GPs, surgeons	19.2

To **keep up to date with nursing news generally**, respondents cited the most useful sources as journal articles and reports – chosen by 73.8% of all respondents.

## Comment

It is worth repeating here the strong link between using evidence to change practice and ability to recognise the value of a range of information sources both for improving clinical practice and lifelong learning. Below are a few examples of particular relevance to lifelong learning:--

- Respondents who search for evidence to support their practice during working hours are much more likely to find websites useful for finding information to complete an assignment when on a formal course of study than those who never search for evidence to support their practice during working hours.<sup>48</sup>
- Respondents who change their nursing practice as a result of research are much more likely to find websites on the Internet useful for keeping up-to-date with nursing news generally than those who never change their practice as a result of research.<sup>49</sup>
- Respondents who change their nursing practice as a result of research are much more likely to find electronic databases useful for finding out the latest information about their field of practice or for keeping up-to-date with the latest evidence than those who never change their practice as a result of research.<sup>50</sup>

Respondents were asked to choose the best place to access information to support lifelong learning or formal courses of study. The responses are summarised in the table below.

Percentages	My own desk/ Ward	Quiet room close to my own ward/ desk	Cyber-café	RCN Library	Other Health Library	At home
To find information when studying on a formal course	34.1	28.7	1.5	14.6	30.4	63.6
To keep up-to-date with nursing news generally	48.6	25.9	2.0	15.4	21.6	50.7
To keep up-to-date with the latest information for field of nursing	51.9	27.9	1.9	16.0	24.1	48.0

Respondents were asked how far they were prepared to travel from their workplace to get to a place where they could access information to support lifelong learning or formal courses of study. The responses are summarised in the table overleaf.

<sup>48</sup> Chi-squared analysis of association gave a value of 29.7 with 4 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

<sup>49</sup> Chi-squared analysis of association gave a value of 18.6 with 8 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

<sup>50</sup> Chi-squared analysis of association gave a value of 42.4 with 4 degrees of freedom and a p-value of 0. Reject the null hypothesis of no association. There is very strong statistical evidence that these two are related.

Percentages	Not prepared to leave workplace	Less than 5 minutes	Up to 15 minutes	Up to 30 minutes	Up to one hour	More than one hour
To find information when you are studying on a formal course	5.9	5.7	20.8	33.2	21.6	12.4
To keep up-to-date with nursing news generally	14.5	15.3	25.7	27	9.8	7.4
To keep up-to-date with the latest information for your field of nursing	11.6	10.4	23.6	28	12.5	13.3

It is interesting to compare this table with its equivalent for improving practice in the clinical area. Whereas 67.2% of respondents are prepared to travel up to 30 minutes and over to access information when studying on a formal course, only 49.6% are prepared to travel this distance to find “how to do” type information. Similarly 11.1% of respondents stated that they were either not prepared to leave their workplace or would only travel for less than 5 minutes to find “how to do” type information as compared to 5.9% (not prepared) and 5.7% (less than 5 minutes) to access information when studying on a formal course.

## Conclusion

Having good access to information – via the Internet and via a physical library and via information skills – appears to have a direct effect on putting evidence into practice. Those with the best access to information were also more likely to both search for evidence and to change their nursing practice as a result of research

The role of the employer is crucial in this. The evidence is clear that if a respondent’s employer encourages their employees to search for evidence, allows them to leave their workplace and has a process for the employee to have input into changing practice, then the employee is more likely to search for evidence during working hours and more likely to change their nursing practice as a result of research. In addition, respondents whose employer offers this type of support and encouragement are more likely to search for evidence in their own time i.e. while not being paid.

Respondents who search for evidence during working hours or in their own time or report changing their practice as a result of research are much more likely to find a whole range of information resources useful both for improving clinical practice and lifelong learning.

A significant number of respondents still have no or limited access to a computer and the Internet at work. Those who work in the independent sector are more likely to have less access to Information. This is true of access to the Internet, access to a library and for access limited due to lack of information skills.

There is a very high demand for more information skills training.

There is a high demand for valued added information services which help nurses find good quality, up to date, relevant evidence in manageable amounts.

Ros Bertulis, RCN Outreach Librarian

Input by: Jackie Lord, Head of RCN Library and Information Services

RCN Library and Information Services would like to acknowledge the role played by Jane Keys in the Information Needs Survey before leaving the organisation to take up a new post.

**Published by the Royal College of Nursing, 20 Cavendish Square, London, W1G 0RN © 2004 Royal College of Nursing. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without prior permission of the Publishers or a licence permitting restricted copying issued by the Copyright Licensing Agency, 90 Tottenham Court Road, London W1T 4LP. This publication may not be lent, resold, hired out or otherwise disposed of by ways of trade in any form of binding or cover other than that in which it is published, without the prior consent of the Publishers.**

Appendix:

<sup>a</sup> The literature review has been summarised in the following document: Keys, J (2003) Information Needs Analysis – what we want to find out and what the literature tells us. 8th December 2003. The document is available from Jackie Lord or Rosamund Bertulis.

<sup>b</sup> **Respondents by RCN region or Board**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 East Midlands	98	5.7	5.7	5.7
2 Eastern	105	6.1	6.1	11.8
3 London	122	7.1	7.1	19.0
4 North West	271	15.8	15.8	34.8
5 Northern	154	9.0	9.0	43.7
6 Northern Ireland	106	6.2	6.2	49.9
7 Overseas	18	1.0	1.0	51.0
8 Scotland	142	8.3	8.3	59.2
9 South East	134	7.8	7.8	67.1
10 South West	77	4.5	4.5	71.5
11 Wales	221	12.9	12.9	84.4
12 West Midlands	138	8.0	8.0	92.5
13 Yorks & Humber	118	6.9	6.9	99.4
9999 (region unknown)	11	.6	.6	100.0
Total	1715	100.0	100.0	

RCN Publication code 003 216

<sup>c</sup> In all the tables throughout the report 8888 means “not applicable” and 9999 means “data missing”.