

# Supporting Evidence-Based Nursing

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UNIVERSITY OF KUOPIO

*Health, environment, wellbeing*

# Introduction

- Growing demand for evidence-based nursing (EBN)
- Challenge for information professionals in hospitals
  - Teaching information literacy (IL) skills for nurses
  - Promoting research utilisation in nursing
  - Supporting nurses' continuing education and life long learning



# Key concepts – EBN

- Evidence-based nursing is the process by which nurses make clinical decision using the best available research evidence, their clinical expertise, and patient preferences



# Key concepts – EBN

- EBN steps
  1. Formulation of an answerable question to address a specific patient problem or situation
  2. Systematic searching for the research evidence that could be used to answer the question
  3. Appraisal of the validity, relevance, and applicability of the research evidence
  4. Decision making regarding the change in practice
  5. Implementation of the evidence based practice decision
  6. Evaluation of the decision outcome



## Key concepts – EBN

- Information technology is an essential tool for each step of the EBN process
- EBN does not stop at information retrieval
- EBN is the connection of internal evidence (patient-related understanding) and external evidence (or knowledge from studies)
- Information literacy helps in making the connection



# Key concepts – IL

- Information literacy is the ability
  - To recognize that information is needed
  - To find it
  - To evaluate it
  - To use it in practice
- Part of the process of evidence-based practice
- Foundation for critical thinking also in EBN



## Key concepts – IL

- Computer literacy does not mean the same as information literacy but computer skills are needed in information retrieval from electronic resources
- Not only the competencies of nurses, but also the availability and usability of databases have to be taken into account



# EBN in UKU and KUH

- Demand of evidence-based nursing has been taken seriously both in the University of Kuopio (UKU) and in the Kuopio University Hospital (KUH)
- Role of information professionals in the process is expanding





## EBN in UKU and KUH

- The Department of Nursing Science in the University of Kuopio is profiled nationally as a preventive nursing science research and education unit
- University of Kuopio was the first university in Finland to start with a degree program in Health Administration with nursing science as a major in 1979



# Evidence-based nursing in UKU

- Evidence based nursing
  - First year students
  - Basic concepts in evidence-based nursing, retrieval of evidence-based research from databases, critical evaluation of research evidence, products of evidence-based nursing, theories of research spreading and factors influencing on it
  - Information professionals teach information retrieval



# Evidence-based nursing in UKU

- Development of Evidence Based Nursing
  - Third year students
  - Development of scientific knowledge, its nature and usefulness, nursing outcomes, and effectiveness in health care
  - Majority of the students have at this point completed the Information Retrieval and Library Skills course compulsory for all undergraduate students
  - Many students make appointments with information specialists



## Evidence-based nursing in KUH

- Kuopio University Hospital has the longest nursing research tradition in Finnish hospitals
- Nursing research systematically developed
- Stretches from practical development activities of the nursing units to academic dissertations



## Requirements of EBN

- Nursing workforce able to access and effectively use information-retrieval systems is necessary for efficient and effective information use
- Libraries have a crucial role
- EBN requires
  - Clinical information and decision support system available at the point of use
  - Quick access to available evidence-based information
  - Computerized clinical information system



# Survey results in Kuopio University Hospital

- Survey in May 2007
  - In order to develop information retrieval training in KUH
  - In order to find out the nursing staff's
    - Educational needs in information retrieval
    - Knowledge about EBN
    - Attitudes towards EBN
  - Link to the electronic survey was put on the hospital intranet and send to several in-house mailing lists of the nursing staff
  - 162 answers



Figure 1: Knowledge about EBN

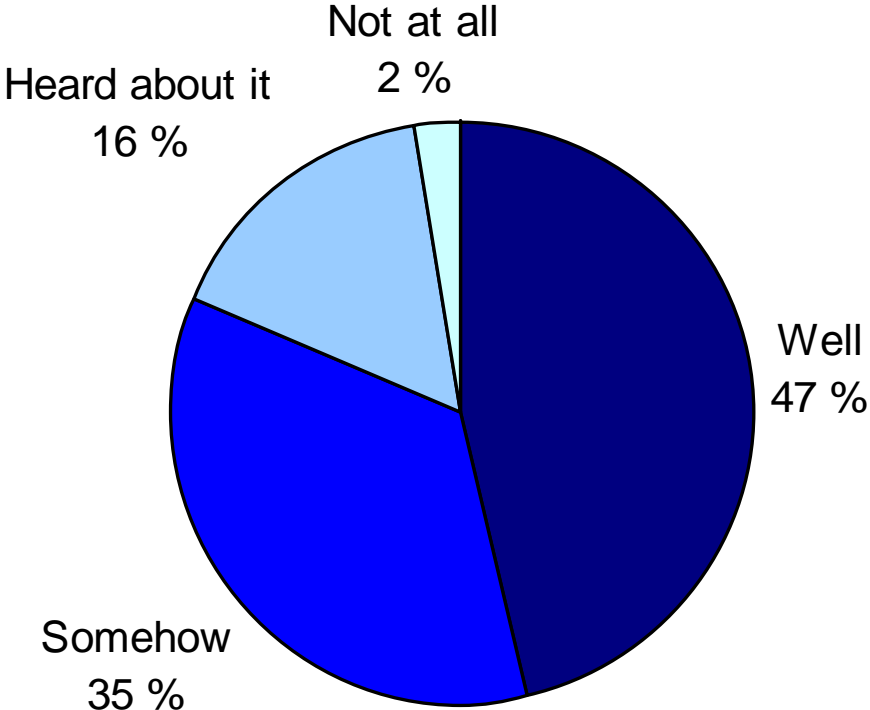


Figure 2: EBN training

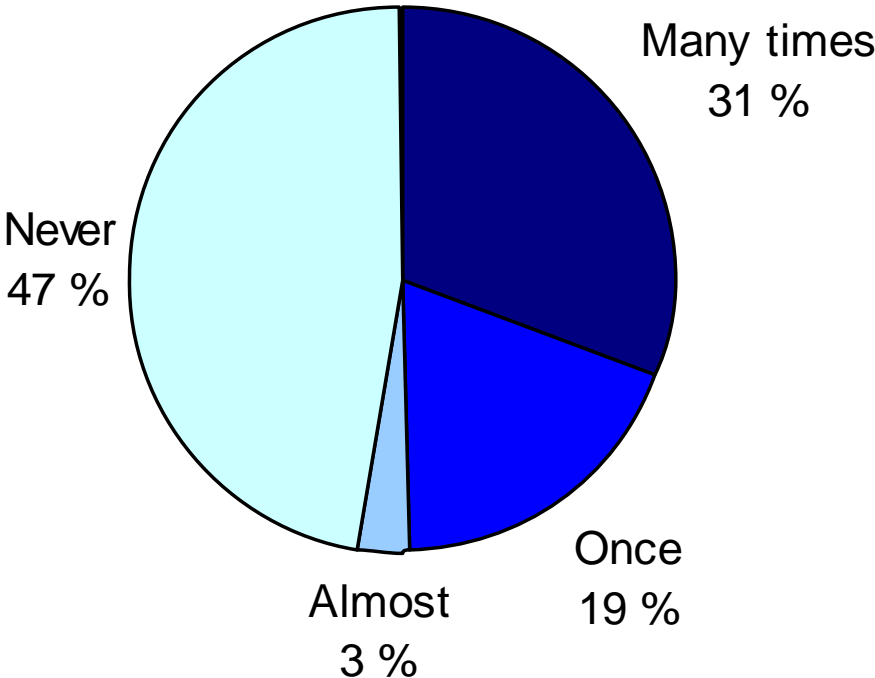




Figure 3: No EBN training, would attend

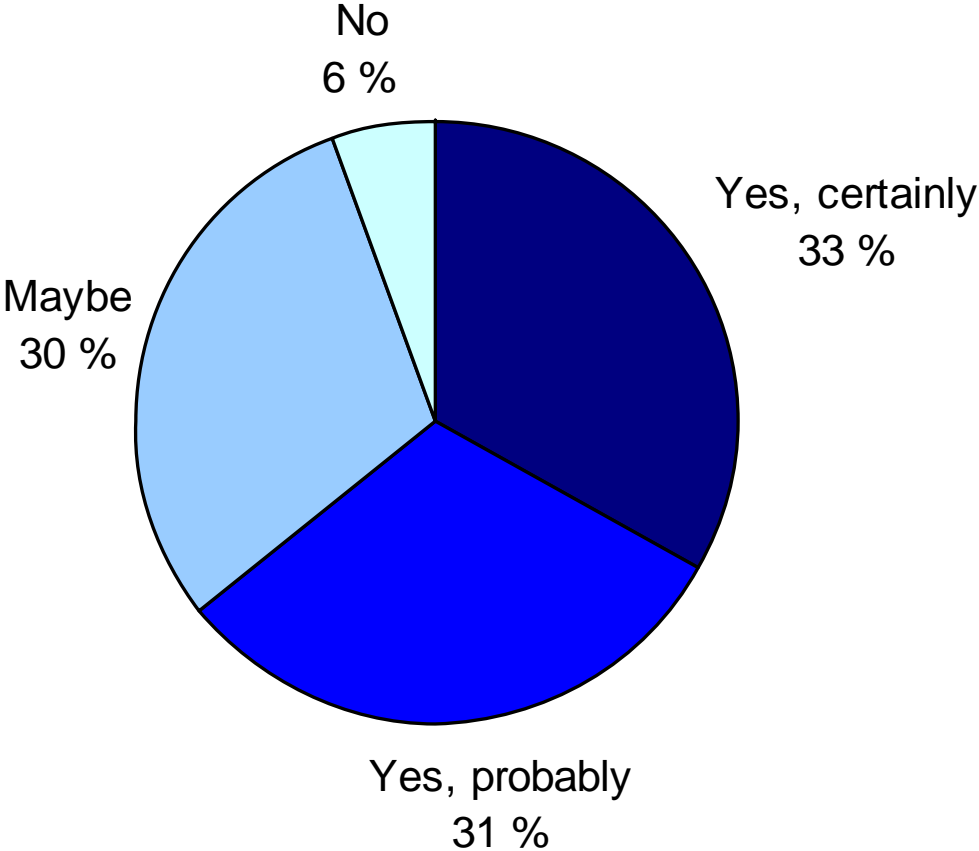


Figure 4: Would attend EBN training again

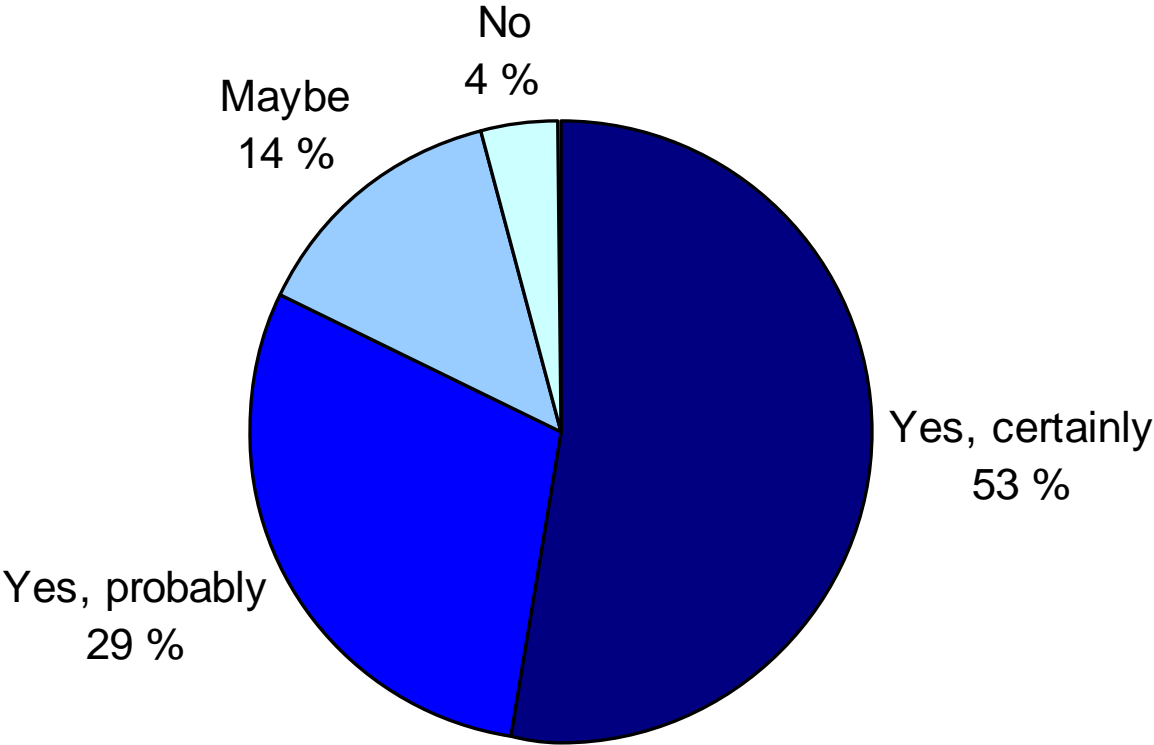


Figure 5: Information retrieval training

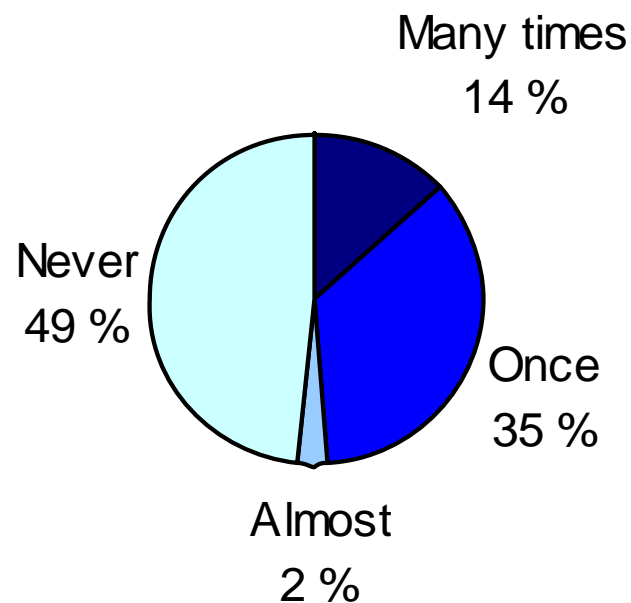


Figure 6: No IR training, would attend

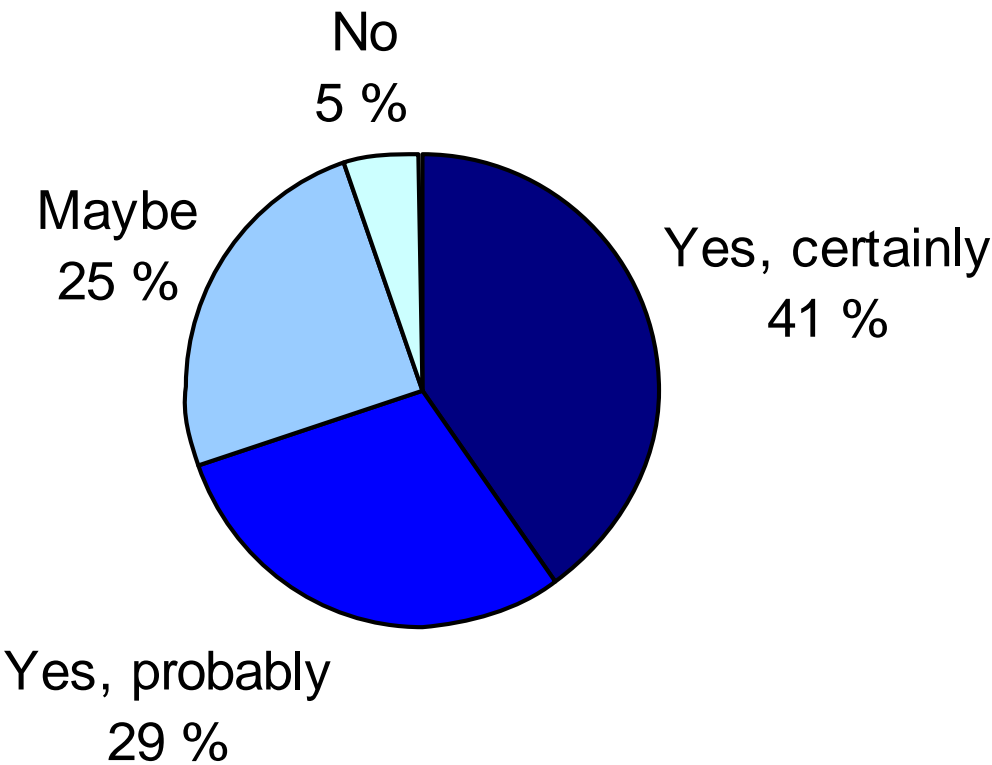


Figure 7: Would attend IR training again

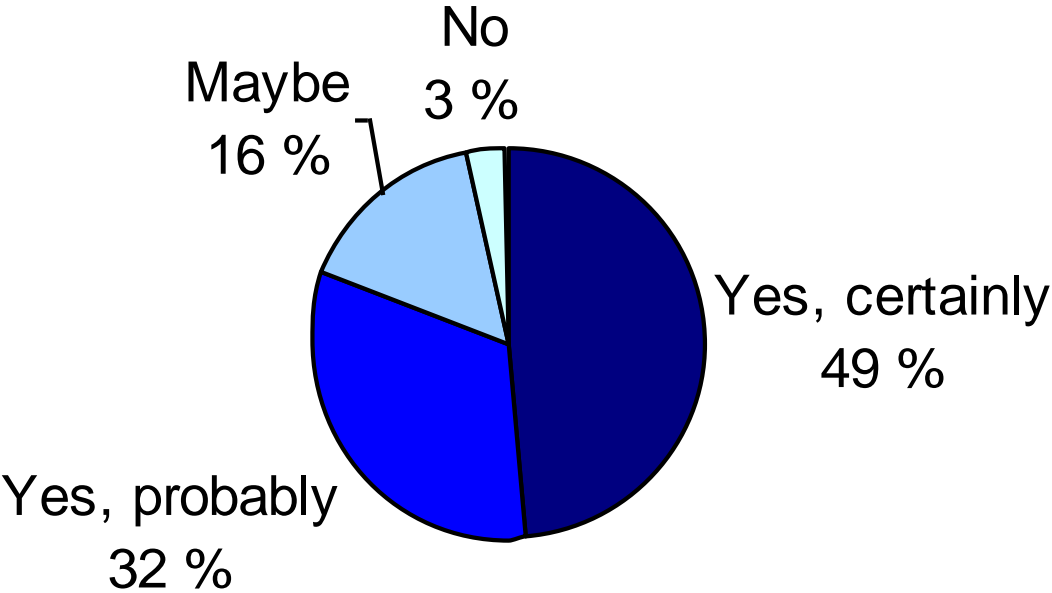


Figure 8: Searching in general

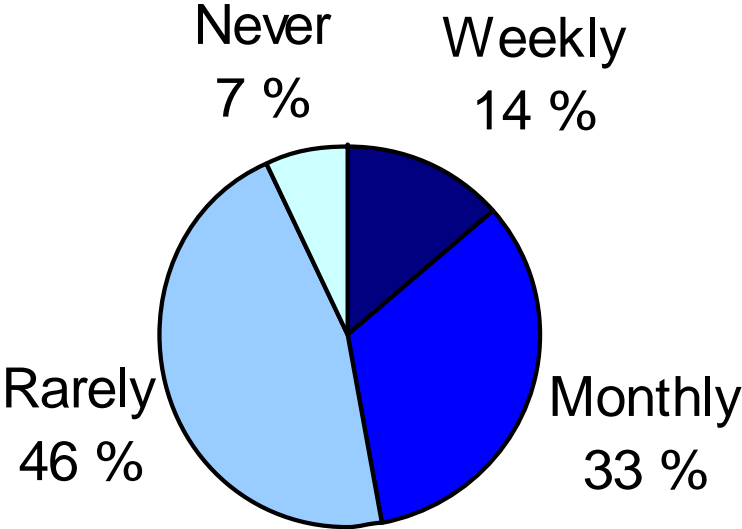


Figure 9: Searching Internet

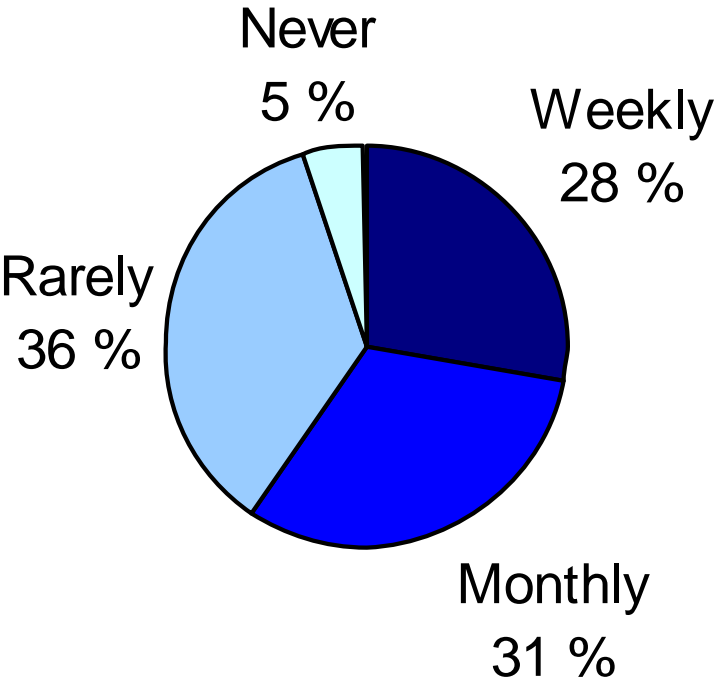


Figure 10: Searching OPACs

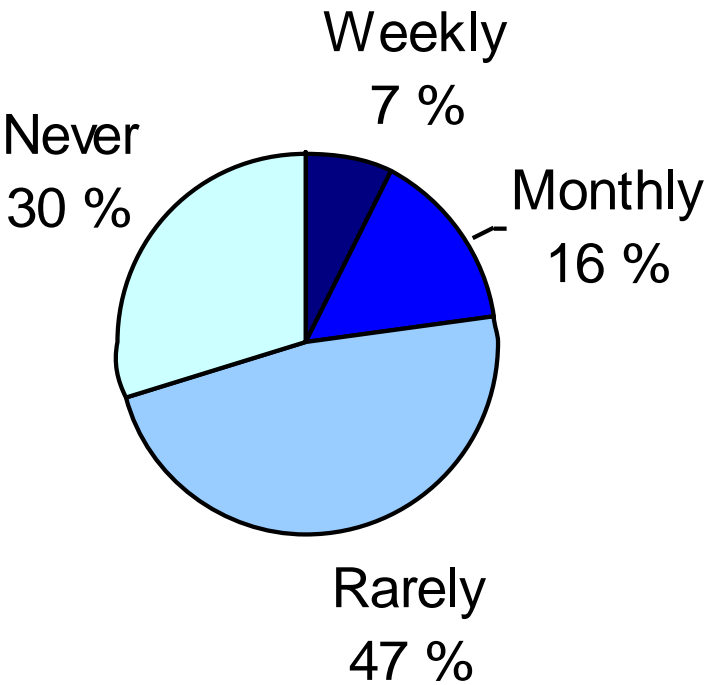




Figure 11: Searching Finnish databases

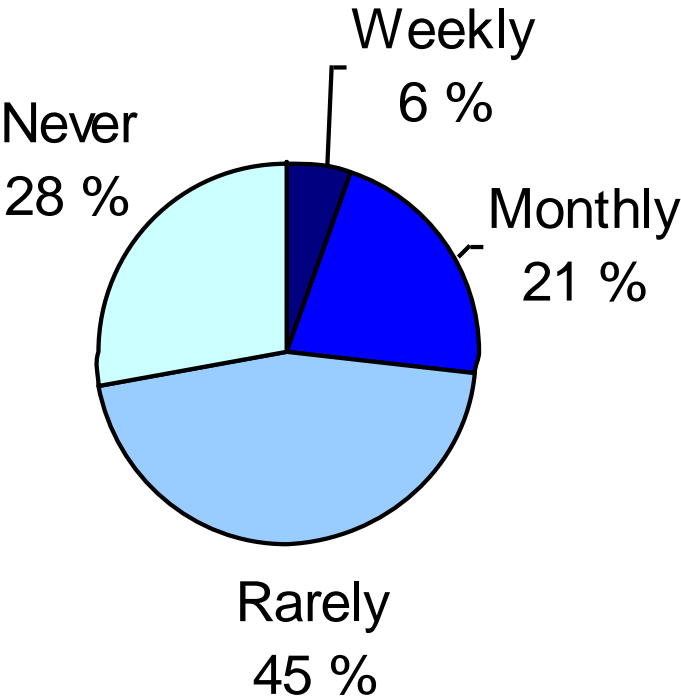


Figure 12: Searching international databases

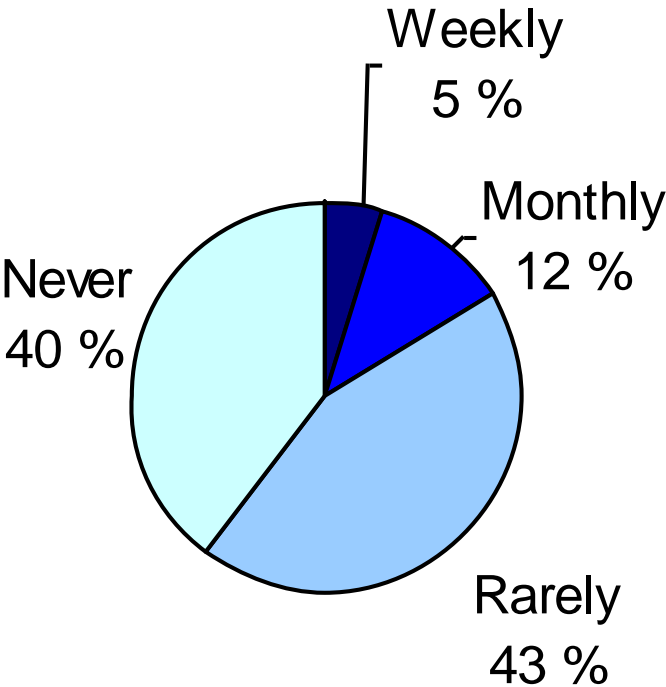


Figure 13: Somewhere else

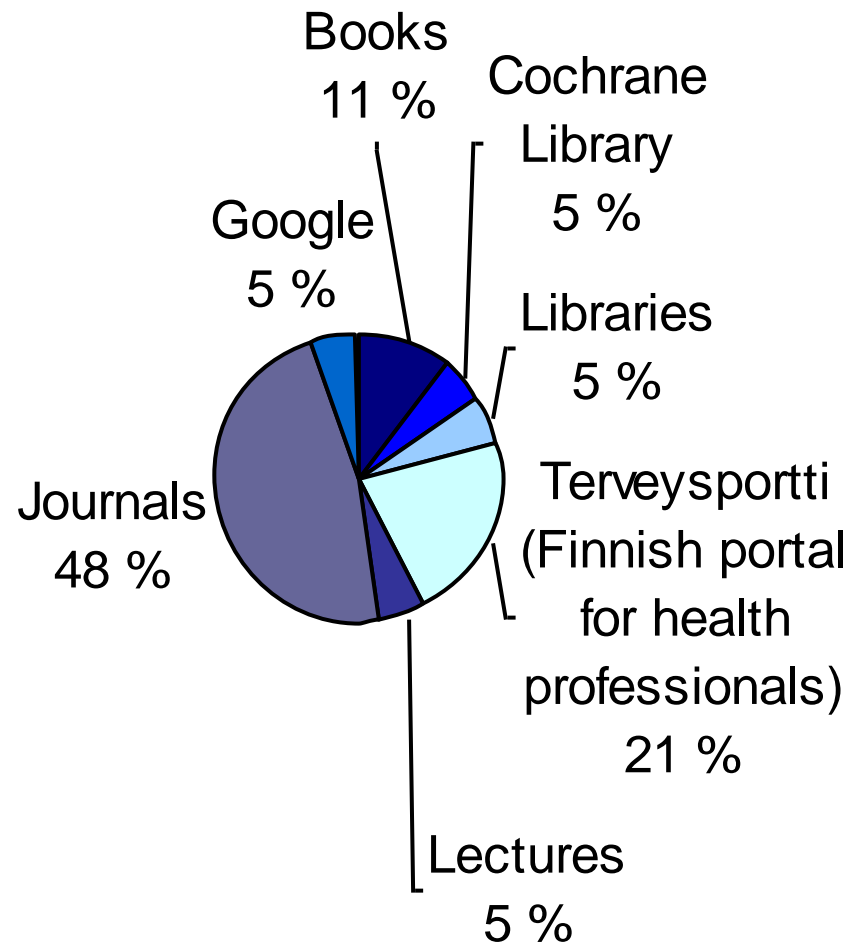


Figure 14: Why never search

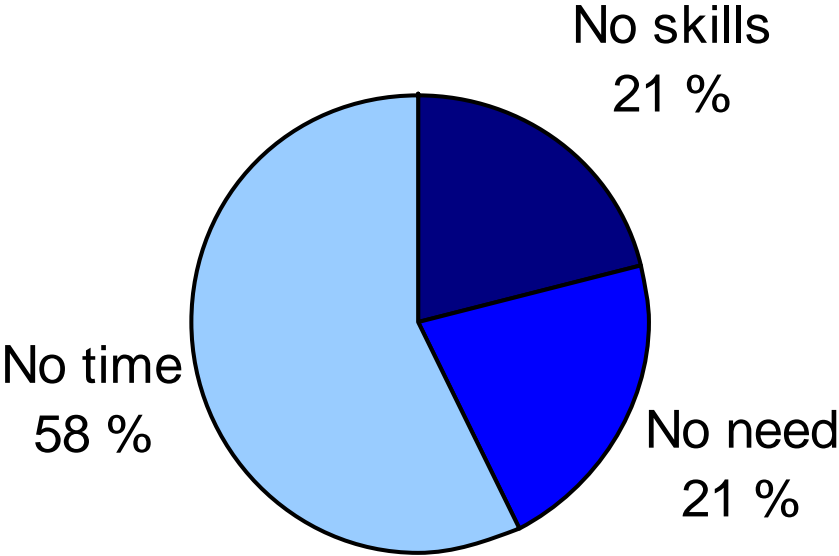
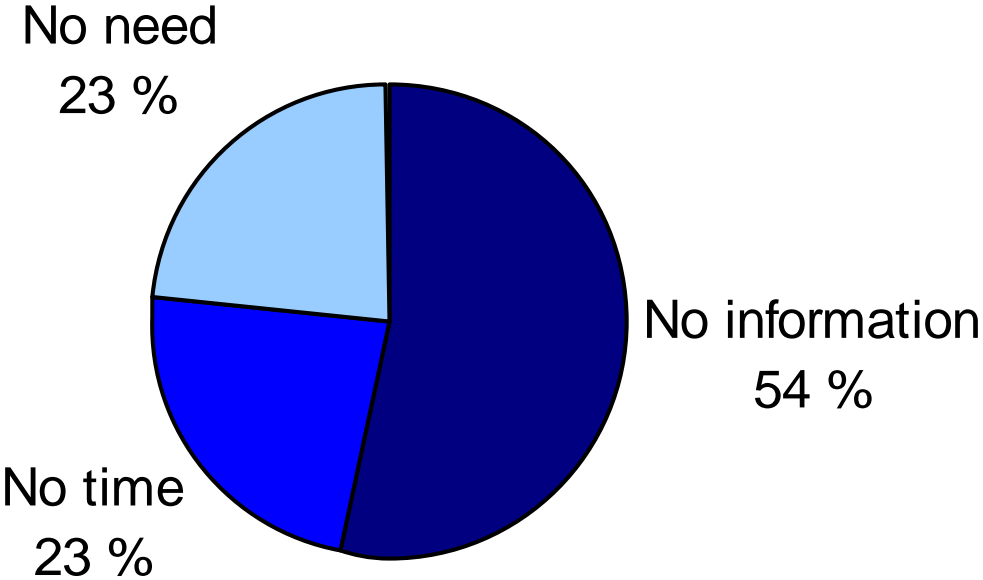


Figure 15: Why not IR training?



# Discussion 1

- Incorporating EBP requires complete administrative support, openness, and encouragement of learning new skills
- If the management is not encouraging the nursing staff, there is small chance that the efforts of the library will be of much value



## Discussion 2

- The process of incorporating good quality research findings into nursing practice is not straightforward
- Nurses have difficulty in accessing and appraising published research, either because they do not have access to journals and libraries, or because they have not been taught how to find and appraise research



## Discussion 3

- Relying on intuition, tradition, and authority of policies and procedures is understandable due to
  - Lack of time
  - Limited access to computers
  - Inadequate computer skills
  - Insufficient language proficiency
  - Lack of superior support
- Changes in organizational cultures do not happen overnight





## Discussion 4

- Yet, my small survey indicates that
  - Half of present-day nurses already practice evidence-based nursing
  - Almost all are eager to practice evidence-based nursing



## Discussion 5

- Inadequate information retrieval skills discourage nurses from seeking research studies and reports
- Negative attitudes about research due to lack of familiarity with terminology, statistics, and information technology
  - Lowering the library threshold
  - Taking the library services to the customers
  - Training the nurses



## Discussion 6

- Removing information barriers
  - Organizational commitment
  - Clinical cultures
  - Information infrastructure



# Conclusions 1

- Nurses must be able to
  - Access information
  - Develop skills required for information retrieval
  - Use the information appropriately in order to answer clinical questions



## Conclusions 2

- Three kinds of training for the nursing staff in KUH
- First, short and open-to-all introductions
  - Telling about the services
  - Introducing the resources the library has to offer
  - Once a month
  - Different days of the week and different hours of the day



## Conclusions 3

- Second, hands-on-training sessions in PC class-rooms
  - Getting familiar with the databases
  - Practicing information retrieval
  - Getting assistance



# Conclusions 4

- Third, continue
  - Visiting the departments
  - Attending nurses' meetings
  - Sitting in study groups
  
- In addition
  - Being active and visible in presenting our services to the nursing staff



## Conclusions 5

- Both the literature on the subject and the results of my little survey encourage us librarians to rise to the challenge of supporting nurses in evidence-based practice by providing not only access to information but also assistance and training in information retrieval
- It is part of our role as information professionals to promote research utilisation in nursing and to support nurses' information literacy and life long learning

