

# Health Informatics in the Eyes of Overseas-born Health Professionals

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# Outline



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# Introduction

- Australia is a land of cultural diversity.
- Migrants have been introduced to certain aspects of health informatics directly and/or indirectly by health authorities, health care services, and various migrant communities.
- How do Vietnamese overseas-born health professionals view health informatics?

# Introduction

- This study investigated the views and attitudes of overseas-born health professionals about health informatics
- The focus was on confidentiality, coordination, management, communication and technical user-friendliness.

# Background



- “Good health is more precious than gold”.
- HI operates under key principles covering confidentiality, privacy and security.
- These concepts are interrelated and are important in evaluating the success of the implementation of HI.
- Have different meanings and values in different cultures.

# Aims



- To find out how health informatics was perceived by Vietnamese overseas-born health professionals in Australia.
- Research questions:
  1. What is their knowledge about health informatics?
  2. What are their views on the role of health informatics in health care?
  3. What are their views on the significance of health informatics to health professionals?
  4. What are their views on the cultural aspect of health informatics?

# Methods



- *Survey instrument:* A questionnaire:
  - Demographic data: participants' backgrounds (e.g. gender, health profession, and years of working).
  - Views: 16 statements about their views on HI knowledge and experience; HI and its usefulness; and HI and health professionals.
  - Likert Scale from 1 (strongly disagree) to 5 (strongly agree).

# Methods

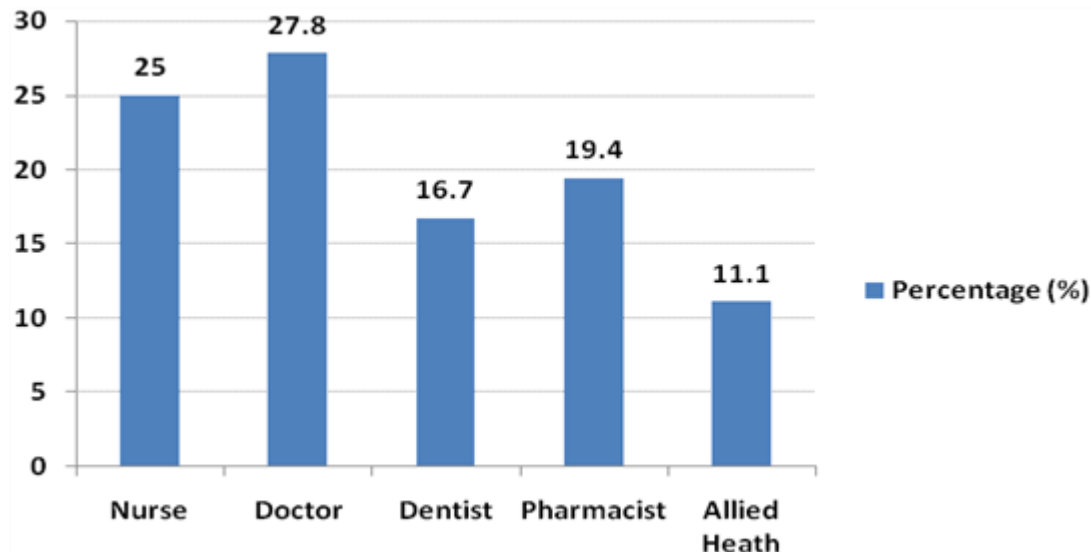


- *Unstructured interview*: Four participants of different health professional backgrounds:
  - a medical doctor,
  - a physiotherapist,
  - a pharmacist
  - a nurse.



# Results

- Survey results



The distribution of participants by health professions

# Survey Results



- Response to question 5 “In your understanding, what is HI?”
  - “Health informatics is information about health”.
  - “Health informatics is the use of computers in a health system”.
  - “Health informatics is the management of health care information with the use of modern computer technology”.
  - “Health informatics is about how to make use of IT in communication and management of health care”.

# Survey Results



- Their responses reflect the main aspect of health informatics given in the following official definition:
  - *Health Informatics has also been defined by WHO as “an umbrella term used to encompass the rapidly evolving discipline of using computing, networking and communications – methodology and technology – to support the health related fields, such as medicine, nursing, pharmacy and dentistry”. (Standards Australia E-health)*

# Survey Results



- Responses to questions on their backgrounds on health informatics

Questions	Count (n)	Mean (M)	Standard Deviation (SD)
6- Your knowledge of health informatics	36	2.64	0.96
7- In your work, health informatics is (from very important to unnecessary).	36	2.67	0.86
8- Health informatics is essential in health care.	36	4.14	0.59

# Survey Results



- Responses to questions on their potential problems of Health Informatics.

Questions	Count (n)	Mean (M)	Standard Deviation (SD)
9- HI can be linguistically biased.	36	3.69	0.82
10- HI can be culturally biased.	36	3.83	0.94
11- HI should include languages other than English.	36	4.33	0.72
12- Users at health centres should be provided access to computer for HI.	36	4.39	0.65

# Survey Results

- Responses to questions on their potential problems of Health Informatics

Questions	Count (n)	Mean (M)	Standard Deviation (SD)
13- HI can be unreliable.	36	3.67	0.83
14- HI can be risky.	36	3.75	0.90
15- HI can be abused.	36	3.89	0.82
16- Users' privacy is important in HI.	36	4.64	0.48
17- Security is important in HI	36	3.94	0.79

# Survey Results



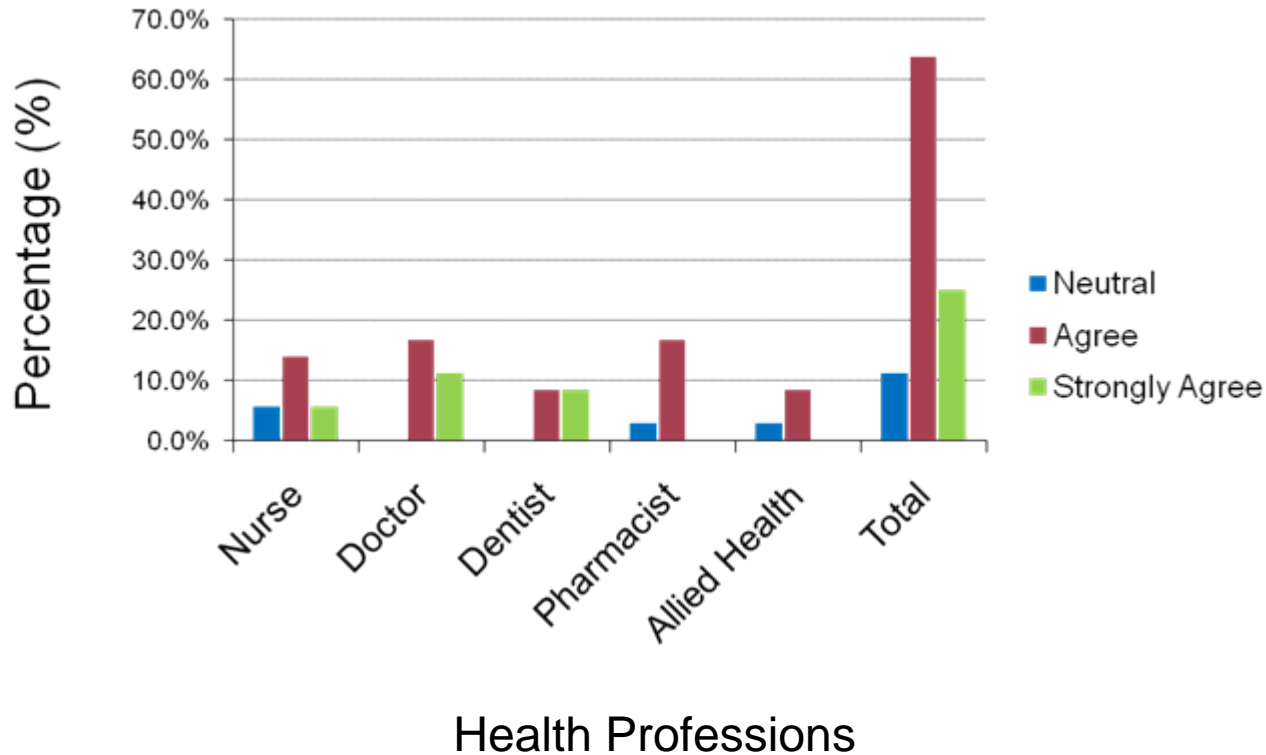
- Responses to health informatics for health professionals

Questions	Count (n)	Mean (M)	Standard Deviation (SD)
18- All health professionals should have some basic knowledge about health informatics.	36	3.89	0.78
19- Health informatics is in urgent need to health professionals working in remote areas.	36	3.97	0.97
20- Health informatics should be included in professional development of health professionals.	36	4	0.58

# Survey Results



- Q8: Health Informatics is essential in health care

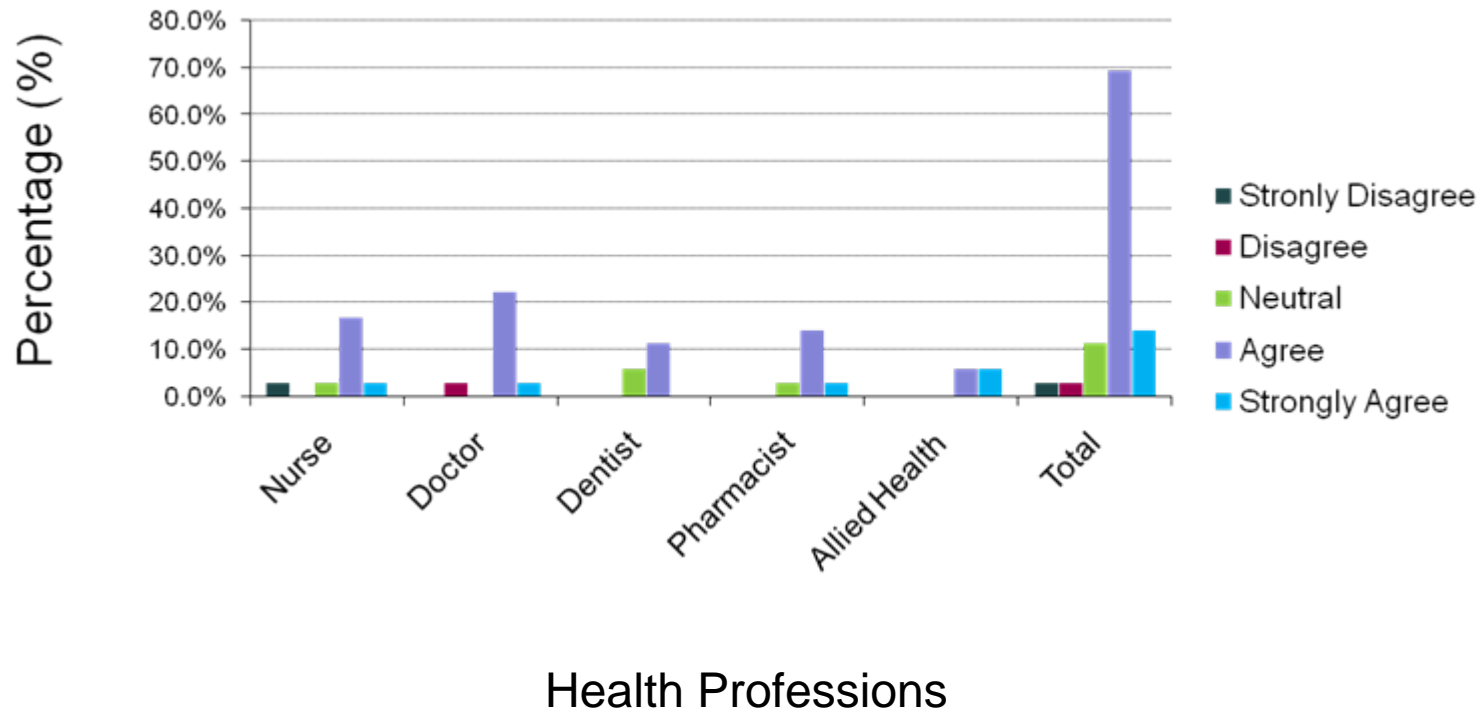




# Survey Results



- Q18: All health professions should have some basic knowledge about health informatics



# Interview Results



- To know and not to know
  - Most interviewees were not sure about ‘how much do they know or do not know’ about health informatics.
  - They had a feeling that computer was used to store health data for use by health professionals.
  - They expected that personal files of individuals were kept electronically but did not know exactly how it worked.

*“I think health informatics is something about using computer technology to manage health information. But I must admit this is what I know. I’m sure there are a lot of things about health informatics that I don’t know. I think it’s the hospital admin staff who should know all this as it is their jobs”.*

*(Participant)*

# Interview Results



- Security and privacy

- For them, computer security depends heavily on users, and less on the technology.
- Human errors are a big risk to security in health informatics.
- Information sharing in health is important but there is a strong possibility that individuals' health information can be misused.

*It's good to store health information electronically. It saves time. While it takes ages to find a particular piece of information through paper records, it takes a few minutes if the information is stored electronically. Doctors can promptly access the information. The worst fear is that personal files of patients are not kept safely. It would be terrible if someone else knows about our health conditions. (Participant)*

# Interview Results



- Misinformation

- The information about health services was out of date.
- Personal information about individuals was inconsistent.
- The information provided was not exactly the information stored

*People don't always communicate successfully. Sometimes people may make up information as they don't treat it seriously, or they may not remember well. When a person is given a form to fill in about his health, we don't expect that what he gives is exactly correct. (Participant)*

# Interview Results



- Cultural values and health informatics
  - Cultural value was an important issue in health informatics.
  - People come from a cultural background in which face-to-face communication in health care is the norm could find health informatics ‘very impersonal’.
  - In one culture, individual privacy is treated seriously whereas it may be treated unimportantly in another culture.

*know some people don't think it's a crime for health workers to reveal someone's personal health information. It easily happens in Vietnam. I think privacy is very much culturally determined. (Participant)*

# Implications



- Security and privacy are the great concerns. Health informatics can be very useful but it can be harmful if security is not maintained.
- As Australia is a country of linguistic and cultural diversity. Health informatics should take into account the use of different languages in health informatics and the information should be culturally appropriate.
- Health professionals have some awareness of health informatics and they need to be given opportunities for professional development in this area.

# Conclusion



- This study provides some insights about health informatics in relation to Vietnamese migrants in Australia.
- Health informatics can be useful to health professionals and health services. However, the cultural and linguistic aspects of health informatics need to be taken into consideration as well, since Australia is a land of cultural diversity.



# Thank you

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