Mixed Method Approaches:

Organisational case study methodology

Professor Sheila Payne
Palliative and End of Life Care
Research Group
University of Sheffield, UK

Aims of this session

- To introduce the rationale and purpose of case study methods
- To describe indications for when this might be a suitable research design
- To explain the different types of case study design
- To discuss two examples of research using organisational case study methodology
- To highlight the strengths and weaknesses of this methodology

Definition – drawn from Yin (2003)

A case study is an empirical inquiry that:

- Investigates a contemporary phenomenon within its real-life context, especially when:
- The boundaries between phenomenon and context are not clearly evident.
- > Focuses on many variables.
- Uses triangulation to make sense of multiple data sources.
- Uses prior theoretical propositions to guide data collection and analysis.

When to use this method

- Interested in an identifiable entity such as: an individual, a group, an organisation.
- Interested in the social, political and cultural context in which the case is embedded.
- Uses the principles of naturalistic inquiry.
- Suitable for investigation of 'real world' situations.
- Suitable for contexts where it is difficult or impossible to control potentially confounding variables.

When to use case studies in palliative care

- > Dynamic situations.
- Evaluations of new and emerging complex interventions.
- Variability in interventions (each tailored to patient and family needs) for different periods of time.
- Ethical concerns about randomisation and placebo control.

When *not* to use case studies

- Clinical descriptions of a case.
- When you wish to randomly allocate people to an intervention.
- > In-depth qualitative analysis alone.
- Survey alone.
- > Experiment alone.
- > Inductive theory development.

Indications for using case study methods

In evaluation research:

- Description of real-world case.
- > Illustrate certain features of a case.
- Explain features of case and relationship to other cases.
- Explore the situation in which interventions are conducted.
- ➤ Meta-evaluation study an evaluation.

Different types of case study design

- Single case designs eg one service and its context.
- Single case, embedded designs eg. N number of patients with same condition treated in one hospice.
- Multiple case designs eg. N number of patients with same condition treated in different hospices
- Multiple case, embedded designs eg. Number of different patients in different hospices.

Data sources and analysis

- Quantitative data eg. service use statistics, costs, surveys.
- ➤ Qualitative data eg. Interviews, focus groups, diaries.
- > Documentary data.

Analysis:

- by case
- cross case comparisons

Examples of organisational case studies in palliative care

- Investigation of the role of community hospitals in the provision of palliative care for older people
- Evaluation of adult bereavement support provided by hospices
- Evaluation of childhood bereavement services in the UK

Investigation of the role of community hospitals in the provision of palliative care for older people

Research Team

- Sheila Payne
- David Seamark
- Frances Sheldon
- Carol Davis
- > Helen Roberts
- Nikki Jarrett
- Paul Roderick
- > Helen Smith

Research Staff

- > Sheila Hawker
- > Chris Kerr
- Mary White

Funded by The Health Foundation



Aims

To identify the extent to which community hospitals are involved in providing palliative and terminal care to older people with end stage cancer and non-malignant diseases.

To examine the nature and quality of palliative care delivered from the perspective of patients, their relatives and staff.

Overall study design

- Phase 1 April December 2001
 A national survey of all 478 Community Hospitals
- Phase 2 January August 2002
 Interviews with hospital managers/senior nurses in 30
 Community Hospitals in the South East and South West
- Phase 3 September 2002 March 2004
 In-depth organisational case studies of six community hospitals using observation, questionnaires and interviews in the South East and South West.

Rationale for using case study design in the third phase

- In-depth account of service provision from multiple perspectives
- > Use of multiple sources of data
- Use of multiple types of data
- > Impossible to control any variables
- Complex situation
- Interested in context in which community hospitals were situated.

Phase 3: Organisational case studies

Size (Beds)	Small <30 3	Medium 30-49 2	Large >50 1
Location	Rural 4	Coastal 1	Urban 1
Organisation Of care	GP led	Consultant Led 1	Shared care

Participants and data sources

- Older patients in community hospitals (n=18) 10 women, 8 men, age range 68-90, 10 had cancer – semi-structured interviews
- Current carers (n=11) interviews (9 women)
- Bereaved carers (n=51) interviews (40 women)
- Staff (n=125) questionnaires from doctors (31), nurses (44), care assistants (22), other professionals (28).
- Non-participant observations approx. 900 hours

Evaluation of adult bereavement services provided by hospices

Sheila Payne¹, David Field², Marilyn Relf³ and David Reid¹

- Palliative and End-of-Life Care Research Group, University of Sheffield, UK
- 2. Department of Health Sciences, University of Leicester
- 3. Sobell Study Centre, Sir Michael Sobell House, Oxford



Aims

- > To describe the purpose, organisation and delivery of bereavement support services.
- To examine the role of professionals and volunteers in providing these services.
- > To assess the views and outcomes of bereaved people who have used and not used these services.

Research Design

Phase 1: National postal survey of adult bereavement services provided by hospices and specialist palliative care services

Phase 2: Organisational case-studies at five selected services

Rationale for using case study design in the second phase

- In-depth account of service provision from multiple perspectives
- Use of multiple sources of data
- Use of multiple types of data
- Impossible to control any variables
- Complex situation
- Interested in context in which bereavement services were situated, others sources of support
- To make comparisons between different types of bereavement services (eg. volunteer versus professional only services)
- To understand the views of bereaved people who declined services.

Research Methods

Method	Paid Staff	Volunteers	Non-Hospice Staff	Bereaved people
Qualitative interviews	Yes	Yes	Yes	Yes
Focus groups	Community nurses	Yes	Community nurses	Yes
Structured questionnaires				Grief Experience Inventory; SF36
Observation of meetings and events*	Yes	Yes	No	No
Documentary evidence	Records, 'referral' forms	Referral information	Information sheets	Letters of invitation, information sheets, bereavement booklets

[•]Observation was limited at sites 2 and 4 because the researchers were not based in the main hospice building.

Summary characteristics of the five bereavement services

Site	Duration of Service	Size of Service	Bereavement Volunteers	Activity level	Locality
1	Old	Large	Yes	High	South West
2	Old	Small	Yes	High	West
3	Young	Small	Yes	Low	North Midlands
4	Young	Large	Yes	High	South Midlands
5	Young	Small	No	High	South East

Data Analysis

> Descriptive account of each case site.

Comparative analysis across sites.

Offer generalisations from commonalities and differences observed in the data.

Strengths of case study methods

- > Provides complex accounts
- > Takes account of multiple perspectives
- Offers evaluation rather than just description
- Possible to offer some generalisations
- > Evaluation method for real world contexts.

Weaknesses of case study methods

- > Difficult to infer causation.
- > Time consuming
- Difficult to make sense of multiple and possibly contradictory data
- Selection bias always a possibility limited claims for representativeness
- Limited generalisability
- > Hawthorn effect possible

Key references

> Yin, R.K. (ed.) (2003). Case Study Research: design and methods (3rd edition) Thousand Oaks, CA: Sage.

➤ Walshe, C.E., Caress, A.L., Chew-Graham, C. and Todd, C. (2005) Case studies: A research strategy appropriate for palliative care? *Palliative Medicine* 18: 677-684.