

## Background

- The hospital post-mortem is an important and beneficial tool for friend and family, and their clinicians, as well as to greater society.
- Despite this, hospital post-mortem rates have been in decline for decades. Many reasons have been hypothesised for this decline.
- A small number of strategies to improve hospital post-mortem rates have been developed and implemented with significant success.
- As part of these overarching strategies, better communication of the post-mortem process to relatives has been identified as a key factor.
- Closely linked to this, the clinician's confidence in knowledge of the post-mortem process has been identified as a key factor in increasing post-mortem rates.
- A lack of available written information on the topic has been cited as a pitfall when trying to gain consent for post-mortem.

## Aims

- The aims of this project were to explore the literature on the reasons for declining hospital post-mortem rates and ways in which they have been increased by improving communication.
- An informational overview of the post-mortem process was also sought.
- The information from this literature search was then used to create a lay document, in the form of a leaflet, that can be used to help inform relatives at the point of consent, as well as giving clinicians an extra resource they can rely on in the consenting process.

## Declining post-mortem rates

### Clinician factors

- Personal discomfort in discussing post-mortems with relatives.<sup>1</sup>
- Inaccurate beliefs about the power of modern diagnostic technology.<sup>2</sup>
- The reduction in the use of post-mortem within medical education has resulted in generations of doctors being unaware of the benefits of post-mortem and likely contributed to their reluctance in requesting autopsies.
- Lack of training and confidence in seeking consent for autopsies is also cited as a major barrier.<sup>3</sup>

### Family factors

- Lack of rapport with clinicians.<sup>3</sup>
- Inadequate knowledge of the benefits of post-mortem.<sup>3</sup>
- Worries about disfigurement, funeral delays and religious objections.<sup>3</sup>

### Ultimately

- At the point of consent there is a lack of knowledge from both.
- The clinician is unable or uncomfortable in communicating the topic and the relative is uninformed.
- Without consent it cannot be performed.

## Leaflet conceptualisation, design and pilot study

### At a glance

**What?**  
 A physical examination of the body of someone who has recently died.

Involves opening the body and looking at the organs.

**Why?**  
 To find information about the cause of death to improve knowledge for you and for staff.

**When?**  
 As soon as possible after the death has occurred.

**Where?**  
 In the local mortuary.

**Who?**  
 Doctors called pathologists.

**Sources of support**  
 Ask your doctor or GP for information on local bereavement services.

**Cruse Bereavement Support**

- cruse.org.uk
- 0800 808 1677
- helpline@cruse.org.uk
- visit in person at a local centre

**Bereavement Advice Centre**

- bereavementadvice.org/contact-us/

**Sands**

- 0800 164 3332
- helpline@sands.org.uk

**Post Mortem Guide**

An overview of what you might want to know in this difficult time

Created on 17/04/2023

### Formatting, design and graphics

- NHS Identity guidelines<sup>5</sup> were followed to ensure the leaflet aligned with NHS design.
- This in turn ensures the user's confidence in the quality of the leaflet.<sup>6</sup>
- The UK government's guidelines<sup>7</sup> on accessible print publications were used to guide formatting choices.

### Readability and language style

- A non-emotive, factual and formal language style was used for this leaflet.
- A Gunning Fox Index of 7.025 meets the threshold score needed for near-universal understanding of the text.

Domain	Mean Score
Relevance of content	4.9
Language style used	4.9
Clarity of message	4.8
Colour scheme	4.7
Font style and size	4.7

Results received from a pilot study conducted on a group of 9 medical students about the leaflet design.

### What is a post-mortem and why are they done?

A post-mortem is an important physical examination of the body of someone who has died. It involves examining the body for any signs of disease or injury that might have caused or contributed to the person's death.

There are some situations where it is possible to do a limited examination or use a body scanner instead.

There are two types of post-mortems:

#### Hospital post-mortem

A hospital post-mortem can help give doctors and relatives more information about the cause of death. It can also help medical research.

They need permission from the next of kin, usually a partner or close relative.

#### Coroner's post-mortem

A coroner is a government official in charge of investigating and explaining deaths. A post-mortem will be referred to the local coroner when a death is unexpected, unnatural, or suspicious.

This is a legal requirement so you won't be asked for permission but you will be told about it taking place.

### Intended Audience and Content

- Friends and family of the recently deceased seeking a brief overview of the post-mortem process, especially the next of kin who might be contemplating to consent for a hospital post-mortem. It will also help those for whom a coronial post-mortem has been requested. The audience is likely to be an adult.
- Medical professionals and others involved in end-of-life care might also find the leaflet helpful and give them more confidence in answering basic questions on the topic, as well as consenting the next of kin.
- Spieron et al.<sup>4</sup> described clinician dissatisfaction with the quality of written information on the topic. Therefore, it was decided to use a written text medium in the form of a tri-fold leaflet design because they are succinct and easy to read. They are physically compact and can be easily stored and presented in patient-facing areas.

### When and where are they done?

- They happen within 2-3 working days. Sometimes within 24 hours in special circumstances, such as for religious reasons. Please ask if this is important to you.
- Post-mortems take place in the mortuary and are similar to surgery.

### Who is involved?

- Pathologists perform post-mortems with lots of respect. They are a type of doctor.
- Mortuary technicians help them.
- Sometimes professionals in training also attend post-mortems. You can request that this doesn't happen.

### More detailed information can be found here:

- NHS website [nhs.uk/conditions/post-mortem](https://www.nhs.uk/conditions/post-mortem)
- Royal College of Pathologists [www.rcpath.org](https://www.rcpath.org)
- Human Tissue Authority [hta.gov.uk](https://www.hta.gov.uk)

### What happens during a post-mortem?

The pathologist makes cuts on the chest and the back of the head, and the body is opened up.

They remove the organs from the body to examine them. Sometimes small samples are taken from the organs so that they can be looked at in more detail later. The organs are then returned to the body.

The body is closed, cleaned and dressed. The cuts are not visible.

### What happens after a post-mortem?

Post-mortems do not normally affect the person's appearance and you are welcome to view the body after. Some find this helps with the grieving process. Please tell us beforehand if you would like to do this.

The funeral directors will then collect the body from the hospital so that funeral preparations can begin.

The pathologist writes their report and gives a cause of death. The coroner will give you this information or you can discuss the findings with the doctor or your GP.

## Improving post-mortem rates through better communication tools

- It was decided to create a lay document about autopsies for friends and family of the recently deceased to help inform them of the post-mortem process. It could also serve as a succinct and easy-to-read resource for healthcare professionals to refer to and learn from to improve their confidence in consenting for post-mortem. It is hoped that this could lead to increased post-mortem rates. The creation of said document is detailed to the left.
- The literature suggests improvements in post-mortem related communication at the point of consent as critical in improving post-mortem rates.
- Champ et al.<sup>8</sup> compare post-mortem rates in two neighbouring UK district general hospitals, one with an post-mortem rate of 11% and the other 50%. They identified that contact between the certifying doctor with the bereaved, as well as a culture of positive staff attitude towards post-mortem as two of the key factors in explaining the increased post-mortem rate.
- Clayton and Sivak<sup>9</sup> demonstrated a significant increase in post-mortem rate at an American university hospital by implementing formal teaching to residents on how to gain post-mortem consent, as well as encouraging the process of consent-seeking. When gaining consent they were required to mention the following: that post-mortem benefits medical science; that pathologists carry out the post-mortem respectfully; that the post-mortem itself is similar in nature to surgery; and that the appearance of the body would remain unaffected.
- Djaldetti et al.<sup>10</sup> employed Clayton and Sivak's<sup>14</sup> method and the post-mortem rate increased from 1.8% to 26.7% during the trial period in their Israeli hospital.
- Spieron et al.<sup>4</sup> conducted a survey of 103 neonatal healthcare professionals in the UK that identified staff training in rapport development and addressing emotional distress as ways of improving staff confidence in consenting for post-mortem of neonates. Of the respondents, 73.4% provided relatives with written materials but only 54.6% were satisfied with the information available to parents and 4.6% highlighted a lack of available information.
- Rosenburg et al.<sup>11</sup> demonstrated that clinician training on motivational interviewing to improve communication in the post-mortem consent process led to a significant doubling in post-mortem rates in a Swiss hospital.
- Smith and Zumwalt<sup>12</sup> successfully increased their university hospital's post-mortem rate by creating and distributing information to staff on the purpose and potential value of an post-mortem, amongst other interventions.

## References

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## Conclusions

- Globally, hospital post-mortem rates have been in a steady decline for decades. A lack of appropriate patient information, as well as clinician training and confidence in the consent process have been recognised as major factors contributing to this downward trend.
- Studies in multiple countries, across multiple hospital types, have shown that addressing these communication issues, as part of wider overhauls to the post-mortem consent process, can improve post-mortem rates significantly.
- A lay leaflet was created to help address these issues. In a small pilot study of medical students, the leaflet received largely positive feedback.
- No study has singled out and tested changing communication methods in isolation. Neither have they tested the implementation of a lay document in isolation. Going forward, this could be achieved through a survey-based study addressing both next of kin and medical professionals separately. This would allow the efficacy of this intervention to be tested in isolation and give it an evidence-base going forward.