Surviving Carbon Monoxide (CO) Poisoning: an Interpretative Phenomenological Analysis (IPA)
Julie Connolly (PhD student)

Introduction
Carbon monoxide is undetectable to our human senses and is the most toxic by-product of combustion. Currently, there are 50 fatalities and 200 hospital admissions per year in the UK. What does not seem to be commonly known is that survivors often suffer a range of truly unpleasant physiological, neurological and psychological symptoms known as Delayed Neuropsychiatric Syndrome (DNS), which can diminish over months or years, or persist for a lifetime.

The aim of this work is to explore the lived experiences of those who have survived a CO poisoning event, and the subsequent difficulties that they face because of that event, in an accurate and detailed account.

Although lived experience literature is a sound rationale for collecting in-depth, qualitative data from those living with chronic conditions, there are no personal accounts of survivors of CO poisoning in the literature; there are medical case studies, but no room is given to exploring the experiences of those who have survived a poisoning event.

Interpretative Phenomenological Analysis (IPA)
Qualitative researchers tend to be concerned with the quality and texture of experience, rather than the identification of cause and effect relationships. IPA is an experiential qualitative approach to research in psychology and the human, health and social sciences. It is concerned with comprehending and exploring people’s own experiences of events which are significant to them, and the meanings which those experiences hold for an individual.

It is an approach which guides small-sample research from formation to write-up, giving the researcher a detailed process to follow, if they deem it suitable, but crucially allowing for a healthy flexibility. As a methodological framework, it is based in both phenomenology and hermeneutics and has a strong idiographic focus.

Phenomenology, by taking a philosophical approach to the study of experience, offers a concept of the body and the lifeworld as a critique of the Cartesian dualistic perspective that separates and favours the agency of the mind over the materiality of the body. It is concerned with ‘the meaning of what happened to me’. IPA, by allowing significant experience to be related, conveys the individuals’ subjective ideas and allows meaning to develop.

Hermeneutics involves interpretation; we can never completely immerse ourselves in another’s perspective, so the best that we can do is interpret. Negotiated understanding through conversation reveals ‘the things themselves’; this means that researcher and participant are both interpreting and creating meaning. This is known as a ‘double hermeneutic’ or a part of the ‘hermeneutic circle’, illustrating the dynamic relationship between part and whole; to understand one, it is necessary also to understand the other, so there are clear connections to the pictured fractal.

IPA’s idiographic focus means that it prioritises the particular and is therefore committed to understanding the lived experience of the individual rather than testing theories on a general population. Each case is considered, therefore, in its own context.

Mechanisms
CO and haemoglobin form the very stable Carboxyhaemoglobin; this results in hypoxia. There is also a poisoning of cells. The heart, CNS and kidneys are extremely susceptible to damage.

Effects of poisoning
Later effects of poisoning can become apparent immediately after the event or can take several weeks to manifest. They include the exacerbation of any underlying respiratory and/or cardiac dysfunction, motor, memory and executive function impairment, urinary and faecal incontinence, apraxia, aphasia, and agnosia, slow mental processing speed and the decline of cognitive function, emotional disorders and, dizziness, paraesthesia, lethargy, somnolence, motor and sensory disorders, dementia, personality and judgement disorders, encephalopathy and neuropathy, Parkinsonism, dystonia and acquired Obsessive Compulsive Disorder (OCD).

References

This study is an innovative collaboration between the Faculty of Technology and Environment and the Faculty of Education, Health and Community

Grateful thanks go to supervisors: Raphaela Kane, Phil Carey and Andy Shaw