

## DECISION MAKING AROUND THE USE OF INDWELLING URINARY CATHETERS IN ACUTE STROKE PATIENTS.

### Hypothesis/Aims of study

The limited guidance on management of bladder dysfunction following stroke indicates that indwelling catheters are associated with adverse effects and should generally be avoided as an initial management strategy unless there are specific clinical needs for accurate output monitoring or where significant urinary retention is evident. Complications arising from the use of indwelling urinary catheters may result in increased mortality, morbidity, patient discomfort, healthcare costs and a poorer quality of life. Clinical practices surrounding insertion and management of indwelling urinary catheters following stroke must be understood if targeted prevention of catheter use is to be successful however there is an absolute lack of information as to why post-stroke patients are catheterised when admitted to hospital.

This study aimed to understand healthcare professionals' (HCPs) decision making around post-stroke urinary catheterisation.

### Study design, materials and methods

Semi-structured, digitally recorded face to face and group interviews were undertaken with doctors, nurses and allied health professionals in three UK hospitals.

Inclusion criteria: Involvement, in the admission/treatment of stroke patients through working in acute stroke units (ASUs) or medical receiving units (MRUs) across a range of shifts.

Content analysis was used to analyse the data.

### Results

A total of 50 HCP were interviewed across the three sites – 30 nurses (10 per site), 12 doctors (4 per site), 8 AHPs (2/3 per site). The majority saw continence related activities as part of general nursing care of the acute stroke patient and a lower priority than other clinical issues. There was no consensus on the number of acute stroke patients who were thought to be catheterised with respondents estimating the number as 5-99% of new stroke patients. The majority thought catheters were inserted early in the journey of care, with 42/50 believing that this happened prior to admission to the ASU. The decision to catheterise was seen as being driven by clinical need related to the severity of stroke, with reduced mobility considered to be an influencing factor. Reasons for catheterisation were cited as being predominantly medical or nursing care related. Medical care related reasons included: the presence of urinary retention (27/50) and the need to accurately monitor output (26/50), although the urine volumes retained varied as to level at which catheterisation would be considered, from under 300ml,(2/50) to 300-450 ml (6/50) to 450-500ml (8/50). Nursing care reasons for catheterisation included: concerns about skin integrity (30/50), incontinence complicating other problems (15/50), comfort care (14/50) and end of life care (11/50). Staff convenience (4/50), habit (6/50) and family distress (3/50) were also indications cited by the HCPs. In the absence of clinical guidance or policies on catheter use following stroke, unwritten rules were evident which resulted in different processes of decision-making in different clinical areas. There was confusion surrounding responsibility for decisions to insert and remove urinary catheters, particularly when the indications were not related to a specific medical need.

### Interpretation of results

When medically indicated to accurately monitor acute stroke patients' clinical condition or relieve urinary retention the decision making process for catheterisation is clear, following a linear model based on systematic assessment and led by medical staff acting on the information provided by the nursing staff,. In contrast, if indwelling urethral catheters are used for the purposes of containing urinary incontinence to prevent the acute stroke patient from experiencing wetness, the decision making process is multidimensional, varied, complex and lengthy taking into account a range of influencing patient and contextual factors.

### Concluding message

The purpose of the indwelling urinary catheter for the individual patient was the most influential factor on the health care professionals decision making processes in relation to catheterisation following acute stroke.

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<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>Yes</b>
<b>Specify Name of Ethics Committee</b>	<b>West of Scotland Research Ethics Service</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>