

Rehabilitation nurses' knowledge, experiences, and perceptions of the provision of psychological care for patients post stroke in Ireland: A cross-sectional study

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Research article

Received: 26-June-2023

Revised: 28-July-2023

Accepted: 30-July-2023

Online first: 31-July-2023

Abstract

Introduction: Early assessment and management of depression and/or anxiety for patients post stroke is critical. However, suboptimal provision of psychological care is widely reported. Nurses are the largest professional group to care for patients post stroke and have an important role in addressing their emotional wellbeing.

Aim: The aim of this paper is to examine nurses' knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke in Ireland.

Methods: A cross-sectional descriptive survey design involving both quantitative and qualitative items was administered to a convenience sample of seventy-four (n=74) nurses working in six Irish community hospital rehabilitation units.

Results: Fifty one (n=51) questionnaires were completed and returned which represented a 69% response rate. Findings demonstrate suboptimal psychological care provision for patients post stroke with no formal pre-defined care pathways. Despite nurses' knowledge of psychological problems and symptomology, participants revealed receiving limited training in psychological monitoring and no systematic allocation of psychological care duties. This research suggests that pre-defined/formal care pathways; access to psychology expertise; further training and support for members of the Multi-Disciplinary-Team has the potential to improve the provision of psychological care for patients post stroke.

Conclusions: This study has implications for the reform and development of rehabilitation services in relation to practice, education, and research. It identifies opportunities to support nurses to improve the delivery of psychological care for patients post stroke.

Keywords: Stroke, rehabilitation nurses, knowledge, perceptions, experiences, psychological care, service improvement

Citation: Merrigan, G., Bennett, L. (2023). Rehabilitation nurses' knowledge, experiences, and perceptions of the provision of psychological care for patients post stroke in Ireland: A cross-sectional study. *Journal of Health and Rehabilitation Sciences*. Advance online publication.

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1. Introduction

A Cerebral Vascular Accident (CVA), more commonly known as stroke is the second leading cause of death and one of the leading causes of disability worldwide (Feigin et al., 2022). According to the literature, a third of individuals post stroke suffer from depression and/or anxiety and this is associated with sub-optimal recovery and a reduction in quality of life (Medeiros et al. 2020; Towfighi et al. 2017; Robinson & Jorge 2016; Hackett et al., 2014; Hackett et al., 2014; Ayerbe, et al. 2013). However, suboptimal provision of psychological care for patients post stroke has been reported and described as ‘ad hoc’, un-coordinated, and inconsistent (Merrigan and Bennett 2023; Baker et al. 2021; Manning et al. 2020; Ryan et al. 2019; Northcott et al. 2018; Simpson et al. 2018; Harrison et al. 2017; Sekhon et al. 2015). Arguably there is an urgent need to implement current evidence based models of psychological care within the stroke rehabilitation services such as the stepped psychological care framework (Merrigan and Bennett 2023). Given their central role in addressing the psychosocial needs of patients post stroke, nurses are key professionals within the Multi-Disciplinary Team (MDT) to successfully screen for depression (Loft et al., 2019; Mitchell, 2016; Theofansidis & Gibbons, 2016; Dryer et al., 2016; Clarke & Holt, 2015; Clarke, 2014; Aadal et al., 2013; Gillham & Clark, 2011; Kirkevold, 2010). Early assessment and management of mood disorders is critical for the functional improvement of patients (Medeiros et al. 2020; Hackett et al., 2014; Ayerbe, et al. 2013; Herrmann et al. 1998). Nurses must therefore be knowledgeable in recognising the more common psychological reactions and problems together with early signs and symptoms that post stroke patients experience. However, a recent systematic review by Merrigan and Bennett (2023) highlight a paucity of literature examining the role of nurses in the provision of psychological care for patients post stroke. This paper therefore reports on rehabilitation nurses’ knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke.

1.1 Context: The Irish Healthcare System

The National Clinical Programme for Stroke established in 2010 by the Irish Health Service Executive (HSE) has been charged with addressing the historic deficiencies for patients within stroke rehabilitation services. However, psychological supports for patients in Ireland remain massively underdeveloped and must be addressed through the provision of clinical psychology and key workers (National Stroke Strategy 2022-2027). Merrigan and Bennett (2023) suggest the requirement for further supports for Health Care Professionals (HCP’s) from their institutional leaders to improve psychological care provision for patients post stroke and to ensure that these concerns are considered in any plans for service transformation to develop strategies within rehabilitation

services. In this context, using one specialist Irish service as a case exemplar, this study examines nurses’ knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke in Ireland and provides useful insights that may be of relevance to service development outside of Ireland.

2. Method

2.1 Aim of this study

To examine Irish rehabilitation nurses’ knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke.

2.2 Design

A cross-sectional descriptive survey involving both quantitative and qualitative items examining nurses’ knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke in Ireland was used. In this regard, permission was sought and granted to use and adapt Gurr’s (2009) survey conducted in the UK to determine rehabilitation team members understanding of psychological care for patients post stroke. Gurr’s survey was divided into two sections and consisted of 24 questions with regards to: (1) provision of psychological care and service development for patients post stroke; (2) understanding of psychological consequences for patients; and (3) staff training, support, and personal development.

An adapted questionnaire for use within an Irish context was divided into two sections and consisted of 24 questions with regards to: (1) knowledge of common psychological reactions for patients post stroke; (2) experiences of the provision of psychological care and monitoring for patients; and (3) perceptions of how psychological care post stroke should be organised and requirements for staff who provide emotional care. All references to the National Health Service in the UK was removed and the adapted questionnaire addressed only nursing members of the rehabilitation team.

2.3 Inclusion and exclusion criteria

Inclusion criteria were:

- A Registered General Nurse with greater than six months experience in a rehabilitation unit.
- Employed in any one of the six Irish community hospital rehabilitation units.
- Ability to read and understand the English language.

Exclusion criteria were:

- A Registered General Nurse with less than six months experience in a rehabilitation unit (this decision assumed that these nurses may be unable to complete the questionnaire).
- Inability to read and understand the English language.

2.4 Ethics

Ethical approval was sought and granted by both Waterford Institute of Technology and HSE Research

Ethics Committee's. All participants agreed voluntarily to participate in the study after receiving detailed information and explanation of the research aim. Reassurances that the data would be anonymized and only used for research purposes was given.

2.5 Pilot

The adapted questionnaire was reviewed by five rehabilitation nurses selected from the rehabilitation units with a range of experience to determine its validity for use within an Irish context and to ensure adequacy and relevance of questions. Two of the nurses had greater than 15 year's rehabilitation experience, two had 5-10 years' experience and one less than 2 years' experience. The pilot study took place in December 2021. Suggested changes from the pilot study referred to minor editing and some minor rewording of the questionnaire which were amended prior to the main study. The questionnaire was distributed and collected in hard copy and completed in 30 minutes or less.

2.6 Administration

All rehabilitation nurses working in six community hospital rehabilitation units within a Community Health Organisation (CHO) area who met the inclusion criteria were invited to participate in the study from January-February 2022.

A cover letter outlining the study and what participation involved was given to potential participants. Participants completed the paper survey in the staff room of the clinical area. Seventy-four (n=74) questionnaires were handed out and fifty-one (n=51)

questionnaires were completed and returned (69% response rate).

2.7 Data analysis

Quantitative data were analysed using Statistical Package for the Social Sciences (SPSS) Version 21.0 (Salcedo and McCormick 2020). Descriptive analysis was expressed as frequency and percentages to obtain summary statistics for categorical variables. Seventy-eight percent (n=40) of participants answered all questions and valid percent is reported throughout this study.

Responses to open-ended questions were coded using an inductive content analysis method in accordance with Elo and Kyngäs (2008) qualitative content analysis process that involved three phases: (1) preparation; (2) organizing; and (3) reporting.

3. Results

3.1 Nurses' knowledge of psychological care for patients post stroke

Participants were asked how they would define psychological care for patients post stroke. While 32% (n=15) of participants defined it as 'promoting autonomy' and 15% (n=7) as 'creating connections', the majority of participants (42%, n=20) considered psychological care as encompassing both concepts 'promoting autonomy' and 'creating connections'. Eleven percent (11%, n=5) of responses were categorised as 'other factors' and these included for example, inconsistency and 'ad hoc' delivery. Box 1 presents examples of illustrative quotes.

Box 1. Examples of illustrative quotes

'Promoting autonomy'.

'Recovery and ability to achieve baseline Activities of Daily Living (ADL) again'. (P16)

'Timely support, be patient and support their independence'. (P50)

'Create positivity to life that will help them to deal with the changes and cope with new routine'. (P18)

'Education about stroke, aftercare, prognosis, rehabilitation is very important'. (P55)

'Creating connections'.

'By observation and interaction with the patient'. (P27)

'Taking time to listen to their thoughts, worries and emotions. Provide support and encourage communication'. (P39)

'Talking to the patient about their feeling after their stroke, and picking up non-verbal, cues-facial expressions'. (P47)

Participants were asked about their knowledge of early signs and symptoms that are reflective of a psychological reaction or problem for patients post

stroke. As illustrated in Figure 1, the responses fell into 3 categories. The majority of participants (59%, n=30) identified adverse emotional/mood symptoms

(affective) together with maladaptive/adverse physiological (behavioural) symptoms as early signs and symptoms of a psychological reaction post stroke. Maladaptive/adverse physiological (behavioural) symptoms alone were reported by 11% (n=6), while 12% (n=6) described behavioural symptoms together

with executive dysfunction (cognitive) issues. Only 6% (n=3) of participants acknowledged that patients post stroke exhibit adverse emotion/mood (affective) symptoms in isolation, while a further 12% (n=6) identified that patients in the early stages post stroke can exhibit all 3 categories.

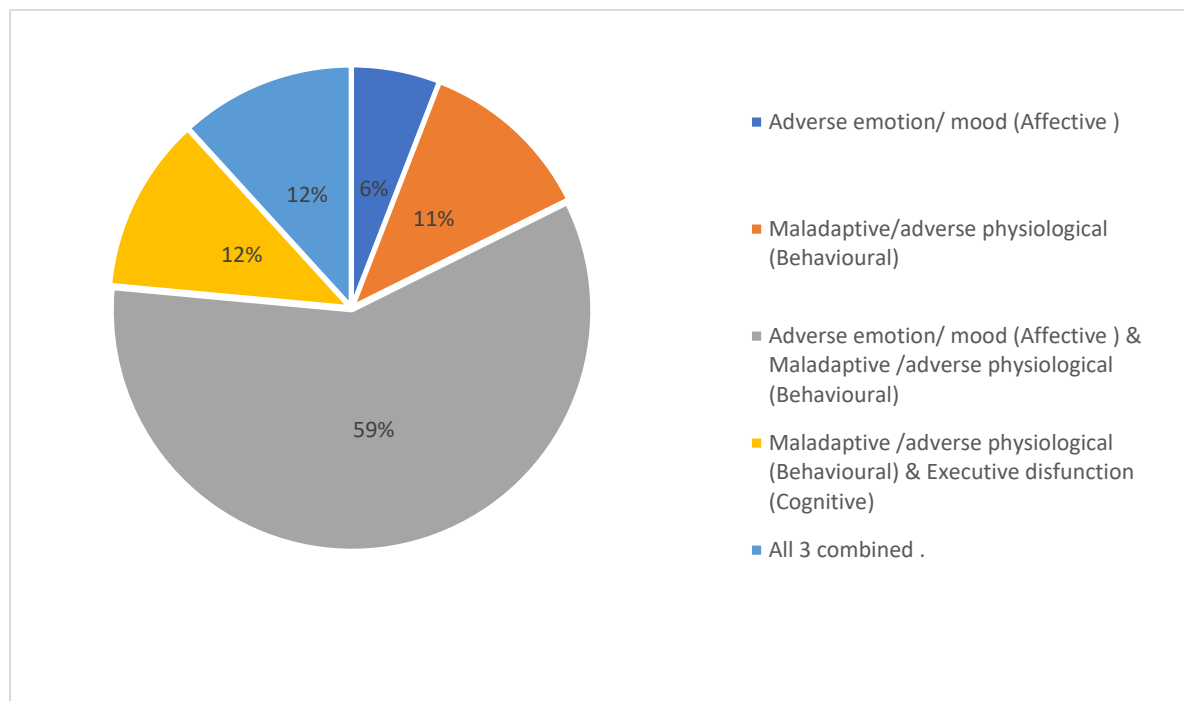


Fig. 1: Knowledge related to early signs and symptoms reflective of psychological problems for patients post stroke.

Table 1: Provision of psychological care to patients post stroke.

General Questions	Yes % (n)	No % (n)	N/A% (n)
Is emotional care work relevant to your health care profession?	98.0 (50)	1.96 (1)	-
Is there an explicit scheme for psychological care interventions?	17.6 (9)	82.4 (42)	-
Is there a systematic allocation of psychological care duties?	13.7 (7)	86.2 (44)	-
Have the nurses or staff members had relevant training?	15.7 (8)	84.3 (43)	-
Is basic psychological care guaranteed for all patients?	60.8 (31)	39.2 (20)	-
Are there prepared materials for staff	7.8 (4)	92.2 (47)	-
Are records kept of significant psychological interventions?	20.0 (10)	80.0 (40)	0.51 (1)
Do medical staff support efforts to provide psychological care?	72.0 (36)	28.0 (14)	0.51 (1)
Is there an established link with psychological /counselling services?	52.0 (26)	48.0 (24)	0.51 (1)
Do you need to improve your own psychological self-care?	88.0 (44)	12.0 (6)	0.51 (1)
Would a support group be viable and helpful?	86.0 (43)	14.0 (7)	0.51 (1)

3.2 Nurses' experiences of the provision of psychological care to patients post stroke.

Participants were asked about their experiences of providing care to patients post stroke in eleven close-ended questions (see Table 1). Ninety eight percent of participants (n=50) reported that emotional care was relevant to their role. Fifty two percent (n=26) indicated that there was an established link with clinical psychology/counselling services for referrals within their units compared to 48% (n=24) who have no established link. The majority (82%, n=42) of participants indicated that there was no explicit scheme in place for psychological care interventions. Similarly, 86% (n=44) indicated that no systematic allocation of psychological care duties existed in their workplace. According to 61% (n=31), basic psychological monitoring was guaranteed for patients compared to 39% (n=20) who stated it was not guaranteed in their units. The majority (84%, n=43) felt that they did not receive relevant training in psychological monitoring. According to 92% (n=47), prepared materials such as psychological assessment sheets were not available within the rehabilitation units. In the event of a significant psychological intervention only 20% (n=10) were aware of records kept. Seventy two percent (n=36) reported support from medical staff in the provision of psychological care. Most participants (88%, n=44) reported they needed to improve their own psychological care and 86% (n=43) believed that a support group would be helpful. The majority of participants (85%, n=40) stated they had no formal pathway to provide psychological care compared to 11% (n=5) who said they had. Participants were asked whether the current informal

approaches to psychological care worked. According to 33% (n=15) these informal approaches were successful or worked most of the time, 52% (n=24) stating the approaches worked sometimes, while 15% (n=7) reported they did not work.

3.3 Nurses' perceptions of psychological care requirements for patients post stroke.

Participants were asked about their main assumption in relation to emotional care responses. Twenty seven percent (n=11) identified it as essential care and support for their patients. Twenty seven percent (n=11) suggested care was undervalued, while 22% (n=9) identified it as compassion, 12% (n=5) as both essential care and support together with compassion, while 5% (n=2) stated it to be both essential care and support but also undervalued.

Participants were asked to identify the requirements necessary to provide emotional care to patients post stroke. The responses (n=49) were categorised as: (1) empathy; (2) appropriate knowledge and communication skills; (3) workplace support; and (4) an appropriate mind-set. Seventy two percent (n=35) reported combinations of the four categories compared to only (4%, n=2) that reported empathy, workplace support and appropriate mind-set independently while (16%, n=8) identified appropriate knowledge and communications skills as the only necessary requirement.

When asked what their arguments were for developing psychological care within their units, most participants (81%, n=37) reported to 'improve health outcomes' (see Box 2 for examples of illustrative quotes). Fifteen percent (n=7) identified to 'provide knowledge and support for staff'.

Box 2. Examples of illustrative quotes of arguments to 'improve health outcomes'.

'In order to develop and enhance the holistic model, psychological care needs to be increased'. (P 26)

'Early identification of symptoms. Timely support, prevent social isolation. Promote early recovery by boosting psychological state of patient which in turn improves or promotes recovery.' (P 47)

'Mental health is the key component for enhancing and maintaining overall health of human beings.' (P 39)

'If we don't look after a patient's psychological needs it hinders their physical rehabilitation needs. It also leads to family complications.' (P 50)

Participants were asked who should deliver psychological care to patients post stroke. The majority (90%, n=45) reported that psychological care should be undertaken by all members of the MDT compared to 10% (n=5) who stated it should be carried out by staff with specialist training such as psychologists, counsellors, or MDT members with specific training. Ninety-eight percent (n=50) stated they required further training. However there was no consensus on who participants perceived they could call on for guidance, training, supervision, and support in such matters. Of the 92% (n=47) who responded, the MDT

and management was suggested by 30% (n=14); psychology/specialist services by 21% (n=10); the HSE by 13% (n=6); and a combination of supports by 13% (n=6). Twenty-three percent (n=11) of participants stated they had no-one or did not know.

Views of the participants were sought on how psychological care should be organised. Sixty-three percent (n=30) reported that psychological monitoring should be addressed formally within rehabilitation units while 12% (n=6) suggested that this could be achieved at an informal level. Nineteen percent (n=9) reported both approaches should be adopted. In

relation to the developments that would improve psychological care within rehabilitation units, 57% (n=27) of participants suggested establishing an appropriate care pathway such as access to psychology services, 13% (n=6) acknowledged staff education and training and a further 13% (n=6) stated better patient engagement. Having access to psychology services together with staff education and training was suggested by 15% (n=7). Responses that did not fit into either category accounted for 2% (n=1).

Participants were asked how psychological care should be organised within their rehabilitation units. Figure 2 illustrates most participants (70%, n=32) suggest that psychological care should be organised through an appropriate care pathway, whilst 15% (n=7) identified suitably skilled staff was a sole requirement and 6% (n=3) that appropriate care pathways together with suitably skilled staff was needed.

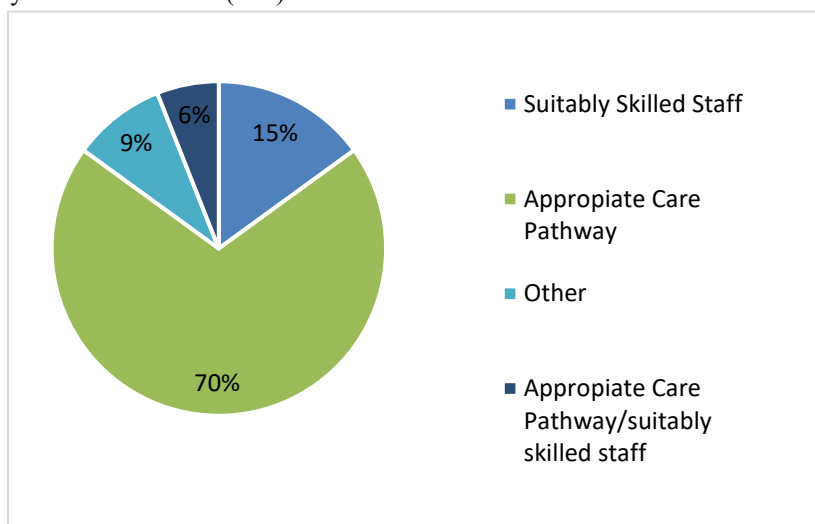


Fig. 2: Nurses' perceptions on how psychological care should be organised.

4. Discussion

Consistent with the literature, most nurses in this study define psychological care as either 'promoting autonomy' and/or 'creating connections' (McClure and Leah 2021; Lehto et al. 2017; Kirkevold 2010). The majority of nurses demonstrated a good understanding of the most common psychological problems and symptomology experienced by patients post stroke, consistent with the literature (Knapp et al. 2020; Hackett and Pickles 2014; Hackett et al. 2014; Ayerbe et al. 2013). Yet, the findings showed that nurses had not received relevant training in psychological monitoring. In addition, there was no systematic allocation of psychological care duties and no explicit schemes for psychological care interventions or availability of formal documentation. Therefore, psychological care provision for patients post stroke should be introduced and integrated into the curriculum for undergraduate nursing and health care education followed by, at a postgraduate specialist level, a greater depth of understanding of the psychological assessment and management needs of patients. This arguably has the potential to support all nurses and the MDT to acquire the skills and confidence to manage the psychological challenges associated with patients post stroke.

Consistent with the literature, the findings from this study suggest the psychological needs of patients post stroke are not being adequately met and

improvements in service provision is required (Harbinson et al. 2022; Baker et al., 2021b; Baker et al., 2021a; Manning et al. 2020; Ryan et al., 2019; Simpson et al., 2018; Northcott et al., 2018; Northcott et al., 2017; Harrison et al., 2017; Sekhon et al., 2015). This study suggests that participants' value their role in providing emotional care, however they were distinctly not satisfied with psychological care provision for patients post stroke. Whilst the findings overall indicate that formal care pathways were not followed, over a third of participants reported current (informal) approaches were successful or worked most of the time. These findings may support the premise that stroke patients receive basic and informal psychological care, albeit by various members of the MDT due to suboptimal psychological services (Northcott et al., 2017, Sekhon et al., 2015). The literature has identified these practices undertaken by the MDT as 'minding the gap' and/or 'bridging the gap' (Baker et al., 2012a, Harrison et al., 2017).

It was mentioned in this study that an established link with clinical psychology or counselling services was available within the six rehabilitation units. This is an interesting finding, as it is at odds with the Irish National Audit of Stroke Report 2021, which found only 5 hospitals nationally having access to a clinical psychologist as part of stroke unit care (Harbinson et al., 2022). Similarly Manning et al., (2020) found that more than half of speech and language therapists reported the only access to psychological services their

patients had was through community supports such as charities and voluntary organisations. One possible explanation for the finding in this study is that participants may have considered psychological referrals to stroke support services such as Head Way, Acquired Brain Injury Ireland, and the Irish Heart foundation as an established care pathway to access clinical expertise.

This study suggests that nurses perceive they are under skilled, lack knowledge and have little support in addressing patient's psychological needs, consistent with the literature (Merrigan and Bennett 2023). In contrast, established access to psychologists and counselling services, improved staff training and adapting a coordinated standardised approach to care provision is highlighted in the literature as facilitators to providing better psychological care for patients (Manning et al. 2020; Ryan et al. 2019; Harrison et al. 2017). The majority of nurses in this study identified that appropriate care pathways with access to clinical psychology together with suitably skilled staff would improve psychological care provision for patients post stroke. This finding establishes a link between a lack of formal care provision/pathway within stroke rehabilitation services, and nurses' perceptions of inadequate skills and knowledge to provide adequate care to meet their patient needs. Both from a service provision and patient perspective this finding has clinical relevance given that only 33% (n=15) of nurses reported current psychological care provision was adequate and 98% of nurses (n=50) identified a need for further training.

The majority of participants identified a need to improve their own psychological care. This finding warrants further consideration by institutional leaders, as supporting nurses' health and wellbeing enhances the care they deliver (Melnyk et al., 2018). To improve stroke rehabilitation psychological services in Ireland, consideration must be given to implementing formal care pathways that establishes a framework for regular screening and monitoring of early psychological problems. In addition, implementing integrated psychological interventions with clinical psychology input/oversight is required.

5. Limitations

Due to the budget available and time constraints this study was conducted within one CHO area in Ireland only. Therefore, limitations of this study include a relatively small sample size which makes the detection of significance less likely. This study did not include demographic data such as age, gender, experience, and qualification and which if it had been included would have enhanced findings. The close-ended questions with the questionnaire did not provide for a standard reliability analysis of the questionnaire items.

In this context, it may be argued that findings were service specific as opposed to an examination of the entire service provision for stroke patients. However,

this study may be considered a micro example of the broader services' delivery of psychological care provision. Further research is necessary to report a deeper level of inquiry of nurses' knowledge, experiences, and perceptions of the provision of psychological care to patients post stroke using qualitative methodology.

6. Conclusion

This study has provided a basis for an evaluation of nurses' knowledge, experience, and perceptions of psychological care for post stroke patients in six Irish community rehabilitation settings. Arguably it offers indicators for rehabilitation services nationally and internationally on how psychological care can be improved. It highlights the need to fully understand the psychological issues that people post stroke confront and to consider these in any plans for service transformation. An urgent need to improve access to psychology services and care provision in clinical practice for patients post stroke is clearly warranted. Improving psychological care provision will involve examining organisational culture, structures and processes and identifying where these may conflict with policy aims. This is not just a challenge for policy makers and leaders but requires a greater collaborative approach from the MDT.

Findings from this study would suggest that considerable improvement in terms of further training and education for nurses that ensures they have a clear understanding of the psychological assessment and management for patients post stroke within integrated care programmes is needed. Moreover, support for nurses is also required if services are to authentically operationalise psychological care provision for patients post stroke. We propose more specific studies to examine issues at an organisational level to explore how access to psychological services and care provision; implementation and findings of a psychological stepped care intervention; support structures; and further training for nurses impact the delivery of psychological care provision for patients post stroke.

Conflicts of interest

The authors have no conflicts of interest to declare.

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