**London School of Hygiene & Tropical Medicine**

**Department of Public Health and Policy**

## MSc Public Health (Health Promotion)

**Project Type**: Policy review

**Project Title:**

To evaluate the role of Occupational Therapists in health promotion with particular reference to patients who have experienced strokes.

'Without a clear focus on health promotion and disease prevention, we risk spending more and more of our increasingly scarce resources on care with less and less return' [1]

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## EXECUTIVE SUMMARY

Stroke is the third biggest cause of death in the UK and the largest single cause of severe disability. Each year more than 110,000 people in England experience their first stroke, costing the NHS £2.8 billion.

Recent government legislation has focused on improving the health and well-being of the nation with emphasis on modifying behaviour associated with increased risk of morbidity and mortality, in particular with coronary heart disease (CHD) and cardiovascular disease (CVD). Occupational therapy plays a key role in CHD, CVD and post-stroke rehabilitation and its holistic approach shares many similarities with health promotion. However there are no U.K. national guidelines on the role of occupational therapy in health promotion and many barriers exist for both patient and therapist. If health promotion is considered post-stroke, it is rarely approached in a systematic, co-ordinated and multi-disciplinary manner thereby limiting its potential benefits.

This study aims to evaluate the role of occupational therapists in promoting the health and well-being of older persons who have experienced a stroke, in the London Borough of Tower Hamlets. Key informants' views were sought through the local Primary Care Trust, including opportunities, barriers and effectiveness of health promotion post-stroke.

The results indicate that all respondents thought health promotion is worthy of incorporation into existing interventions such as therapy sessions and patient information groups. However the need for further training in the theory and practise of health promotion was identified as a key requirement. Literature on this topic is scarce but supported health promotion for secondary prevention of CVD, including stroke.

Recommendations for specialist stroke services, with particular relevance to Tower Hamlets, focus on embedding the philosophy of health promotion into the rehabilitation setting; maximising opportunities for education with patients and their families; methods of delivery and precise targeting of the message; multi-sectoral partnership and community involvement within the wider socio-economic context.

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| AHP | Allied Health Professional |
| ASU | Acute Stoke Unit |
| CHD | Coronary heart disease |
| CVD | Cardiovascular disease |
| DN | District nurse |
| DOH | Department of Health |
| HRQOL | Health related quality of life |
| HT | Hypertension |
| LBTH | London Borough of Tower Hamlets |
| LSHTM | London School of Hygiene & Tropical Medicine |
| MDT | Multidisciplinary team |
| NSF | National Service Framework |
| OT | Occupational Therapist |
| PCT | Primary Care Trust |
| PT | Physiotherapist |
| QOL | Quality of life |
| RCT | Randomised controlled trial |
| RCP | Royal College of Physicians |
| SAPS | Single assessment process |
| SES | Socio-economic status |
| SW | Social worker |
| THPCT | Tower Hamlets Primary Care Trust |

# CHAPTER 1: INTRODUCTION

## 1.1 Background

Stroke is the third most common cause of death in the UK and the largest single cause of adult disability[2]. It has significant socio-economic consequences and has been highlighted by the Government as an area of major public health importance[4,3].

Every year approximately 110,000 people in the UK have their first stroke and another 30,000 have a second or subsequent one, 88% of all patients over 65 years of age[5]. 16% of all women, and 8% of men are likely to die of a stroke[2,6-8]. A further 30-40,000 experience a transient ischaemic attack (TIA), with the risk of a completed stroke as high as 20% within the first month[7].

All general hospitals that care for stroke patients were required to introduce specialist stroke care services by 2004, based on evidence that they improved patient outcomes regardless of age, sex or stroke severity[9-10]. However there remains considerable geographic variation in the availability of specialist units[11].

## 1.2 Opportunities

### a) The policy background

There is a plethora of government papers related to coronary heart disease (CHD) and cardiovascular disease (CVD), including stroke, as well as long-term conditions, older persons, the role of allied health professionals in health promotion, and preventative care and well-being. One of the earliest was *Our Healthier Nation*[12] and more recent policies include *Choosing Health*[4], the *NSF for Older People* [9] and the Green paper *Independence, Well-being and Choice*[13], that outlined the Government's agenda for promoting health, independence and well-being, with particular reference to older people. This was confirmed in *Our Health, Our Care, Our Say* [14] that aims to give people greater control and shift to a stronger emphasis on prevention and health promotion.

*Choosing Health* [4] in particular sets out how people can change their lifestyles to improve their health and recommends:

- supporting informed choice for health
- personalising support to individuals to make healthy choices
- working in partnership with many organisations

These themes are reinforced in *Our Health, Our Care, Our Say* [14] with clear standards of delivery outlined in *Essence of Care: Benchmarks for Promoting Health*[15] and *Standards for Better Health*[16].

**b) The local situation**

The London Borough of Tower Hamlets (LBTH) is one of the most deprived boroughs in London with high levels of poverty and ill health and the worst housing overcrowding in England and Wales. Other aspects include low educational achievement, high unemployment, a relatively unskilled workforce, low income levels, and large numbers of households with lone parents or pensioners living alone [17-18]. A strong association between lower socio-economic status (SES) and increased mortality and morbidity is well established [17,19-20] and is reflected in the Borough's standard mortality rates, 49% worse than average[17-18,21], and average life expectancies at birth of 72.5 years for men and 78.8 for women, 3.2 years and 1.7 years, respectively, lower than for England as a whole[22]. Deprivation is also associated with inequalities in health care including access, utilization and quality of care [23].

While SES is important it does not fully explain the higher risks of CVD in the Bengali population [24]. Out of a total Borough population of 220,500, there are 15,000 people recorded as having high blood pressure and 8-9000 suffer from diabetes, twice the national rates [18]. There is a high rate of strokes, especially within ethnic minority groups that make up 57% of the population, 33% of whom are from Bangladesh. Mortality from stroke in under-65s, taken as the average for 1997-99, was 19.6/100,000 compared to the national average of 10.0 [17].

**c) Local policy**

A recent reflection of government policy is the 10 year plan *Improving Health and Well-being in Tower Hamlets*[18] that outlines an ambitious strategy grouped under five aims:

1. reducing inequalities in health and well-being
2. improving the experience of service users
3. developing integrated and more localised services
4. promoting independence, choice and control by service users
5. investing resources effectively.

The first aim includes reducing the gap in life expectancy between LBTH and England & Wales overall as well as reducing deaths from heart disease, strokes and related conditions by at least 40% in people under 75 by 2010 and by 50% in 2016[18] (p35). To achieve these targets a multi-sectoral approach to tackling the social determinants of ill health is advocated alongside a strong focus on empowering people to choose healthy lifestyles, a reflection of *Choosing Health*[4]. Services must address lifestyle factors and minority groups must have equitable access to older people's services.

The fourth aim relates to improving quality of life (QOL) for people with long-term conditions and their carers and reflects ideas from the *NSF for Older People* [9] (Standard 5 & 8) and *NSF for Long-Term Conditions* [25]. It also builds on a Tower Hamlets discussion document that extols the importance of 'empowering local

people to take more control of their health and well-being'[22] (p5). That QOL is related to health, and thus comes under the umbrella of health promotion, is discussed later.

Tower Hamlets Health Improvement & Modernisation Programme [26], 2003/6, laid the groundwork for the above document and highlighted the need to develop fully integrated stroke services.

Alongside this individual focus the above policies proposed that multi-sectoral initiatives should be aimed at tackling social determinants such as poverty and sub-standard housing.

**d) Stroke Unit, Mile End Hospital, Tower Hamlets**

The Stroke Unit at Mile End Hospital was set up to provide specialist stroke rehabilitation for this vulnerable population, in line with the *NSF for Older People*[9]. Stroke patients are transferred from the acute wards at the Royal London Hospital for rehabilitation and on discharge receive community follow up.

### 1.3 Interventions

A number of lifestyle interventions are associated with reduced risk of first stroke [2,4,6,8,27-28], in addition to medical management of hypertension and other conditions [29-32]. The Royal College of Physicians (RCP) evidence-based guidelines (2004) included five key lifestyle factors that should be addressed in

combination with medical management for patients who have already had a stroke [7] (p.41):

1. stopping smoking
2. regular exercise
3. diet and achieving a satisfactory weight
4. reducing salt intake
5. avoiding excess alcohol

**a) The role of occupational therapy**

The defining feature of occupational therapy for stroke patients is its holistic approach encapsulating all areas of life (self care, productivity and leisure) within a socio-environmental context. Purposeful activities are used to achieve functional goals that have been set with the patient and are targeted towards meaningful end points such as return to work [33].

Traditionally, allied health professionals (AHPs), including OTs, have not focused on health promotion because of their concentration on clinical care and 'alleviating the effects of illness or disability'[3] (p12). However AHPs are well placed to broaden their role because of 'their particular skills, knowledge and personal contact with patients that place them in a very strong position to drive health promotion initiatives'[3] (p12). In addition many AHPs have a strong allegiance to working as part of a team and across professional boundaries[3].

A basic tenet of occupational therapy is the 'close association between what people do and their health', thus there is ample justification for therapists to 'aim practise towards positive health and well-being'[3] (p87). Occupational therapists are ideally placed to promote health and well-being through meaningful occupation and the restoration of valued roles [3,34-36].

That health promotion is an important role for AHPs is endorsed by the Government [4,37-38], but to date there are no U.K. national guidelines on the role of occupational therapy in health promotion. Recent stroke guidelines[39] (standard 7) refer to assessing lifestyle factors and providing advice on smoking, exercise, diet/weight, salt intake, and alcohol but many practising OTs have received little, if any, training in this area [40-41].

**b) Politics, philosophy and practice**

'There is little doubt that health promotion is a political activity'[3] (p3) with significant ethical dilemmas and potential ambiguities in practise. The traditional focus on the individual does not challenge social determinants of ill health. However Scriven argues that the profession has a wider responsibility to promote health 'that involves a commitment to advocate and mediate for the provision of occupationally just policies'[3] (p96), drawing from the three broad strategies for health promotion outlined in the Ottawa Charter [42].

The Canadian Association of Occupational Therapists also resonates with the Ottawa Charter, stating that health promotion is more than disease prevention and therapists have a duty to promote healthy lifestyles across all sectors, in partnership with stakeholders [1,43-45]. Similarly the American Association of Occupational Therapists affirms the profession's participation in health promotion[46].

It is beyond the remit of this study to discuss such dilemmas, but that a broad definition encompassing any activity designed to promote health, well-being or quality or life, or to prevent further illness or disability, will be used [42].

**c) Barriers**

Health promotion is seldom approached in a systematic, co-ordinated or multi-disciplinary manner with stroke patients[47]. Opportunities exist that may reduce the risk of further illness or disability and improve quality of life for both patient and carer, despite many barriers such as time, cost, resources, staff training and a dearth of specific studies [3].

## CHAPTER 2: AIMS & OBJECTIVES

### 2.1 Research question

Recent government legislation has focused on improving the health and well-being of the nation. Occupational therapy plays a key role in secondary level care and its holistic approach shares many similarities with health promotion.

### 2.2 Aim

This study aims to evaluate the role of OTs in promoting the health and well-being of older persons who have experienced a stroke, in the LBTH.

### 2.3 Objectives

a) Outline the philosophy of occupational therapy, its role in the treatment of stroke and its concordance with health promotion.

b) Identify key demographic features of the LBTH and describe the policies and care pathway in operation for patients who have had a stroke.

c) Identify a range of effective health promotion interventions for stroke patients and the contribution OTs can make.

d) determine the extent to which health promotion interventions are provided in a local PCT, identifying opportunities, barriers and effectiveness.

e) Produce recommendations concerning health promotion post-stroke. These will primarily be for the local Trust but may also be extended to professional bodies.

## CHAPTER 3: METHODOLOGY

### 3.1 Literature review

A comprehensive literature review prepared the framework for the interviews and provided background information on Government and local legislation pertinent to promoting health post-stroke. It involved searching the following databases: PubMed; CINHAL; Web of Knowledge; EMBASE; Cochrane; CAB Direct; IBSS; EPPI-Centre and PsychInfo.

In addition websites were searched for policy documents and relevant un/published material (appendix A), including: Barts and the Royal London PCT; the College of Occupational Therapists in the UK, New Zealand, Australia, America and Canada; Department of Health; East London and City Health Authority; the King's Fund; National Research Register; NHS Health Scotland; NICE; PEDro; Stroke Association; Tower Hamlets PCT; and the World Health Organisation.

The search was initially confined to literature on occupational therapy, health promotion and stroke and was then widened to include allied health professionals and health promotion with older persons, long-term disabilities or CHD. Studies were limited to those written in English over the last 15 years. In addition, relevant articles cited in the literature were followed up. The main focus was on

systematic reviews, meta-analysis and randomised controlled trials, but all study types were included.

Search terms were as follows:

Primary keywords: cerebrovascular disorders, cerebrovascular accident, health promotion, health behaviour, lifestyle, occupational ther*, secondary prevention.

Secondary keywords: exercise, physical fitness, health education, patient education, risk factors, relaxation techniques, quality of life, nutrition, prevention and control,

Additional resources included The British Library, The College of Occupational Therapists and the LSHTM database for books regarding health promotion, occupational therapy and secondary prevention.

### 3.2 Interviews

Semi-structured interviews with key informants were used to gain insights from selected representatives of stakeholder groups and to benefit from their expertise as clinicians. The interviews complemented findings from the literature, in particular on the role of occupational therapy in promoting health post-stroke. An interview framework identified during the literature search was used which delineated areas of interest but also allowed flexibility (appendix B).

Respondents were selected through purposive sampling, to represent the key professions involved in stroke care. They were contacted by letter (appendix C), followed up by telephone or email. The interviews were conducted over two weeks in July, on hospital premises, tape-recorded and later transcribed. Content analysis involved: reading through the data repeatedly; vertical analysis of the main features of each case; horizontal (thematic) analysis to identify, code and organise recurrent themes into categories; reviewing and refining the categories[48].

### 3.3 Ethical issues

Ethical approval was given by LSHTM Ethics Committee, East London and City COREC and Tower Hamlets R&D Centre (appendix I-K).

Interview request letters were accompanied by information sheets (appendix D, E) that advised them on ethical issues such as the right to withdraw at any stage. On the day of interview a consent form was read and signed (appendix F). All respondents agreed to being quoted in the report.

### 3.4 Analytical framework

To examine current practise and policy on secondary prevention of stroke it was essential to identify a framework around which to structure the investigation, and the following guidelines were used:

a) The RCP National Clinical Guidelines for Stroke [7].
b) East London summary guidelines: stroke and transient ischaemic episodes [49] based on previous RCP guidelines [6].
c) RCP and Occupational Therapy audit package for stroke [39].

Interviewees were asked what policies or guidelines they were aware of and how they interpreted them to assist the researcher understand the link between policy and practise as well as potential barriers to implementation.

## CHAPTER 4: EVIDENCE FOR HEALTH PROMOTION POST-STROKE

### 4.1 The literature

Most of the literature was on medical management. No systematic reviews or meta-analyses on health promotion post-stroke were found but there was substantial literature on related aspects which is summarised below. CHD is included because many of the interventions that reduce its incidence and severity also apply to stroke and their underlying pathology is essentially the same [50-52].

**Table 1: Summary of literature review findings**

| | Subject | Number of studies | Comments |
|---|---|---|---|
| i. | Health promotion post-stroke (lifestyle interventions) | 8 | 2 RCTs |
| ii. | Health promotion & primary prevention of stroke | 5 | 1 RCT . Plus literature from Stroke Association & WHO. |
| iii. | Health promotion post CHD/CVD (secondary prevention) | 3 | 2 systematic reviews; 1 RCT. |
| iv. | Health promotion & primary prevention of CHD | 3 | 2 systematic reviews; 1 RCT. |
| v. | Health promotion with older persons | 8 | 2 RCTs. |
| vi. | Occupational therapy & health promotion | 7 | Including 1 MSc. |
| vii. | Opportunities & barriers for health promotion | 5 | 2 articles specific to OT. |

**i. Health promotion post-stroke**

Table 2 summarises the studies on secondary prevention post-stroke, including the setting (hospital, home, community), intervention type, staff involved, population group and evidence of effectiveness. Interventions included exercise/physical activity; life skills education (alcohol, smoking, diet, coping strategies, communication); and information/support.

## Table 2: Studies of secondary prevention of lifestyle factors post-stroke

| Study & date | Population & setting | Study design & staff/researcher background. | Intervention type, purpose & outcome measure | Results | Conclusion |
|---|---|---|---|---|---|
| Bluvol[74], 2004 | Stroke patients with moderate-severe functional impairments & their spouse/ main carer, at home; Ontario, Canada. | Cross-sectional n=40<br><br>Nursing | **Stroke information:** To examine the relationship between hope, health work and quality of life in families of stroke survivors. Health work was defined as 'an active process through which families learn ways of coping and developing that are conducive to healthy living over time' (p322). | Moderate positive relationships were found between hope & health work, & hope/ QOL for patients & spouses; family health work was positively associated with QOL of stroke survivors but not their spouses. | Important to focus on family strengths & caregiver burden. Illness related socio-economic factors are important contributors to QOL. |
| Greenlund et al[75]. 2002. | 20 States in the USA that partook in a behavioural risk factor survey, 1999; home setting. | Cross-sectional n= 51193<br><br>Physicians | **Diet & exercise:** To examine the prevalence of persons with stroke who received physician advice for, and engaged in, dietary change and exercise, and whether this was associated with differences in health related (HRQOL). | 2.4% (1228 people) reported a history of stroke. Of these: a) 61% said that they had received dietary advise and 85.4% reported adjusting their diet (controls: 56%).<br>b) 64% reported being advised to exercise more, and 76.5% said they had | No association between diet & HRQOL. Recommends provider advise for 2nd prevention post-stroke. |

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|---|---|---|---|---|---|
| | | | Outcome measure: HRQOL measured by questionnaire of overall health status in the preceding 30 days (non-standardised); compiled an index of healthy days. | (controls: 38.5%). Those who exercised reported fewer days of poor health ($p<0.005$), fewer limited activity days ($p<0.01$) and more healthy days ($p<0.05$) | |
| Guilmette et al.[78], 2001 | Elderly inpatients who smoked prior to admission on a rehab ward; USA. | Commentary<br><br>MDT: rehab staff | **Smoking:**<br>How to assist patients to stop smoking through a smoking cessation programme; relapse prevention. | One person should be responsible for delivering the programme to the patient, supported by the team. Intervention should include 1:1 advise & support, pharmacotherapy & written materials. | Health promotion should be addressed in the rehab setting, which provides a 'teachable moment' (p561). Smoking cessation programmes can be implemented with little cost in most rehab units. |
| Rimmer et al.[72], 2000 | Mainly African-American, low income, stroke survivors living at home in Chicago, USA. Age 30-70; >6 months post-stroke & able to | Pre-test/post-test lag control group n=35 (26 female, 9 male)<br><br>MDT: dietician, psychologist, social worker, | **Exercise, nutrition & health behaviour:**<br>Examined the effects of a 12 week (x3/week) health promotion intervention.<br><br>Outcome measure: Biomedical fitness, | Treatment group made significant gains over controls in the following areas: reduced weight ($p<0.01$) and cholesterol ($p<0.05$);<br>improved cardiovascular fitness; | A short-term health promotion intervention was effective in improving several physiological & psychological health outcomes. |

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|---|---|---|---|---|---|
| | walk >50ft with/without an aid. | therapist. | nutritional, and psychosocial measures | increased strength; increased life satisfaction and ability to manage self-care needs; decreased social isolation. | |
| Redfern et al.[76], 2000 | South London Stroke Register: first-in-a-lifetime strokes, at home; 1995-1998 | Prospective cohort n=1139<br><br>Medical | **Smoking, alcohol & obesity:**<br>To estimate risk factor prevalence & lifestyle changes post stroke.<br><br>Outcome measure: changes in smoking, alcohol consumption & weight 3 months & 1 year post-stroke. | At baseline 32.2% smoked, 13.2% drank more than the weekly allowance, 56.3% were obese.<br>At 3 months: 717 of 1139 were included for analysis. 22.2% smoked & 4.9% drank too much. At 1 year the figures were little different & 36.1% were still obese. | High risk groups should continue to be targeted to prevent stroke reoccurrence. Most behavioural change occurs in the first 3 months. Relationship between socio-demographic characteristics & lifestyle change remain unclear. |
| Boysen & Truelsen[77], 2000. | Stroke patients at risk of secondary event, at home or in hospital. (Denmark). | Review<br><br>Medical | **Smoking, exercise, alcohol & cholesterol:**<br>The lack of data on secondary stroke prevention, in particular lifestyle factors (smoking, physical activity & alcohol | Stroke recurrence higher among patients with prior heavy drinking; equivocal reports re smoking, cholesterol levels & lipid lowering; support for reducing cholesterol with | 'Lack of proof should not lead to a reluctant attitude' to encouraging patients and their families to 'live a more healthy life' (p70). |

| | | | | | |
|---|---|---|---|---|---|
| | | | consumption). | statins in patients with prior acute myocardial infarcton; people with HT, diabetes, carotid stenosis (>70%) & atrial fibrillation are at higher risk of 2nd stroke. | |
| Rodgers et al.[73], 1999 | Stroke patients admitted to North Tyneside hospital, & their carers. 01/01/97-01/12/98. | RCT<br>n= 240 (patients) + 176 (carers)<br><br>MDT/community: Nurse, PT, OT, SLT, SW, DN, psychologist, stroke club, carers associations. | **Stroke education:**<br>To determine the effectiveness of a multidisciplinary stroke education programme (SEP) for patients and their carers versus standard care. 1st session in hospital, a further 6 sessions, 1/week, post-discharge.<br><br>Outcome measure: patient and carer perceived health status (SP-36) at 6 months post-stroke. Plus stroke knowledge scale (unspecified); Hospital | Patients and carers randomised to SEP scored higher on the stroke knowledge scale (patients, p=0.02; carers, p=0.01). Patients in SEP were more satisfied with the stroke information they received (p=0.004). No differences in emotional or functional outcomes between groups. | SEP improved patient and carer knowledge about stroke & patient satisfaction with some components of stroke services, but no association was found with perceived health status. |

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| | | | anxiety & depression scale (HAD). | | |
| Duncan et al.[79], 1998 | Minimally-moderately impaired stroke patients who had completed inpatient rehab & were 30-60 days post-stroke, at home; recruited from Kansas City Stroke Study, USA. | Randomized controlled pilot study.<br>n=20<br><br>Physical therapists | **Exercise:**<br>1) to develop a home-based exercise programme, 8 weeks supervised, 4 weeks independent; 2) to evaluate the ability to recruit & retain stroke patients; 3) to assess the effects of the interventions used.<br><br>Outcome measures: Fugl-Meyer motor assessment, Barthel, Lawton Scale of Instrumental ADL, MOS-36, functional assessments of balance & gait (Berg balance scale, 10m walk, 6m walk, Jebsen test of hand function). | Improvements in Fugl-Meyer upper & lower extremity scores; minimal improvements in Berg balance & MOS-36 compared to controls. No significant differences in Lawton Scale of IADL, Barthel or Jebsen test of hand function. | Demonstrated that an RCT of a post-stroke exercise programme is feasible; measures of neurological impairment & lower function showed most benefit; effects on upper extremity dexterity & functional health status were equivocal. |

**ii. Health promotion and primary prevention of stroke**

Evidence from RCTs has shown that effective management of hypertension reduces the risk of cardiovascular morbidity and mortality [53]. Health promotion interventions can have beneficial effects when targeted at people with hypertension and other high risk groups, although they result in only small changes in risk factors and mortality in the general population [54]. Both WHO[28] and the Stroke Association[2] advocate primary prevention measures such as exercise and smoking cessation.

**iii. Health promotion post CHD/CVD (secondary prevention)**

Ebrahim's & Davey Smith's systematic review assessed the effectiveness of multiple risk factor intervention in reducing total mortality, and mortality from CHD, and supported secondary intervention on the grounds that people at highest risk were more likely to benefit and are motivated to change[54]. The *NSF for CHD* [50] also recommends lifestyle interventions at a secondary level.

A follow up of high cardiovascular risk patients who partook in an RCT of health promotion concluded that benefits were still evident, although smaller, at 5 years[55]. Ebrahim and Davey Smith's response was to comment:

'in people at relatively low risk of cardiovascular disease….studies have failed to provide any convincing evidence of a reduction in morbidity or mortality from individual or family advise on health behaviour modification. Consequently, retartgeting currently fruitless

health promotion activity at secondary prevention should offer much better value for money' [56] (p185).

**iv. Primary prevention of stroke and coronary heart disease**

As already discussed, the control of hypertension and other conditions is well established for the medical management of cardiovascular disease and can be cost-effective [57].

Rigorous studies of lifestyle interventions were scarce. One systematic review concluded that reduction or modification of dietary fat intake reduced cardiovascular mortality by 9% (odds ratio 0.91; confidence interval 0.77-1.07) and cardiovascular events by 16% (0.84; 0.72-1.99) [58]. Encouragingly, trials with at least two years' follow up provided stronger evidence of protection from cardiovascular events (0.76; 0.65-0.90) [58].

**v. Health promotion with older persons: forming healthy habits**

The fundamental importance of providing good-quality information was stressed in several articles [59-60] in addition to tailoring advise to cultural and educational needs [60]. One qualitative study of 40 stroke patients highlighted the importance of quality interaction between patient and professional: 'being respected and valued contributed to a favourable outcome' [61] (p20).

Studies of exercise programmes were difficult to compare due to different programme structures, duration, and outcome measures. One RCT that

considered frequency of exercise found that after ten weeks those who participated in twice weekly exercise demonstrated improvement in health related QOL whereas the once/week group did not [62].

More comprehensive programmes combined exercise with advice on healthy living. Participants in a wellness programme for older persons, run by occupational therapists x1/week over 6 months, demonstrated scores on the SF-36 that were significantly higher in vitality, social functioning and mental health [63].

A similar RCT, also therapist led, consisted of weekly sessions concerning health related behaviours. Patients were assessed at the end of the 9-month treatment phase, and then 6 months later. Of the 285 people who completed both assessments (79%) the authors concluded that approximately 90% of the gains observed at 9 months were still evident at follow up [64].

**vi. Occupational therapy and health promotion**

Occupational therapists used a wide range of innovative methods to promote health. Physical activities included yoga, tai chi, dance, exercise and aerobics. Life skills covered diet, stress management, meditation, transport, smoking cessation, voluntary work and socialisation [63-68].

However there were wide disparities in estimates of the proportion of therapists who view health promotion as part of their role and actively incorporate it into

practise. Of those who do, the vast majority intervene at a secondary or tertiary level focusing on individual behaviour [40,66,69]. Although therapists recognised the need for health promotion training [40-41] they do not always recognise the need for a strong theoretical grounding[70-71].

In addition, ongoing debate surrounded the potential for OTs to enable, mediate and advocate for change at a primary level (population based upstream approach), versus secondary/tertiary intervention. The latter has been interpreted as supporting the medical model in its downstream, reductionist, approach which fails to adequately address the wider socio-economic determinants of health[3,35-36,46].

Two studies specifically refer to OTs as part of a team led programme [72-73]. The key points of these, and other relevant studies, were as follows:

a) The studies supported an association between lifestyle factors and improved QOL [73-74]. It is important to at least provide advise on diet, exercise, smoking and alcohol [73,75-78]. There was insufficient evidence to support an association with morbidity or mortality.
b) Whether advice leads to behavioural change depends on factors such as mode of delivery and duration [75-76,79]. It is important not to assume that giving people advise necessarily translates into behavioural change or functional gains [72].
c) The rehabilitation setting presents an ideal opportunity for addressing

lifestyle factors with patients and their families [78] and this can be continued in community settings post-discharge [73,79].

d) Patients can be motivated to engage in home-based exercise programmes although therapists may need to adapt the programme to the environment [79]. Frequency and duration appear to be key factors [62] and Greenlund et al. point out that the Stroke Council of the American Heart Association recommends 30-60 minutes of moderate exercise at least 3-4 times/week [75]. Further evidence in favour of frequent exercise is Redfern's observation that nearly one-fifth of patients who were not obese at the time of stroke were obese 1 year later [76].

Most of those patients who made lifestyle changes did so within the first 3 months[76] supporting Guilmette's idea of a teachable moment[78]. Older patients were no less likely to make behavioural changes than younger persons [76]. Duncan advocates for the inclusion of individuals with mild stroke because they may have subtle impairments, be physically de-conditioned, and have a high prevalence of cardiovascular risk factors that are 'potentially modifiable' with exercise [79] (p2055). In addition stroke patients are at risk of other cardiovascular diseases and many of the risk factors for stroke are 'well established' for other types of cardiovascular diseases [77] (p70).

Only one study reported high attendance rates (93%) and all participants completed the programme [73]. The authors attributed this to having addressed

potential barriers in advance, supportive staff and participants forming their own social networks.

Finally, but perhaps most important, is the association between maintaining hope, an increased ability to cope and improved QOL for both patient and families. To achieve this a consistent team approach is crucial [74].

**vii. Opportunities and barriers**

The literature considered this either from the perspective of professionals, or from that of patients. Two studies considered the experiences of Canadian women with disabilities and divided their perceived barriers into internal and external, or structural, factors. Hall et al's study (2003) examined the barriers to healthy eating and identified fatigue, finances and motivation as the most common ones[80].

Odette took a broader approach looking at wellness barriers, using focus groups[81]. Similarly to Hall, barriers were categorised into individual factors (energy, fatigue, physical limitations, time) and external factors (lack of money, physical environment, social policies).

With regards to professionals, Scriven & Atwal discuss the potential for occupational therapists to adopt an upstream primary preventative role with the general population, but acknowledge this as rather idealistic because therapists

are under pressure of time and have 'urgent and more traditional professional roles to perform' [82] (p427).

Three studies identified corresponding barriers for therapists: insufficient resources (time, funding, staff levels); managers'/doctors' lack of awareness or support; inadequate knowledge; and difficulty justifying time spent 'just talking' to patients [41,66,83].

A key structural barrier was the absence of a coherent strategy for promoting health compounded by lack of follow-up post-discharge [47,70]. The 'greatest benefit would be a seamless approach to health promotion, with hospitals and primary care working in partnership' [47] (p93).

### 4.2 Methodological limitations of the studies

Limitations were that:

a) Other factors may have confounded the apparent association between lifestyle behaviours and outcome. For example socio-economic context was only addressed by one study [73].
b) Studies used different and non-comparable measures of health-related QOL, well-being and functional status which were not stroke specific and in some cases non-standardised.
c) Results based on what people reported they did, rather than what they actually did [75] may be inaccurate and skewed by recall bias. In addition

acquisition of knowledge, as measured by questionnaire[72], does not necessarily equate with behavioural change.

d) Studies failed to outline criteria for mild, moderate or severe impairment, or to assess the impact of co-morbidities. Conclusions for one stroke category may not be applicable to all.

e) External validity may have been compromised by the use, or exclusion, of specific sub-groups[73]. For example community studies excluded people in residential care who often suffer poorer health.

f) Some studies had a small sample size [73-74,79] with high drop out-rates[72], and minimal long-term follow up [73,79].

g) Programme durations may have been too short and frequency of sessions inadequate. For example a 12-week exercise programme once/week [73] is unlikely to make significant gains given the slow nature of recovery post-stroke.

h) Questionable statistics, for example the use of multiple t-tests [73-76,79].

## CHAPTER 5: INTERVIEW RESULTS

Nine interviews were conducted, from eleven requests. Respondents had worked in the stroke service for up to 10 years and were all senior 1 clinicians or above, including clinical specialists and managers. Professions included OT (4), physiotherapy (PT), speech and language therapy (SLT), dietetics, nursing and medicine. Some respondents worked across sites while others were based in one unit. Interviews lasted from 35-60 minutes. Respondent numbers are shown in brackets.

### 5.1 The stroke care pathway

Stroke patients are admitted to the Acute Stroke Unit (ASU) at the Royal London Hospital. The multi-disciplinary team (MDT) reviews the diagnosis, initiates early medical treatment, identifies and manages complications, and guides early rehabilitation. Patients either go straight home with or without supported discharge schemes, or are transferred to the Stroke Unit at MEH.

The 20-bedded Stroke Unit opened in 2001 to cater for stroke patients over 65 years, and now has a few beds allocated to younger people. At the time of interviewing there was an equal male: female ratio; patients spoke Punjabi (1), Malay (1), Vietnamese (1) and English (17), more usually there are at least 3-5 Bengali speakers. Length of stay varies from a few weeks to several months; most patients are discharged with community follow-up; some are transferred to

residential/nursing homes. They can also be referred from the ASU or the Stroke Unit to the Community Stroke Team (CST) for home-based rehabilitation for up to 12 weeks.

All respondents stated that the service was based on RCP Stroke Guidelines[7] although seven stated that they were not documented: 'there's no official policy or care pathway documented within the stroke services that I'm aware of' (6). Each profession has its own guidelines which fit with the overall RCP policy. The OT department uses the College of OT/RCP guidelines[95] and is developing a care pathway across the OT stroke service.

**5.2 What did respondents think about health promotion post-stroke?**

Eight respondents expressed the conviction that all patients ought to receive information and education on lifestyle factors and that such information could improve their QOL. This was regarded as still relevant to those being discharged to nursing or residential care: 'it doesn't matter where you go, you still need to maintain QOL' (6).

One respondent (3) stated that there is insufficient evidence, in respect to hard outcomes such as reduced mortality, to justify providing psycho-social interventions at a secondary level. However benefits in terms of QOL and patient satisfaction were acknowledged, as well as it being 'politically important because

politicians like it'. Lifestyle intervention could be justified if integrated into existing structures.

The same respondent stated that 'in economically deprived populations with very little control over their own lives the strategy of giving people advice, counselling and choice, the sort of middle class approach, is going to be ineffective and will simply make politicians feel good but won't make any difference.' From a public health point of view the respondent thought it more important to target and treat hypertension in high-risk groups through primary care, combined with simple central government initiatives like reducing salt in processed food.

The other respondents expressed a 'common sense' approach[84] that if lifestyle measures are effective in primary care they must also be relevant to patients post-stroke. Health promotion appeared integral to improved QOL and the link was regarded as obvious: 'If you're not well you can't do the things you were doing therefore you have reduced QOL' (6). This implied that lifestyle advice directly impacts on QOL through increasing functional abilities and 'everyone should be promoting health and focussing on [the patient] going back to a life that they can enjoy' (8).

The terms QOL, health and well-being were used interchangeably and the dividing line between health promotion and rehabilitation appeared unclear. Health promotion 'is something everyone should be doing anyway…it's quality of

care and evidence based from what all the policies are saying, trying to prevent, being proactive rather than reactive‘ and ‘it’s just taking that a step further forward and being more knowledgeable about it ourselves’ (6).

Two respondents were clear that prevention should be considered ‘right from the acute stage’ (1) as behaviours ‘take time to change’ (8) and are ‘all part of and included in the stroke pathway’ (1). Although ‘it needs to be in everyone’s mind, the lifestyle people have come from’ it may not be appropriate to discuss with the patient ‘until they’ve started to understand what’s happened to them…and that it’s not just going to go back to normal’ (8).

All were agreed that family involvement was essential for reasons such as ‘bringing the wrong foods into hospital, not encouraging them once they’re home to do things’ and learning that their relative is ‘not just a disabled person, they’re still a person who needs to be involved in  life’ (8)

Two respondents (8,9) noted that since the Stroke Unit has started to accept younger patients it is increasingly important to address lifestyle issues, and that the CST is well placed to reinforce such advice once patients return home.

### 5.3 Interventions

**a) What health promotion interventions did respondents routinely carry out?**

Replies varied from: ‘very little, if at all’, other than providing information on community resources (2); using the smoking cessation clinic (3); and providing ‘one-off’ verbal advice about ‘smoking, healthy eating, exercise and healthy use of alcohol’ (3). The common theme was that health promotion was ‘generally probably covered but not specifically addressed’ (6) through trying to incorporate lifestyle advise into daily rehabilitation sessions such as cooking, communication groups and improving mobility.

**b) Who provides information, how and when?**

All staff considered a multi-disciplinary approach, with ‘a role for each member of the team’ (4), essential to deliver a ‘consistent and appropriate message’ (8). However all but one respondent said this was not happening: ‘it’s all quite ad hoc’ (3).

The Stroke Unit runs a patient information group over seven weeks, but respondents were divided over whether this was really rehabilitation rather than health promotion. Sessions covered information about stroke, rehabilitation, swallowing and communication difficulties, emotional and psychological issues, and preparation for discharge. Other methods of delivery included leaflets;

referral to the dietician ‘usually a couple of days before discharge which is usually too late and not the right time’; verbal advise; and informally included in treatment. Six respondents thought sessions specifically on health promotion would be beneficial. One respondent noted that people learn in different ways so different methods should be used (9). The need ‘to keep repeating information’ (1) was noted by three respondents.

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Three respondents acknowledged that one-off information, verbal or written, is unlikely to be effective, whereas two were more optimistic: ‘it might be okay for some people’ (2) depending on insight and motivation (2,5). When pressed for different methods of delivery seven respondents suggested practical opportunities such as cooking sessions.

When asked about tailoring information to different people’s needs the Bengali health advocate was cited as invaluable for interpreting in therapy sessions, and the information group for which aphasia friendly material had been developed (1,4). A bilingual leaflet ‘The Bengali way of healthy eating’, was used by one respondent (4). Five respondents mentioned the need to address the requirements of its younger stroke patients.

Eight respondents said they were not aware of documentation of lifestyle advise in the integrated clinical notes. If such advice was routinely documented it could be audited through the Sentinel Audit or OT specific audit. Three respondents

suggested a questionnaire would be beneficial to ascertain patient's views, one suggested focus groups and a fifth suggested objective measures such as weight and cholesterol levels.

**b) What lifestyle activities did respondents identify?**

The following suggestions were made of activities respondents would like to carry out , or thought could be beneficial:

**Table 3: Lifestyle activities identified by respondents**

| Activity | Number of respondents |
|---|---|
| Smoking cessation | 9 |
| Exercise programmes or classes in the community | 6 |
| Healthy eating, cooking skills, understanding food labels, special diets (eg. diabetic) | 5 |
| Access to community facilities | 5 |
| Falls prevention | 4 |
| Sensible use of alcohol | 3 |
| Stress management/relaxation | 2 |
| Advocate for basic environmental changes | 2 |

**5.4 Opportunities and ideas for health promotion**

All respondents thought there were opportunities for promoting health with which all staff could be involved. Several respondents said that additional training could

be added into the existing internal training programme. Six respondents thought at least one session should be dedicated to health promotion and eight were keen for health promotion to play a larger role.

**a) In the Stroke Unit**

Seven respondents thought the patient education group was an ideal forum for lifestyle advise on nutrition, weight management, exercise, smoking cessation, alcohol management, stress/relaxation, falls prevention and community access. Secondly, family meetings were cited by three respondents as an appropriate way of targeting the family as 'you've got the whole team agreeing' and 'then everyone's heard it all at the same time' (8). However one respondent thought there were too many other issues to address (5).

Thirdly, all respondents thought it realistic and cost-effective to incorporate healthy living skills into existing therapy sessions. Suggestions included:

- dietary advice, cooking skills, understanding food labels and 'supermarket safaris' to incorporate falls prevention (2,4,5,6,8,9).
- home exercise programmes and initiating exercise groups or individual sessions with local gyms (2,7,8).
- Stress management and relaxation (2).

Finally, six respondents suggested co-ordinated use of written material on discharge, as an adjunct to other methods, and tailored to specific needs.

**b) Post-discharge**

At present patients receive a medical appointment 6 weeks post-discharge. Six respondents would like to review patients at the same time and include lifestyle issues. They would also like to develop a clinic where patients can be recalled at 6 and 12 months post-discharge. Initially this would 'give us information…. are people fulfilling their best capacity at home and if not what can we do?' (7). Patients who had a mild stroke/TIA were included.

Suggestions also included linking up with community groups, for example running education sessions or exercise classes at the Mosque, Women's Centre and day centres (2,8). Two respondents thought lifestyle advice would be taken more seriously if endorsed by community leaders. Also suggested was a group run in Silheti or Bengali, a young person's group, and employing someone to organise, co-ordinate and raise funds (9). Another innovative suggestion was to link with local school health promotion activities (3).

Housing problems were recognised but seen as a Housing/Social Services issue. Three respondents thought it realistic to advocate for individual clients to 'have their lift fixed' (2) or to install lifts so that clients are not housebound (2,6,8).

### 5.5 Barriers to health promotion

#### a) Patient characteristics

All respondents highlighted physical, cognitive and communication difficulties post-stroke compounded by pre-existing co-morbidities; in addition ‘a lot of advise is inappropriate or hard to follow’ post-stroke (3). Three respondents commented how difficult it is for patients to change long established patterns of behaviour in the relatively short period of intervention, made more difficult by reduced insight, denial, motivation and not being ready for change.

All but one respondent commented on cultural differences, that ‘the Bengali view of health is sick people are cared for’ and it is ‘difficult to challenge’ the passive role many elders adopt (7). In addition health promotion may be low priority ‘when for some people the focus isn’t on getting better but on ‘can I keep my position as head of the family?’’ (2). In addition limited availability of interpreters was a barrier for community staff.

#### b) Staff culture and priorities

Seven respondents, referring to the Stroke Unit, expressed concerns regarding ward staff’s commitment to, and understanding of, rehabilitation and health promotion. Comments included:

‘I don’t see that there’s even the concept of preventative care and health promotion’ (2)

‘As a team we don’t think long term about that person’s lifespan and the quality of that life’ (8)

‘I think it just tends to pop into their head once in a while’ (5)

‘the basics are not dealt with, here it’s just survival never mind quality of life’ (8)

Those who tried to incorporate aspects of lifestyle advise into their daily sessions felt hindered by lack of time, lack of team support or consistent approach, pressure for early discharge and late referral.

**c) Systemic barriers**

Four respondents expressed dissatisfaction with hospital food: it was ‘unappetising’ (5); ‘unbalanced… I’ve never seen anyone having fruit salad’ (4); and contradicted the healthy eating message staff were trying to impart. ‘If food is revolting relatives will bring in food and the easiest stuff is a chocolate bar’ (8).

Eight respondents commented that rehabilitation achievements were seldom maintained once patients were transferred to residential or nursing homes, thus lifestyle goals stood ‘even smaller chance of success’ (7).

Two respondents commented on the lack of interplay between stroke and primary care services while seven respondents commented on lack of follow up post-discharge: ‘when people go home we don’t really know what happens to

them…there's no real data on QOL or dependency levels…. we need to find that out because then we could tailor education' to individual needs (2).

**d) Wider barriers**

All respondents referred to multiple environmental barriers that are particularly difficult for older people such as negotiating wheelchairs outside and obtaining disabled parking badges. Seven respondents stated that sub-standard and over-crowded housing, especially affecting Bengali families, significantly impaired the ability to maximise rehabilitation gains on discharge, with negative consequences for QOL. Two respondents commented that gyms and health centres have not adapted their facilities for people with disabilities.

Two respondents highlighted that the perceived threat of crime/racism deterred community access: 'there are Bengali people on predominantly white estates who feel threatened and stay indoors… and vica versa' (3).

### 5.6 Implementing national policies at a local level

Policies regarded as relevant included *NSF for Older Persons*[9], NICE guidelines on nutrition and various Essence of Care benchmarks. Three respondents thought government policies too generic to be relevant.

One respondent commented 'every single one out at the minute has something related to more proactive than reactive intervention and getting in early' (6). The

Government cannot ascribe to every situation so policies ‘give you general vision and then you need to work out how to implement that into your service’ (6). Another respondent commented that the Tower Hamlets health and well-being strategy[18] ‘could be twisted to mean whatever you want it to mean’ and that gave leeway to argue for funds for specific projects (7).

Suggestions for local policy changes included funding for a TIA clinic, co-ordinated primary prevention by GPs, a proper neurovascular service, improved community facilities, tackling environmental barriers and changing the emphasis of services from an illness model to a preventative focus.

Finally one respondent thought the Tower Hamlets 10 year plan was an excellent opportunity to lobby for policies that force health centres and gyms to cater for people with disabilities as currently places ‘just assume it’s the able bodied that are going to use their resources’ (7).

# CHAPTER 6: DISCUSSION

## 6.1 Key findings

### a) Interventions and the contribution of OTs

A range of health promotion interventions were identified by respondents for promoting health post-stroke and are endorsed by the literature. They can be categorised as follows:

1. Exercise/physical activities.
2. Life skills education including dietary advise, weight management, smoking cessation, alcohol control, stress management/relaxation, sleep hygiene, communication skills and falls prevention.
3. Information about stroke, rehabilitation, access to community facilities, transport, carer support and stroke groups.

Although respondents considered that health promotion was often overridden by other priorities this did not undermine their conviction that interventions are worthwhile. The Stroke Unit and CST provide some information and life skills education. The ASU does not appear to address health promotion because patients are either too acute or go home rapidly. The particular contribution of occupational therapy appears to be its holistic approach that views health promoting activities within the context of daily life, family, home environment and

to a certain extent the wider socio-economic context. However OTs did not claim they had a monopoly on health promotion.

It is unclear from the literature which ingredients of a health promotion programme result in which specific health gains. It could be beneficial to validate each component, for example what type of exercise results in improved endurance? But the essence of health promotion is its holistic approach, and taking one factor out of context could be inappropriate and ignore interactions between them. It has been argued that secondary prevention aimed at modifying behaviour post-stroke is ineffectual and therefore low priority. However lack of evidence does not equate with evidence that such efforts are misguided [77]. The literature clearly supports primary prevention including lifestyle modification for CHD [85-86], CVD [50,54-55,57-58,87-88], healthy older persons [4,14,64,89] and for secondary prevention for CHD [50,85-86,88]. Moreover various policies recommend lifestyle modifications post stroke [4,7,39,49].

Rather than excluding people on the grounds of insufficient evidence, an ethically dubious position, secondary prevention should be viewed as an intensification of primary prevention. Until it has been properly implemented it cannot be evaluated nor discounted. As one respondent commented: 'if it makes a difference post cardiac event why not post-stroke?' (7). Even the respondent who stated that lifestyle intervention had minimal impact on mortality and morbidity identified benefits in terms of staff morale, patient satisfaction and QOL:

'What we want to achieve is better QOL …but you can also achieve it by improving community access and by looking at other interventions in the broader sense of health promotion, like falls prevention as well as advising people about their diet' (3).

**b) Opportunities**

The literature supports strategies to target high risk individuals, in particular identifying and treating those with hypertension[7,50,53,88] combined with population based measures [56,87]. One respondent was primarily in favour of population measures (3) while others also supported lifestyle interventions in secondary care: 'most people won't try to change until they've had a scare' (9).

As already mentioned, one respondent stated that in an economically deprived borough such as Tower Hamlets, where people have 'little control over their own lives' targeting individual behaviour 'won't make any difference….is labour intensive and not cost effective' (3). However all other respondents expressed the view that 'it's relevant to everyone, it should just be what we do, part of our day-to-day interventions… we can't solve everything' (6) and suggested a range of strategies to incorporate healthy living skills into rehabilitation, with family support and inclusion. As it is in the first 3 months post-stroke that people appear most motivated to make changes this window of opportunity should not be overlooked [76].

Evidence of effectiveness for psycho-social models of behavioural change is inconsistent [90]. Probably the more basic models, such as the health belief model,

theory of planned behaviour or transtheoretical model are too simplistic to address the complex needs of this client group. However social cognitive theory acknowledges environmental influences on health behaviour, in particular social norms [90]. Interestingly three respondents, in relation to diet, stated that including the family helped develop new patterns of behaviour.

For success in a hospital setting the philosophy of promoting health and well-being needs to be embedded into the structure and policies of the organisation. Staff must be committed to the approach and able to deliver it competently [91]. In the context of stroke services, the philosophy needs to be integrated into rehabilitation, and delivered in a consistent manner, across sites, from admission to post-discharge follow-up. Crucial to success is using a combination of strategies, tailored to individual need, and orientated towards what the patient should do, not just know [14,96].

Vital for sustainability is 'a more proactive and systematic approach' [49] (p4) to enhance the patient's social support network [96] and co-ordinate efforts with primary care services, community groups, the voluntary sector, and even local businesses [4,15-16,18], for example one respondent planned to approach local gyms (7).

**c) Empowerment, choice and personalisation**

There is a clear link between client-centred practice and health promotion as 'the concepts of partnership, communication, choice and power' are fundamental to both[3] (p107). Government guidelines reflect this with recent emphasis on client-centred care [15], and increasing choice and personalisation of services so that people are empowered to make healthy choices [4,13-14]; but the term suffers from over-use and 'translating the rhetoric into action' can be problematic [91] (p39). Scriven makes the point that not only does the hospital system disempower its patients but that therapists also have limited autonomy[3].

In addition an internal locus of control and belief in one's self-efficacy are regarded as important predictors to adapting new behaviours [90-91,93]: If people have 'a sense of ownership, there's a lot they can do' (5). This highlights the importance of giving patients information to help them regain some semblance of control, as this appears linked with better overall outcomes [61] and is policy supported [89]. Interestingly respondents made few references to depression or mood disturbances, which are common post-stroke and would impact negatively on motivation [10]. This may be a reflection of the rarity of clinical psychology for stroke patients both locally and nationally[11]. The importance of emotional well-being and social isolation for elderly and vulnerable groups has been acknowledged as an important and overlooked issue [14] and is certainly applicable to patients post-stroke.

Berg goes as far as to define health promotion in terms of 'being enabled through being the person I am, through information and knowledge and through hope and motivation' [92] (p25), which clearly links education with locus of control and motivation, essential ingredients for behavioural change.

Four respondents made references to advocating for patient rights. Also common was the view that 'we're not actually telling them what to do, it's negotiating, giving them advise and they can pick and choose' (5) and that information is 'relevant to everyone' so it is important to target the whole family (5).

**e) Barriers**

It may not be that secondary intervention per se is ineffectual but that its method of delivery, content and duration need attention. In addition individual patient barriers to change such as motivation, understanding, culture and readiness to change affect uptake. Four respondents expressed a similar view that:

'You've got to encourage people to do as much as they can… there may have to be a balance between what's vital and what's desirable, but you have to encourage people to do the vital bit' (7).

Similarly respondents identified professional barriers to health promotion, as already discussed, including attitude and understanding, time, staffing and resources, confirmed by the literature[3,82].

The Sentinel Audit [94] (2002), government policy [15] and respondents all highlighted the need for staff education:

'I've got a fair idea of how to promote good health but it would be nice to have some more training, make sure that we're all giving the same information and what we're saying is correct' (4)

A clear barrier to working in partnership, explicitly stated by seven respondents, appeared to be the ward culture as already discussed. Indeed the Sentinel Audit commented on the need for an interdisciplinary care pathway and that 'nurses should be an integral part of the rehabilitation team'[94] (p8), implying an existing lack of cohesion. Thus to create a health promoting environment [15] was seen as desirable but almost unobtainable:

'I think health promotion is very important but from where I'm standing someone being able to get to the toilet … is where my attention is at the moment, so at the moment the basics are not dealt with, here it's just survival never mind QOL' (8).

### 6.2 Strengths and weaknesses of this study

Obviously limited conclusions can be drawn from the opinions of just nine respondents, as expressed at one point in time. Additionally the process of analysis is vulnerable to researcher bias and/or misinterpretation. The lack of rigorous research, in particular systematic reviews and RCTs, means that causality can not be established between lifestyle interventions and health gains.

In addition health questionnaires ‘are bound to make value-laden assumptions about the nature of well-being’ [84] (p144) which would reduce reliability. But a number of the points gain cogence from their origin in a front line service in a particularly challenging district and are supported by official policies.

### 6.3 Implications for policy and further research

Most obvious is the need to establish why certain ethnic minority groups experience an increased incidence of stroke, and the relationship to SES. With regards to interventions, more research needs to be conducted on what ingredients constitute a successful programme and how they interact; what health gains can be expected and how long-term they are. For patients post-stroke there are major problems with community access that impinge on, for example, the ability to exercise, which need addressing at a policy level. Insufficient attention has been paid to training staff on the philosophy and practicalities of health promotion, thus interventions may appear ineffectual due to poorly thought out content and delivery. Obtaining the views of patients and carers should be a priority, whatever the difficulties.

## CHAPTER 7: CONCLUSION & RECOMMENDATIONS

The majority of people who experience stroke are over-65, often with co-morbidities including cardiac disease. There is evidence that health promotion is effective with older persons, and post-cardiac event, and it is supported by generic national and local guidelines [4,18,25]. National, local and occupational therapy guidelines [7,39,49] recommend lifestyle interventions in combination with medical management post-stroke.

The resource implications and opportunity cost of incorporating health promotion into existing rehabilitation and staff training are small whereas the benefits may be considerable in terms of QOL and healthcare savings. Occupational therapists are particularly well placed to facilitate lifestyle changes through rehabilitation due to their focus on occupation, a holistic approach and many values shared with those of health promotion.

The potential impact on quality of life for both patients and their families/carers justifies incorporating lifestyle education into the ethos and organisation of specialist stroke units. However, successful implementation of a settings based approach requires a co-ordinated and committed team approach that facilitates patients, and their families, to make informed choices.

The following recommendations for THPCT are considered relevant to all stroke services:

### 7.1 Staff training and a culture of promoting health and well-being

All disciplines across the Stroke Service require a basic understanding of the philosophy, theory and implementation of health promotion in order to develop a culture where promoting health is foremost and behaviour changes are sustained over time. Training can be incorporated into existing in-service programmes.

### 7.2 Assessment of lifestyle factors

It is important to assess modifiable risk factors early in treatment as it takes time to develop new behaviours. Where the Single Assessment Process (SAPS) is used, the questions on ‘disease prevention’ and ‘personal care and well-being’ need reformulating to optimise relevance.

### 7.3 Maximising opportunities

Education and advice needs to be continually reinforced with patients and their families. Opportunities include:

- Family or discharge meetings where the whole MDT are present.

- Expanding patient and family education sessions to include advise on topics such as exercise; smoking cessation; sensible drinking; nutrition, diet and weight management; falls prevention; and community access.
- Therapists' reviews of patients post-discharge could be combined with standard medical review 6 weeks post-discharge. In addition a therapy led out-patient clinic should be developed to review their needs at 6 and 12 months post-discharge. Patients who were discharged with minimal therapy input after a mild stroke or TIA also need follow up as subtle deficits may have been be overlooked.

### 7.4 Multi-medium delivery incorporated into rehabilitation

Information and advice must be delivered in different ways to suit different learning styles and ensure that patients and their families can apply the advise to their daily life. Methods include written information, verbal information, videos, and participatory sessions delivered in a 1:1 or group setting.

### 7.5 Precise targeting of the message

Information must be tailored to the individual and their family, addressing the reality of their social environment and other competing priorities/demands. Advice has to be realistic, practical and tailored to cultural and language requirements and communication/cognitive difficulties.

### 7.6 Consistent service wide written information

Written information is a useful adjunct to other methods if delivery is co-ordinated and the content discussed with patients and their family. The Service needs to assess what leaflets are already circulating, their appropriateness, and whether they need to include other languages, large print, aphasia friendly, or age appropriate varieties.

### 7.7 Monitoring effectiveness

When, how and by whom lifestyle advice is given needs to be documented in patient notes for the purpose of auditing. A variety of methods can be used to elicit the views of patients and families.

### 7.8 Community access, partnership and participation

- The Service should develop formal links with community organisations to increase awareness and understanding of stroke, encourage inclusion of disabled persons, and promote primary prevention.
- Health professionals, especially OTs, have a duty to advocate for basic rights, such as repairing or installing lifts so that patients are not housebound for prolonged periods of time.
- Services need to develop partnerships with local leisure facilities, health centres or gyms to increase access and opportunities for people with disabilities.

### 7.9 The wider context

Other recommendations that clearly came out of the interviews but are beyond the remit of this report relate to the need for:

- A co-ordinated GP led strategy for primary prevention of stroke, initially through targeting high-risk groups and ensuring that blood pressure is monitored and controlled.
- A proper neurovascular service so patients can be medically assessed and investigated within seven days, as nationally recommended [7,11].
- Funding for research to investigate why the risk of stroke is much higher in the Bengali population in the UK.

## REFERENCES


1. Canadian Association of Occupational Therapists. Health Promotion and Disease Prevention: a foundation for the Canadian health system. [Online]. 2001 [cited 2006 Jan 10]. Available from: URL:http://www.caot.ca

2. The Stroke Association. Stroke prevention. [Online]. 2006 [cited 2006 Jul 15]. Available from: URL: http://www.stroke.org.uk/information/preventing_a_stroke/index.html

3. Scriven A. Health promotion practise: the contribution of nurses and allied health professionals. Basingstoke: Palgrave Macmillan; 2005.

4. Department of Health. Choosing Health: Making healthy choices easier. London: The Stationery Office; 2004.

5. Bath PMW & Lees KR. ABC of arterial and venous disease. BMJ 2000;320:920-923.

6. Intercolleigate Working Party for Stroke. National Clinical Guidelines for Stroke. London: Royal College of Physicians; 2000.

7. Intercolleigate Working Party for Stroke. National Clinical Guidelines for Stroke. 2nd ed. London: Royal College of Physicians; 2004.

8. Bryan J. Contemporary thinking in stroke prevention and management. Nursing Times 2003;99(39):20-21.

9. Department of Health. National Service Framework for Older People. London: The Stationery Office; 2001.

10. Rodgers, H., Dennis, M., Cohen, D., Rudd, A. British Association of Stroke Physicians: benchmarking survey of stroke services. Age & Ageing 2003;32(2):211-217.

11. Intercolleigate Working Party for Stroke. National Sentinel stroke audit 2006. [Online].[cited 2006 Aug 12]. Available from: URL: http://www.rcplondon.ac.uk

12. Department of Health. Saving lives: Our healthier nation. London: The Stationery Office; 1998.

13. Department of Health. Independence, well-being and choice. [Online]. 2005 [cited 2006 Mar 25]. Available from: URL:http//www.dh.gov.uk

14. Department of Health. Our health, our care, our say: a new direction for community services. London: The Stationery Office; 2006.

15. Department of Health. Essence of care: benchmarks for promoting health. [Online]. 2006 [cited 2006 Jul 18] ;[14 screens]. Available from: URL:http//www.dh.gov.uk

16. Department of Health. Standards for better health. [Online]. 2006. [Cited 2006 Jul 18];[24 screens]. Available from: URL: http//www.dh.gov.uk

17. Tower Hamlets Primary Care Trust. Public Health Profile. [Online]. 2002 [cited 2006 Jun 30]. Available from: URL.http://www.thpct.nhs.uk

18. Tower Hamlets Partnership. Improving health and well-being in Tower Hamlets: A strategy for primary and community care services 2006-2016. [Online]. 2005 [cited 2006 Jun 06]. Available from: URL: www.towerhamlets.gov.uk/partnership

19. Black D, Morris J, Smith C, Townsend, P. The Black Report. London: Penguin; 1980.

20. Whitehead M. The Health Divide. London: Penguin; 1992.

21. Learning and Skills Council. Tower Hamlets Borough Profile. [Online]. 2004 [Cited 2006 Jul 18]. Available from: URL:http://www. lsc.gov.uk/londoneast/partners/borough_profiles.htmLBTHinfo.

22. Tower Hamlets Primary Care Trust. Improving health and well-being: report of the consultation on the Tower Hamlets discussion document. [Online]. 2005 [cited 2006 Jun 30]. Available from: URL: http://www.thpct.nhs.uk

23. Smith S, Sinclair D, Raine R, Reeves B. Health Care Evaluation Berkshire: Open University Press; 2005.

24. Harding S. Examining the contribution of social class to high cardiovascular mortality among Indian, Pakistani and Bangladeshi male migrants living in England & Wales. Health Statistics Quarterly 2000;5:26-28.

25. Department of Health. National Service Framework for long-term conditions. London: Department of Health; 2005.

26. Tower Hamlets Primary Care Trust. Tower Hamlets health improvement & modernisation programme, 2003/6. [Online]. 2003 [cited 2006 Jun 30]. Available from: URL: http://www.thpct.nhs.uk

27. Department of Health. The NHS improvement plan. Putting people at the heart of public services. [Online]. 2004 [cited 2006 Mar 25];[86 screens]. Available from: URL:http//www.dh.gov.uk

28. World Health Organisation. Avoiding heart attacks and strokes. [Online]. [2005] [cited 2006 Jun 30];[48 screens]. Available from: URL: http://www.who.int/cardiovascular_diseases/resources/avoid_heart_attack_report/en/

29. Lavenson GS Jr, Pantera RL, Garza RM, Neff T, Rothwell SD, Cisneros J. Development and implementation of a rapid, accurate, and cost-effective protocol for national stroke prevention screening. Am J Surgery 2004; 188(6):638-643.

30. Ling GS, Ling SM. Preventing ischaemic stroke in the older adult. Cleve Clin J Med 2005;72(Suppl 3):S14-25.

32. Soko SI, Kapoor JR, Foody JM. Blood pressure reduction in the primary and secondary prevention of stroke. Curr Vasc Pharmacol 2006;4(2):155-160.

33. Pedretti LW, Zoltan B. Occupational therapy practise skills for physical dysfunction. 3rd ed. Missouri, USA: Mosby; 1990.

34. Wilcock AA. Keynote lecture: occupation for health. Brit J Occup Ther 1998;61(8):340-345.

35. Wilcock AA. Keynote paper: biological and sociocultural aspects of occupation, health and health promotion. Brit J Occup Ther 1993;56(6):200-03.

36. College of Occupational Therapists. From interface to integration: a strategy for modernising services in local health and social care communities – a consultation. London: College of Occupational Therapists; 2002.

37. Department of Health. Meeting the Challenge: a strategy for the Allied Health Professionals. London: Department of Health; 2000.

38. Department of Health. Ten key roles for AHPs. London: Department of Health Publications; 2003.

39. Royal College of Physicians & College of Occupational Therapists. Occupational therapy audit package for stroke. London: Royal College of Physicians; 2006.

40. Hurst JE. Health promotion in student practise placements: occupational therapists' use of related activities. University of Exeter, MSc. 2004.

41. Flannery G, Barry MM. An exploration of Occupational Therapists' perceptions of health promotion. Irish Jnl of Occ Ther 2003; Winter:33-40.

42. World Health Organisation. Ottawa Charter for health promotion. Geneva: WHO; 1986.

43. Canadian Association of Occupational Therapists. Position statement: Occupational therapy and active living for older adults. Can J Occ Ther 2003a;70(3):183-184.

44. Canadian Association of Occupational Therapists. Position statement: Occupational therapy and primary health care. [Online]. 2005 [cited 2006 Jan 10]. Available from: URL:http://www.caot.ca

45. Canadian Association of Occupational Therapists. Position statement: Everyday Occupations and Health. [Online]. 2003 [cited 2006 Jan 10]. Available from: URL:http://www.caot.ca

46. American Occupational Therapy Association. Occupational Therapy in the promotion of health and the prevention of disease and disability statement. 2001. Am Jnl Occ Ther;55(6):656-660.

47. McBride A. Health promotion in hospitals: the attitudes, beliefs and practises of hospital nurses. Journal of Advanced Nursing 1994;20:92-100.

48. Pope C, Mays N, editors. Qualitative research in health care. 2nd ed. London: BMJ Books; 2000.

49. Clinical Effectiveness Group. East London summary guidelines: Stroke and transient ischaemic episodes. [Online]. 2002 [cited 2006 Jul 15]. Available from: URL.http:// www.ichs.qmul.ac.uk/nhs/ceg

50. Department of Health. The National Service Framework for Coronary Heart Disease. London: The Stationery Office; 2000.

51. Lusis AJ. Atherosclerosis. Nature 2000;407(6801):233-41.

52. Santangelo J. Clinical burden of stroke greater than that of heart disease in the UK. [Online]. 2005 [cited 2006 Jul 15]. Available from: URL: http://www.medicalnewstoday.comnewsletters.php

53. Fahey T, Schroeder K, Ebrahim S. Educational and organisational interventions used to improve the management of hypertension in primary care: a systematic review. Br J Gen Prac 2005;55:875-82.

54. Ebrahim S, Davey Smith G. Systematic review of randomised controlled trials of multiple risk factor intervention for preventing coronary heart disease. BMJ [serial online] 1997 [cited 2006 Jun 22]; 314:1666:[22 screens]. Available from: URL:http://bmj.bmjjournals.com

55. Cupples ME, McKnight A. Five year follow up of patients at high cardiovascular risk who took part in randomised controlled trial of health promotion. BMJ 1999;319:687-88.

56. Ebrahim S, Davey Smith G, Bennett R. Health promotion activity should be retargeted at secondary prevention. BMJ 2000;320:185.

57. Yosefy C, Ginsberg GM, Dicker D, Viskoper JR, Tulchinsky TH, Leibovitz E, Gavish D. Risk factor profile and achievement of treatment goals among hypertensive patients from the Israeli Blood Pressure Control (IBPC) program: initial cost utility analysis. Blood Pressure 2003;12(4):225-31.

58. Hooper L, Summerbell CD, Higgins JPT, Thompson RL, Capps NE, Davey Smith G et al. Dietary fat intake and prevention of cardiovascular disease: a systematic review. BMJ 2001;322:757-63.

59. Janowicz L. Health talks for elderly Latin Americans. Improving health in London case study. [Online]. 2004 [cited 2006 Jul 10]. Available from: URL:http://www.kingsfund.org.uk

60. Reijneveld SA, Westhoff MH, Hopman-Rock M. Promotion of health and physical activity improves the mental health of elderly immigrants: results of a group randomised controlled trial among Turkish immigrants in the Netherlands aged 45 and over. J Epidemiol Community Health 2003;57:405-11.

61. Pound P, Bury M, Gompertz P, Ebrahim S. Stroke patients' views on their admission to hospital. BMJ 1995;311:18-22.

62. Stiggelbout M, Popkema DY, Hopman-Rock M, Greef M, Mechelen W. Once a week is not enough: effects of a widely implemented group based exercise programme for older adults; a randomised controlled trial. J Epidemiol Community Health 2004;58:83-88.

63. Matuska K, Giles-Heinz A, Flinn N, Neighbour M, Bass-Haugen J. Outcomes of a pilot occupational therapy wellness program for older adults. Am J Occ Ther 2003;57:220-24.

64. Clark F, Stanley PA, Carlson M, Mandel D, LaBree L, Hay J et al. Embedding health-promoting changes into the daily lives of independent-living older adults: long-term follow-up of occupational therapy intervention. J Gerontology 2001;56B(1):60-3.

65. Scott AH. Wellness works: community service health promotion groups led by occupational therapy students. Am J Occup Ther 1999;53(6):566-74.

66. Seymour S. Occupational Therapy and Health Promotion: A Focus on Elderly People. British Journal of Occupational Therapy 1999;62(7):313-317.

67. Black W, Living R. Volunteerism as occupation and its relationship to health and well-being. Brit J Occup Ther 2004;67(12):526-30.

68. Scott D, McPhee, Johnson TR, Dietrich MS. Comparing health status with healthy habits in elderly assisted-living residents. Fam Community Health 2004;27(2):158-69.

69. Rea BL, Hopp Marshak H, Neish C, Davis N. The role of health promotion in physical therapy in California, New York, and Tennessee. Phys Ther 2004;84(6):510-23.

70. Miller L, High J, Arter K, Fernando R, Prime N, Rosenfeld V et al. Health promotion in nurses and occupational therapists. Part 1: using occupational standards to benchmark pre-registration programmes and gauge current competence. Int J Health Promotion & Education 2001;39(2):44-51.

71. Miller L, High J, Arter K, Fernando R, Prime N, Rosenfeld V et al. Health promotion in nurses and occupational therapists. Part 2: using occupational standards to identify training and development needs. Int J Health Promotion & Education 2001;39(3):68-75.

72. Rimmer JH, Braunschweig C, Silverman K, Riley B, Creviston T, Nicola T. Effects of a short-term health promotion intervention for a predominantly African-American group of stroke survivors. Am J Prev Med 2000;18(4):332-338.

73. Rodgers H, Atkinson C, Bond S, Suddes M, Dobson R, Curless R. Randomized controlled trial of a comprehensive stroke education program for patients and caregivers. Stroke 1999;2585-2591.

74. Bluvol A, Ford-Gilboe M. Hope, health work and quality of life in families of stroke survivors. Jnl Adv Nursing 2004;48(4):322-332.

75. Greenlund KJ, Wayne HG, Keenan NL, Croft JB, Mensah GA, Huston SL. Physician advise, patient actions, and health-related quality of life in secondary prevention of stroke through diet and exercise. Stroke 2002; 33:565-571.

76. Redfern J, McKevitt C, Dundas R, Rudd AG, Wolfe CD. Behavioural risk factor prevalence and lifestyle change after stroke: a prospective study. Stroke 2000;31:1877-1881.

77. Boysen G, Truelsen T. Prevention of recurrent stroke. Neurol Sci 2000;21:67-72.

78. Guilmette TJ, Motta SI, Shadel WG, Mukand J, Niaura R. Promoting smoking cessation in the rehabilitation setting. Am J Phys Med Rehabil 2001;80(8):560-562.

79. Duncan P, Richards L, Wallace D, Stoker-Yates J, Pohl P, Luchies C, Ogle A, Studenski S. A randomised, controlled pilot study of a home-based exercise program for individuals with mild and moderate stroke. Stroke 1998;29:2055-2060.

80. Hall L, Colantonio A, Yoshida K. Barriers to nutrition as a health promotion practice for women with disabilities. Int J Rehabil Res 2003;26(3):245-247.

81. Odette F, Yoshida KK. Barriers to wellness activities for Canadian women with physical disabilities. Health Care Women Int 2003;24:125-134.

82. Scriven A, Atwal A. Occupational therapists as primary health promoters: opportunities and barriers. Brit J Occup Ther 2004;67(10):424-429.

83. Spalding N. Health promotion and the role of occupational therapy. Brit J Ther & Rehab 1996;3(3):143-147.

84. Seedhouse D. Health Promotion: philosophy, prejudice and practice. 2nd ed. Chichester: John Wiley & Sons; 2004.

85. Murchie P, Campbell NC, Ritchie LD, Simpson JA, Thain J. Secondary prevention clinics for coronary heart disease: four year follow up of a randomised controlled trial in primary care. BMJ 2003;326:84-87.

86. Taylor R, Brown A, Ebrahim S, Jolliffe J, Noorani H, Rees K et al. Exercise based rehabilitation for patients with coronary heart disease: systematic review and meta-analysis of randomised controlled trials. Am J Med 2004;116:682-92.

87. Mullis RM, Blair SN, Aronne LJ, Bier DM, Denke MA, Dietz W et al. Prevention Conference VII: obesity, a worldwide epidemic related to heart disease and stroke: Group IV: prevention/treatment. Circulation 2004;110:484-88.

88. Arima H, Tzourio C, Butcher K, Anderson C, Bousser MG, Lees KR et al. Prior events predict cerebrovascular and coronary outcomes in the PROGRESS trial. Stroke 2006;37(6):1497-1502.

89. Department of Health. National standards, local action. Health and Social Care Standards and Planning Framework 2005/06–2007/08. [Online]. 2004 [cited 2006 Mar 25]. Available from: URL:http//www.dh.gov.uk

90. Nutbeam D, Harris E. Theory in a nutshell. 2nd ed. Sydney: McGraw Hill Book Co; 2004.

91. Tones K, Green J. Health promotion: planning and strategies. London: Sage Publications; 2004.

92. Berg GV, Sarvimakia A, Hedelin B. Hospitalized older peoples' views of health and health promotion. Int J Older People Nursing 2006;1:25-33.

93. Law m, Steinwender S, Leclair L. Occupation, health and well-being. Can J Occ Ther 1998;65(2):81-91.

94. East London City Health Authority. National sentinel audit of stroke 2001/02: summary of results for North East London. [Online]. 2002 [Cited 2006 Jul 18];[21 screens]. Available from: URL: http://www.nelondon.nhs.uk/downloads/boardPapers0311/b7b.pdf

95. Royal College of Physicians & College of Occupational Therapists. Occupational therapy standards for stroke care. London: Royal College of Physicians; 2002.

96. Uddin I. Development of health promotion in the hospital setting – programme development. Int J Health Promotion & Education 2001;39(2):40-3.

## APPENDICES

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J. Ethics approval, COREC

K. Ethics approval, THPCT

**Appendix A: List of websites**

| Organisation | Website |
|---|---|
| Barts and the London PCT | www.bartsandthelondon.nhs.uk |
| Association of Occupational Therapists in: | |
| America | www.aota.org |
| Australia | www.ausot.com.au |
| Canada | www.caot.ca |
| New Zealand | www.nzaot.com |
| UK | www.cot.org.uk |
| Department of Health | www.doh.gov.uk |
| East London and City Health Authority (ELCHA) | www.nelondon.nhs.uk |
| EPPI-Centre | www.eppi.ioe.ac.uk |
| The King's Fund | www.kingsfund.org.uk |
| National Research Register | www.nrr.nhs.uk |
| NHS Health Scotland | www.hebs.com |
| National Institute of Clinical Evidence | www.nice.org.uk |
| Centre for Evidence-Based Physiotherapy (PEDro) | www.pedro.fhs.usyd.edu.au |
| Stroke Association | www.strokeassociation.org.uk |
| Tower Hamlets PCT | www.thpct.nhs.uk |
| World Health Organisation | www.who.int |

## Appendix B: Interview schedule

**London School of Hygiene & Tropical Medicine**
**Department of Public Health and Policy**
Keppel Street, London WC1E 7HT

**Tel:**
**e-mail:** **@lshtm.ac.uk**

**INTERVIEW GUIDE**

**Study title**:
To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and well-being in patients who have had a stroke.

**1. Introduction (3 mins)**
Explain about confidentiality and study objectives

Aim
This study aims to evaluate the role of occupational therapists in promoting health and well-being with older persons who have experienced a stroke in a local London Borough.

Objectives:

1. Outline the philosophy of occupational therapy, its role in the treatment of stroke and its cogence with health promotion.
2. Identify key demographic features of the London Borough of Tower Hamlets and describe policies and the care pathway for patients who have had a stroke.
3. Review evidence on the effectiveness of health promotion with stroke patients and in particular the contribution of occupational therapists.
4. Gather key informant views from the local Primary Care Trust (PCT) regarding health promotion post-stroke including: opportunities, barriers and evidence of effectiveness.
5. Produce recommendations concerning health promotion post stroke. These will primarily be for the local Trust but may also be extended to professional bodies.

**2. Warm up & background (3 mins)**

Before we start please tell me briefly about the characteristics of the unit you work in and your role within the service.

Prompt:

- What are your main roles within the team?
- What size is your caseload, how often do you see patients, length of stay and follow up
- Patient demographics: age, gender, ethnicity, SES, employment status.

**3. Could you describe the care pathway for stroke patients (5 mins)**

Generic care pathway for all professions?

What's profession-specific?
Are you aware of any policy statement around HP by your professional body?
Do you have any client groups that have special care needs? (ethnic minorities)

**4. Are there any activities that you, [your staff*] routinely carry out with patients and/or their families that you think constitutes health promotion rather than rehabilitation? (8 mins)**

*****For non-clinicians

Prompt:

- Exercise/physical activities
- Dietary advise/nutrition
- Weight management
- Smoking cessation
- Alcohol management
- Stress management/relaxation
- Sleep hygiene
- Medical management (Doctor only)

**For any named activity, ask:**

- Who provides this information, and why? Is the message consistent/co-ordinated?
- How is such advice delivered? And when?
- To whom: patient and/or family?
- How is advice/intervention tailored to the specific needs of client groups named above?
- How do you monitor effectiveness?
- How do you prioritise time given to health promotion against other needs?

**5. (IF no activities provided ask), Do you think there is a need for HP with this client group? (8 mins)**

How do you think patients could benefit?

Approximately what percentage of patients and/or their family do you think would benefit?

For the patients you think it's relevant to:

- Who do think would be best placed to provide this information, and why?
- What information/activities would you include in HP?
- How would such advice be delivered? And when?
- To whom: patient and/or family?
- How would the advice/intervention be tailored to the specific needs of any client group?

**6a. What opportunities are there for promoting health within the various client groups? (10 mins)**

Prompt:
As for question 4. Focus on OT's potential

What about people in who don't return to their own homes?

**6b. What are the barriers to health promotion within the various client groups? (10 mins)**

Prompt:
As for question 4. Focus on OT's potential.

What HP activities would you like to do that you are presently unable to carry out? Why not?
Culture, language, resources/time, knowledge etc
Patients who don't return home.

**7. (If there is time) How have you tried to implement the more recent government policies such as the NSF for Older People/LT conditions and Choosing Health? (5-10 mins)**

Prompt:
Have you received any additional resources/money to implement these guidelines?

What is your interpretation of government policy in relation to:

- the specific needs of this client group? (ethnic mix, low SES).
- increasing informed choice & independence
- training needs for staff
- 30mins/day exercise target
- 5 A DAY
- weight management
- smoking cessation/ chewing beetle nut

Are there any Health Trainers, Sports and Exercise specialists, community matrons in TH?

What concerns do you have about equity/equality of access or use of services

**8. (If there is time) Are there any policy changes that you would like to see implemented at a local level, and how? (5-10 mins).**

Prompt:
Develop from answers to 6a, 6b & 7.

**Thank and close**

## Appendix C: interview request letter

**London School of Hygiene & Tropical Medicine**
**Department of Public Health and Policy**
Keppel Street, London WC1E 7HT

**Tel**
**e-mail: @lshtm.ac.uk**

Date:

Address:

Dear …….,

**Re: interview request for research on health promotion with patients who have experienced a stroke.**

I am undertaking research on the role of occupational therapists, within the inter-disciplinary team, in promoting health and well-being in patients who have had a stroke. I would like to arrange an interview with you in order to obtain a practical and up-to-date perspective on this topic. The interview will be semi-structured and last approximately 30 minutes. I have enclosed an information sheet that gives further details of the study. Questions will focus on:

- Your experience of, and views about, promoting health with patients who have had a stroke.
- What opportunities are there for promoting health with this client group?
- What are the barriers to promoting health?
- What policies are you aware of that support health promotion with this, or similar, client groups?
- What policy recommendations would you suggest?

If you are able to take part please could you suggest a time that suits you, week commencing 10th or 17th July, if possible.

Yours sincerely,

**Appendix D: Information sheet, part 1**

**London School of Hygiene & Tropical Medicine**
**Department of Public Health and Policy**
Keppel Street, London WC1E 7HT

**Tel**
**e-mail:**

**PARTICIPANT INFORMATION SHEET: PART 1**

**Study title**:

To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and wellbeing in patients who have had a stroke.

**Invitation paragraph:**

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish.

- Part 1 tells you the purpose of the study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Ask the principal researcher, Vanessa Abrahamson, if anything is unclear or you would like further information. Please take time to decide whether or not you wish to take part.

**Purpose of the study:**

Stroke is the third biggest cause of death in the UK and the largest single cause of severe disability (Department of Health, 2006). Occupational Therapists play a vital role in post-stroke rehabilitation however to date there are no national guidelines on health promotion with this client group. This study plans to evaluate the role, and effectiveness, of occupational therapy in health promotion with patients who have experienced a stroke. Although the focus is primarily on occupational therapists the study aims to consider their role within the wider context of the inter-disciplinary team.

This is a student research project and results will be written up as part of an MSc Public Health dissertation.

**Why have I been chosen:**

The individual experience of practitioners will add understanding and depth to the subject area and the key concepts that emerge can be compared and contrasted to the literature. This will help develop recommendations on the role of occupational therapy, within the inter-disciplinary team, in health promotion for stroke patients.

**Do I have to take part?**

No. Participation is entirely voluntary and you have the right to withdraw, without reason, at any stage. If you agree to participate you will be asked to read and sign a consent form before the interview begins. You will be given a copy of this, and the information sheet, to keep.

**What happens to me if I take part?**

As part of this investigation a semi-structured interview, lasting approximately 30 minutes, will be carried out by the principal researcher, Vanessa Abrahamson. To help accurately represent your views, it would be helpful to record the interview, but only with your consent.

**What are the possible disadvantages of taking part?**

The interview will take place during work time.

**Investigator's name and contact details:**

[details removed]
MSc Public Health Student
London School of Hygiene & Tropical Medicine
Keppel Street, London WC1E 7HT

Department of Health (2006) www.doh.doh.gov.uk [Accessed 17 Feb 2006]

**If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.**

**Appendix E: Information sheet, part 2**

**London School of Hygiene & Tropical Medicine**
**Department of Public Health and Policy**
Keppel Street, London WC1E 7HT

**Tel**
**e-mail:**

**PARTICIPANT INFORMATION SHEET: PART 2**

**What will happen if I don't want to carry on with the study?**
If you decide to withdraw at any point during the study, all information obtained during the interview will be destroyed.

**What if there is a problem?**
If you have any concern about any aspect of the study you should speak to the principal researcher, Vanessa Abrahamson, who will do her best to answer your questions and alleviate concerns. If you remain unhappy and wish to complain formally you can do so through the NHS Complaints Procedure.

**How will confidentiality be maintained:**
This process is completely voluntary and your written consent will be obtained prior to taking part. Interview data will be recorded using a dictaphone and will be coded by number, not your name. It will be transcribed and analysed by the principal researcher, Vanessa Abrahamson. Once transcription is complete the tapes will be destroyed. The computer is password protected and any printed material will be stored in a locked draw accessible only to the researcher.

Information from interviews will not be attributed to a named professional: a generic term will be used rather than, for example, 'occupational therapist'. Each respondent will be given the option of not being quoted and material will be disposed of when all the work has been completed.

**Who has reviewed this study?**
This study has been approved by the Ethics Committee of The London School of Hygiene & Tropical Medicine and Tower Hamlets Primary Care Trust Ethics Committee.

**Thank you very much for considering to participate in this study and taking the time to read the information sheets.**

**Appendix F: Consent form**

**London School of Hygiene & Tropical Medicine**
**Department of Public Health and Policy**
Keppel Street, London WC1E 7HT

**CONSENT FORM**

**STUDY TITLE**:
To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and wellbeing in patients who have had a stroke.

**RESEARCHER'S NAME**:
Vanessa Abrahamson

**TO BE READ BY THE PARTICIPANT:**

1. I confirm that I have read and understand the information sheet (version 1.0) for the above study. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I may withdraw at any time, without giving a reason. ☐
3. I have the right to refuse to answer any questions. ☐
4. I agree to take part in this study. ☐

**To be signed by participant, researcher and witness**:

Name: ……

Signed: …… Date:……..

Name: ……

Signed: …… Date:……..

Name: ……

Signed: …… Date:……..

## Appendix G: Protocol

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE
Department of Public Health and Policy

**MSc Project Protocol 2005-2006: 1st draft**

| |
|---|
| CANDIDATE NAME:<br>**MSc PUBLIC HEALTH (HEALTH PROMOTION)** |

| |
|---|
| **PROJECT TYPE: Health policy report** |
| **TITLE OF PROJECT:**<br>To evaluate the role, and effectiveness, of Occupational Therapy in health promotion as part of rehabilitation with patients who have experienced a stroke. |
| **BACKGROUND**:<br>**Occupational Therapy (OT) and Health Promotion**<br>To date there are no U.K. national guidelines on the role of occupational therapy (OT) in health promotion. But 'without a clear focus on health promotion and disease prevention, we risk spending more and more of our increasingly scarce resources on care with less and less return' (Canadian Association of Occupational Therapists, 2001, p1).<br><br>Occupational therapy traditionally focuses on the individual and does not challenge underlying causes of ill health. Spalding (1996) asserts that therapists do contribute to health promotion, albeit at an individual level. To encompass a broader definition would need a significant paradigm shift and major changes to training and practise (Scriven & Atwal, 2004). Scriven argues that the profession does have a responsibility to promote health and 'that involves a commitment to advocate and mediate for the provision of occupationally just |

policies' (2005, p96).

Cerebrovascular accidents (CVAs)/ Strokes

Stroke is the third biggest cause of death in the UK and the largest single cause of severe disability. Each year more than 110,000 people in England experience a CVA costing the NHS £2.8 billion (Department of Health, 2006). Occupational Therapists play a vital role in post-stroke rehabilitation.

London Borough of Tower Hamlets

The Borough has a high rate of strokes, especially within ethnic minority groups which make up 57% of the population, 33% of whom are from Bangladesh. The population is dense with high levels of poverty, poor housing and ill health (Learning and Skills Council, 2004).

**Stroke Unit, Mile End Hospital, Tower Hamlets**

The Stroke Unit was set up to provide specialist stroke rehabilitation to the local population. This was in line with the National Service Framework (NSF) for Older People which advised that all those who have a stroke should be cared for in a specialist unit, based on evidence of their effectiveness compared to non-specialist wards (Department of Health, 2001). Patients are transferred from the acute ward at the Royal London Hospital for rehabilitation and on discharge receive limited follow up from a community team.

**Health Promotion after a stroke**

Health promotion, if considered, is not approached in a systematic, co-ordinated or multi-disciplinary manner. Opportunities exist for health promotion that may reduce the risk of further illness or disability. However there are many barriers for both patients and therapists (Scriven, 2005).

**AIMS:**

To examine the role of occupational therapy in promoting health and well being in patients who have experienced a stroke in a local London Borough

**OBJECTIVES**:

1. Briefly outline the incidence of strokes in the UK and the cost to the individual, their family and society.

2. Outline the philosophy of occupational therapy, its role in the treatment of stroke and its cogence with health promotion.

3. Identify key demographic features of the London Borough of Tower Hamlets and describe policies and care pathway for residents requiring treatment for stroke.

4. Collect and review literature on effectiveness of health promotion for stroke patients and in particular the contribution of OTs.

5. Gather key informant views from the local Primary Care Trust (PCT) regarding health promotion post-stroke including: opportunities, barriers and evidence of effectiveness.

6. Produce recommendations concerning health promotion post stroke. These will primarily be for the local Trust but may also be extended to professional bodies.

**METHODOLOGY**:

**Literature review**

The following sources will be searched for relevant articles to review:

- Databases: CINHAL, PubMed/Medline, Web of Knowledge, Cochrane.
- Search terms: CVA; stroke; occupational therapy/therapist; health promotion; well being; stroke prevention; allied health professionals; rehabilitation.

To find pertinent non-journal articles the following will be searched:

- Websites: Dept of Health; College of Occupational Therapists in UK, NZ, Australia and Canada; Tower Hamlets Primary Care Trust (THPCT); World Health Organisiation; Health Development Agency; Stroke Association.

**Inclusion criteria**:

Target population: people who had a stroke and received rehabilitation. If insufficient material the remit will be widened to neurological conditions with long term disability. Rehabilitation facilities treating people post-stroke, preferably with direct reference to health promotion or well-being.

Types of study: primary focus will be on intervention studies with evidence that health

promotion is part of the rehabilitation process.

Outcome measures: review improved functional status; improved well-being; modified lifestyles; or behavioural changes that decrease the risk of further strokes.

**Exclusion criteria**

The review will be limited to English language documents. The review will primarily focus on randomised-control trials (RCT) but will be expanded to include observational studies if few RCTs are found.

**Interviews**

While the study will focus on OTs, they cannot be considered in isolation as health promotion must be part of an interdisciplinary process to have a lasting effect. The views of the consultant will also be sought as they play an important role in shaping the team's ethos. If ethical approval is granted, semi-structured interviews with key informants from the local Borough (purposive sampling), potentially:

- Occupational Therapist
- Consultant or GP
- Physiotherapist/ Dietician

Interviews would be tape recorded, transcribed and analysed with systematic coding.

**ETHICAL CONSIDERATIONS**:

1. Approval required from LSHTM ethical committee.
2. Approval required from local PCT ethical committee once draft protocol returned by LHSTM. See feasibility issues below.

**FEASIBILITY ISSUES:**

1. Mile End Hospital's ethics committee may not grant ethical approval at all, or within the time frame of the project. It will then be restricted to policy review without interviews.

Insufficient literature specific to health promotion, stroke rehabilitation and occupational therapy/allied health professionals. Remit will be widened to include health promotion carried out with people who have any long term disability.

**REFERENCES**:


Canadian Association of Occupational Therapists (2001) *Health Promotion and Disease Prevention: a foundation for the Canadian health system*. www.caot.ca [accessed Jan 10, 2006].

Department of Health (2006) www.doh.doh.gov.uk [Accessed 17 Feb 2006]

Department of Health (2001) *National Service Framework for Older People*. www.doh.gov.uk [Accessed Jan 10, 2006]

Learning and Skills Council (2004) *Tower Hamlets Borough Profile*. www.lsc.gov.uk/londoneast/partners/borough_profiles.htmLBTHinfo.

Scriven, A. (2005) *Health promotion practise: the contribution of nurses and allied health professionals*. Basingstoke: Palgrave Macmillan.

Scriven, A. & Atwal, A. (2004) Occupational Therapists as primary health promoters: opportunities and barriers. *British Journal of Occupational Therapy* 67(10)424-429.

Spalding, N. (1996) Health Promotion and the role of occupational therapy. *British Journal of Therapy and Rehabilitation*, 3(3)143-147.

## APPENDIX H: Risk assessment form

## TAUGHT COURSE STUDENT PROJECT RISK ASSESSMENT FORM

1. This summary and assessment must address all planned aspects of the student project.
2. The student, in conjunction with the project supervisor, must complete both pages of the assessment.
3. Projects involving biological, chemical and radiological hazards must be referred to the Departmental Safety Supervisor.
4. Itineraries and contact details for projects involving work overseas must be lodged with the Teaching Office before the work starts.
5. This summary must be completed and all signatures obtained before work is started.
6. A copy of the completed form must be held by the Course Organiser, and retained for two years.

| | |
|---|---|
| Full Name of Student | |
| Course | Public Health (Health Promotion) |
| Project Supervisor | |
| Project Title | To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and wellbeing in patients who have had a stroke. |
| Summary of project aims | To identify the role of occupational therapy in promoting health and well-being in people who have experienced a stroke. It will focus on a stroke unit in a local Borough but results should be relevant to the role of occupational therapy in health promotion, post-stroke. The objectives are to:<br>1. Briefly outline the incidence of strokes in the UK and the cost to the individual, their family and society.<br>2. Outline the philosophy of occupational therapy, its role in the treatment of stroke and its cogence with health promotion.<br>3. Identify key demographic features of the London Borough of Tower Hamlets and describe policies and care pathway for residents requiring treatment for stroke.<br>4. Collect and review literature on effectiveness of health promotion for stroke patients and in particular the contribution of OTs.<br>5. Gather key informant views from professionals within the local Primary Care Trust (PCT) regarding health promotion post-stroke including: opportunities, barriers and evidence of effectiveness.<br>6. Produce recommendations concerning health promotion post stroke. These will primarily be for the local Trust but may also be extended to professional bodies. |
| Where will the project be carried out? | LSHTM, associated libraries and Mile End Hospital, Bancroft Road, Tower Hamlets, London. |
| Will the project involve work overseas? If yes, where? | No |
| Will the project involve significant work away from LSHTM sites? If yes, where? | No |
| Does the project involve work with pathogenic organisms / human blood / radiochemicals? | No |
| **If the Project involves work overseas:** | |
| Will the project be based in an established field station / research institute? If yes, where? | |

| | | |
|---|---|---|
| Is ethical approval required for the project? If yes, has it been granted? | | |
| What supervision arrangements are proposed while away from LSHTM? | | |
| Give the contact details for the off-site supervisor where applicable | | |
| Will the project involve lone / isolated work? If yes, state how you can contacted while working. | | |
| Has appropriate travel insurance been arranged? | | |
| **If the Project involves significant work within the U.K., away from the LSHTM sites in London:** | | |
| Will the project be based in an established college / hospital etc? If yes, where? | Mile End Hospital, London Borough of Tower Hamlets | |
| Is ethical approval required for the project? If yes, has it been granted? | Ethical approval is required and will be applied for in due course | |
| Will the project involve home / personal visits? | No | |
| Will the project involve lone / isolated work? | No | |
| What supervision / contact arrangements are proposed while away from LSHTM? | Contact with supervisor, David Cromwell, as necessary | |
| **If Project Involves work with Pathogenic Organisms, Human Blood or Radiochemicals:** (form to be signed by Departmental Safety Supervisor *) | | |
| Organism/s to be used | | |
| Potential Routes of Infection | | |
| Radiochemical/s to be used | | |
| Laboratories where work with pathogens / radioisotopes will be carried out | | |
| Disinfectants/Disposal | | |
| Health Surveillance required | | |
| **Additional Information:** | | |
| Are there any special needs, disability-related issues or other concerns that may need to be taken into account? | No | |
| Do these need to be considered in planning arrangements? | No | |
| Do these need to considered in relation to the location of the project? | No | |
| Do they impact on supervision arrangements? | No | |
| Do arrangements for access to specialist medical treatment need to be considered? | No | |
| Student Signature | ……<br>I agree to comply with the relevant safety requirements | Date |
| Supervisor Signature | ……<br>I agree that is a reasonable summary of the project | Date |
| M.Sc. Course Organiser Signature | …… | Date |

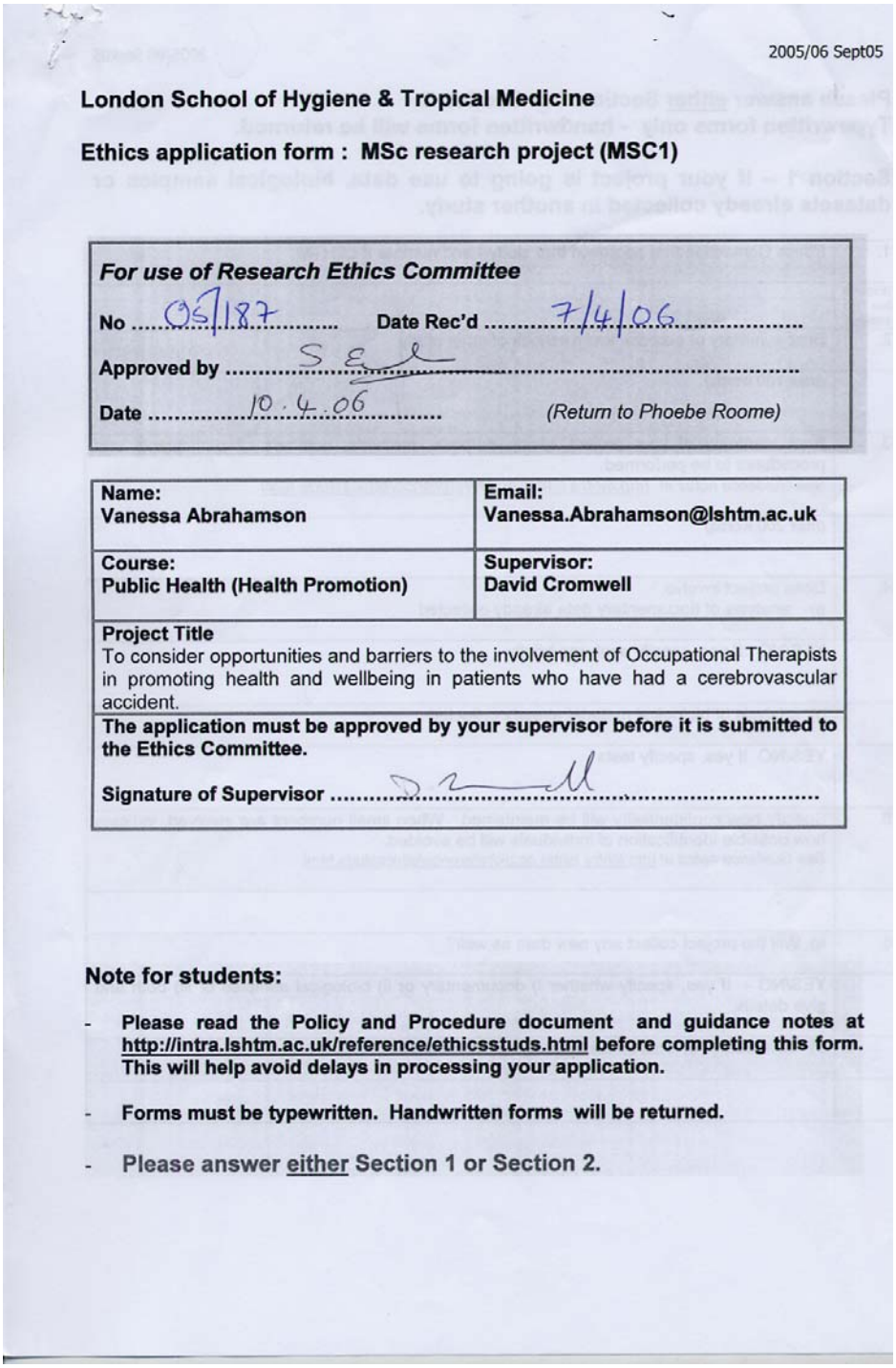
| | | |
|---|---|---|
| | I agree that this project may proceed | |
| Departmental Safety Supervisor<br>(only required if project involves work with pathogens or radiochemicals) | ……..<br>I agree that this project may proceed | Date |

The table below must be completed for all potentially hazardous activities likely to be carried out during the project, especially those identified above.
Please refer to the Guidance Notes and School safety documentation for further information.

| Project Title | To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and wellbeing in patients who have had a stroke. |
|---|---|

| Procedure | Precautions |
|---|---|
| No potentially hazardous activities have been identified. | |

## Appendix I: LSHTM ethical approval



2005/06 Sept05

**London School of Hygiene & Tropical Medicine**

**Ethics application form : MSc research project (MSC1)**

***For use of Research Ethics Committee***

**No** 05/187 **Date Rec'd** 7/4/06

**Approved by** S E

**Date** 10.4.06 *(Return to Phoebe Roome)*

| | |
|---|---|
| **Name:** Vanessa Abrahamson | **Email:** Vanessa.Abrahamson@lshtm.ac.uk |
| **Course:** Public Health (Health Promotion) | **Supervisor:** David Cromwell |
| **Project Title** To consider opportunities and barriers to the involvement of Occupational Therapists in promoting health and wellbeing in patients who have had a cerebrovascular accident. | |
| **The application must be approved by your supervisor before it is submitted to the Ethics Committee.** **Signature of Supervisor** | |

**Note for students:**

- **Please read the Policy and Procedure document and guidance notes at http://intra.lshtm.ac.uk/reference/ethicsstuds.html before completing this form. This will help avoid delays in processing your application.**
- **Forms must be typewritten. Handwritten forms will be returned.**
- **Please answer either Section 1 or Section 2.**

| | |
|---|---|
| 1. | Give an outline of the proposed project. Sufficient detail must be given to allow the Committee to make an informed decision without reference to other documents. |
| (Expand box to answer) | The project aims to investigate the role of occupational therapy in promoting health and well being in patients who have experienced a stroke. It will focus on a stroke unit in a local Borough but results should be relevant to the role of occupational therapy in health promotion, post-stroke. The objectives are to:<br>1. Briefly outline the incidence of strokes in the UK and the cost to the individual, their family and society.<br>2. Outline the philosophy of occupational therapy, its role in the treatment of stroke and its cogence with health promotion.<br>3. Identify key demographic features of the London Borough of Tower Hamlets and describe policies and care pathway for residents requiring treatment for stroke.<br>4. Collect and review literature on effectiveness of health promotion for stroke patients and in particular the contribution of OTs.<br>5. Gather key informant views from professionals within the local Primary Care Trust (PCT) regarding health promotion post-stroke including: opportunities, barriers and evidence of effectiveness.<br>6. Produce recommendations concerning health promotion post stroke. These will primarily be for the local Trust but may also be extended to professional bodies. |
| 2. | Is project a randomised trial? |
| | NO |
| 3. | Will any biological samples be collected and if so specify which |
| | NO |
| 4. | Specify the number (with scientific justification for sample size), age, gender, source and method of recruiting subjects for the study. |
| | Interviews with up to 8 key informants, sourced from a London Borough PCT (purposive sampling). The focus will be on occupational therapists but the views of other health professionals who are part of the inter-disciplinary team and potentially involved in health promotion will also be sought. |

| | |
|---|---|
| 5. | State the likely duration of the project, and where it will be undertaken. |
| | Mid-June to mid-August 2006, at LSHTM. |
| 6. | State the potential hazards, and their likelihood, that research subjects may be exposed to (these may include physical, biological and/or psychological hazards). What precautions are being taken to control and modify these hazards? |
| | Not applicable |
| 7. | State the procedures which may cause discomfort or distress to participants and how these will be managed. |
| | Not applicable |
| 8. | Specify how confidentiality will be maintained. When small numbers are involved, indicate how possible identification of individuals will be avoided. |
| | • Information from interviews will not be attributed to a named professional: a generic term will be used rather than, for example, 'occupational therapist' or 'physiotherapist'.<br>• Each respondent will be given the option of not being quoted.<br>• Taped interviews will be disposed of when all the work has been completed. |
| 9. | State the manner in which consent will be obtained and **supply copies of the information sheet and consent form**.<br>◊ Written consent is normally required. Where not possible, explain why and confirm that a record of those giving verbal consent will be kept.<br>◊ Where appropriate, please state if and how the information and consent form will be translated into local language(s).<br>See Guidance notes at http://intra.lshtm.ac.uk/reference/ethicsstuds.html |
| | Written consent will be obtained, in the presence of a witness and in accordance with LSHTM guidelines. |
| 10. | Local Ethical Approval. Give details of local approval to be obtained (prior to the commencement of fieldwork). |
| | Obtain consent from the local Primary Care Trust. |

## APPENDIX J: Ethics approval, COREC

**East London & The City HA Local Research Ethics Committee 1**
North East London Strategic Health Authority
3rd Floor
Aneurin Bevan House
81 Commercial Road
London
E1 1RD

Telephone: 020 7655 6612
Facsimile: 020 7655 6655

16 June 2006

Miss Vanessa Abrahamson
Full time student
London School of Hygiene & Tropical Medicine
Keppel Street
London
WC1E 7HT

Dear Miss Abrahamson

**Full title of study:** **To evaluate the role, and effectiveness, of Occupational Therapy in health promotion with patients who have experienced a stroke.**
**REC reference number:** **06/Q0603/71**

Further to my recent telephone conversation dated 1st June 2006. These documents have been considered by the Chair, who has advised that the project is not one that is required to be ethically reviewed under the terms of the Governance Arrangements for Research Ethics Committees in the UK.

You provided the following documents for consideration:

| *Document* | *Version* | *Date* |
|---|---|---|
| Application | 1 | 10 May 2006 |
| Investigator CV | 1 | 10 May 2006 |
| Protocol | 1 | 10 May 2006 |
| Covering Letter | 1 | 10 May 2006 |
| Letter from Sponsor | 1 | 02 May 2006 |
| Peer Review | 1 | 23 March 2006 |
| Compensation Arrangements | 1 | 02 May 2006 |
| Participant Information Sheet: Participant Information Sheet 2 | 1 | 02 May 2006 |
| Participant Information Sheet: Participant Information Sheet 1 | 1 | 02 May 2006 |
| Participant Consent Form: Consent Form | 1 | 05 May 2006 |
| Interview request letter | 1 | 05 May 2006 |
| Checklist | 1 | 10 May 2006 |
| Peer Review | 1 | 28 March 2006 |
| CV Dr David Cromwell | 1 | 01 December 2005 |

Although review by a Research Ethics Committee is not required, you should check with the R&D Department for Tower Hamlets PCT whether management approval is required before the project starts.

**06/Q0603/71** **Please quote this number on all correspondence**

Yours sincerely

**Sandra Grote**
**Administrator**

Email: sandra.grote@nelondon.nhs.uk

Copy to:

[Optional: R&D Department for NHS care organisation(s)]

## APPENDIX K: Ethics approval, THPCT

Tower Hamlets NHS
Primary Care Trust

Research and Development Office
2nd Floor, Burdett House
Mile End Hospital
Bancroft Road
London
E1 4DG
Tel: 0208 223 8085
Fax: 0208 223 8084

28.06.06

Miss Vanessa Abrahamson
London School of Hygiene & Tropical Medicine
Keppel Street
London
WC1E 7HT

Dear Miss Abrahamson,

**Full Trust Approval:** ***To Evaluate the Role and Effectiveness of Occupational Therapy in health promotion, as Part of Rehabilitation with Patients Who Have Experienced a Stroke.***

Thank you for forwarding full details of the above study. As Tower Hamlets PCT Lead for R&D I am writing to confirm full approval this research. I note that the East London & The City Local Research Ethics Committee has advised that the project(06/Q0603/71) is not one that is required to be ethically reviewed under the terms of the Governance Arrangements for Research Ethics Committees in the UK. Please note that any amendments to the protocol and/or informed consent procedures will require further approval from this Trust.

I note that London School of Hygiene & Tropical Medicine have confirmed that they will be taking on the role of Sponsor for this study, and have ensured that the appropriate indemnity or suitable financial arrangements are in place for compensation in the event of harm to research participants.

Approval is provided on the basis that you agreed to adhere to the Trust's requirements for Research Governance including:

- As Chief Investigator and/or Principal Investigator for this study you have familiarized yourself with, and accept the responsibilities commensurate with this position, as outlined in the Research Governance Framework (http://www.dh.gov.uk/PolicyAndGuidance/ResearchAndDevelopment/fs/en).
- Compliance with all policies and procedures of the Trust which relate to research, and with all relevant requirements of the Research Governance Framework.

- Co-operating with the Trust R&D Office's regular monitoring and auditing of all approved research projects, including complying with requests for written progress reports.
- Informing the Trust R&D Office *immediately* of any adverse events or complaints, from participants recruited from within this Trust, which occur in relation to this study.
- Co-operating with the Sponsor organisation in managing, monitoring and reporting of the research study.
- Sending a copy of any reports or publications which result from this study to the Trust R&D Office.

Failure to abide by the above requirements may result in the withdrawal of the Trust's approval for this research.

Please note that all researchers who will be interacting with patients or accessing identifiable patient information/data are required to hold an honorary contract with the Trust or the relevant Practice before they start work on this study. Details of the application process for Honorary Contracts with the Trust are available from Karen Jones (0208 223 8085 or Karen.Jones@thpct.nhs.uk).

If you wish to discuss any aspect of this research with our R&D department, please contact Karen Jones in the first instance.

I wish you every success with this study.

Yours sincerely,

**Dr. Keith Meadows**
Associate Director of R&D