

Health, Wellbeing and Local Government Committee

Committee Inquiry into Stroke services in Wales – Written evidence from Dr Mushtaq Wani, Welsh Stroke Alliance

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The following observations and suggestions are based on my own experience as a stroke physician in Wales, Vice Chair of the Welsh Association of Stroke Physicians and Welsh Stroke Alliance

Issues in Stroke Care

Vascular risk factors

Life style - obesity, smoking

Stroke should be seen as a vascular disease with preventable and modifiable risk factors. The aim should be to prevent vascular disease developing in the first place and avoid the end result of vascular disease including stroke.

How to do it?

Primary Prevention

Public Awareness and education starting from schools, work places (amazing to see high smoking rate in the health care sector!)

Help to quit smoking.

Easy and subsidised (possibly free) access to leisure facilities including in work places.

Prevention of stroke after a Transient Ischaemic Attack (TIA)

Early recognition and management of a transient ischaemic attack (TIA) is crucial to avoid a stroke which can lead to catastrophic effects for the patient, family, society and economy.

How to do it?

Rapid Access TIA Service

Health Boards should develop a fast track service with the aim to assess and start treatment immediately. First 7 days after a TIA are critical when the patient is at most from a potentially major stroke (Oxford Vascular Study).¹ Just initiating treatment with relatively inexpensive drugs reduces the risk by about 80% (EXPRESS Study)².

In the ABM Trust we have developed a service which operates as a pathway. This means the management and investigations are initiated by any doctor who sees the patient first, be it a GP, an A&E doctor or a medical doctor in hospital. The patient does not need to wait to be seen in "a clinic". The Pathway has been developed by the members of all profession dealing with TIA/Stroke including primary care health professionals, radiology and vascular surgeons.

Treatment of Acute Stroke

Thrombolysis (Clot busting)

Acute stroke is an emergency. Thrombolysis is very cost effective treatment which improves outcomes by about a third including hospital stay (SITS, SOUTHEND).^{3-5*} This aspect of treatment needs multi-professional support and coordination. Ambulance services, A&E, hospital stroke teams and radiology are the key to its timely administration and success. The treatment is most effective if given within 3 hours of the stroke onset although treatment up to 4.5 hour can also be beneficial.⁶ Therefore prompt recognition, urgent transportation, assessment and brain scanning are vital.

How to do it?

Develop and follow local protocols

Collaboration with multi-profession involvement

The treatment is seen as difficult and not without risks. In practice once the stakeholders have drawn up a workable programme and a protocol it should not be the case as shown by the pilot project in Swansea.⁷ Collaboration with other disciplines will make the delivery so much easier than otherwise thought. For example, cardiologists routinely administer thrombolysis to heart attack patients. We in Swansea have very successfully made use of their existing service and expertise. Any District general hospital should be able to do the same. I believe similar projects are being conducted by the enthusiastic stroke physicians in Royal Glamorgan and UHW, Cardiff.

Most stroke physicians do not embark on this treatment before establishing good rehabilitation and acute care service. In my view any one who has a stroke would want to receive the treatment to minimise or even reverse the damage rather than accept the inevitable devastating effects and then be rehabilitated. Why not treat and limit the damage in the first place?

Telemedicine

Steers Committee report identifies 4 thrombolysis centres in Wales. I along with other stroke physicians believe that the service could be provided as a "Hub and Spoke" with all centres operating 9 am-5 pm and some of the bigger services out-of-hours either directly but more preferably through the use of telemedicine.⁸

Telemedicine is already in use in Wales e.g. dermatology, Burns and Plastics, lung cancer etc. The Imaging needs to be provided as part of "unscheduled" care. A web based Out-of-hours reporting could be provided on All Wales basis. ABM Trust hopes to provide a 24 hour service in the autumn this year.

Acute care

Managing a stroke patient on a well staffed and well trained stroke unit saves lives and improves functional outcomes.⁹ Most people die or deteriorate due to the stroke itself but through avoidable complications.

How to do it?

Each trust need to develop an acute unit preferably on the same site as part of combined acute and rehabilitation unit. Co-locating all stroke patients in a dedicated area does not involve more resources but the numbers of the staff and their training and education is important.

Rehabilitation

The value of rehabilitation by a team of appropriately trained staff is well established and can not be too overemphasised. Programmes like early supported discharge (ESD),^{10,11} and community rehabilitation very cost effective as well as useful in getting patients back into community earlier. ESD pilot scheme in Swansea is already proving successful.

Often discharge planning of stroke patients is delayed (as is also the case generally for non-stroke patients as well), in most cases due purely to slow response of various care agencies involved.

The provision of vocational therapy for young stroke especially is very limited. This area is in need of urgent research and improvement.

How to do it?

Treating all stroke patients on a dedicated ward should not be too difficult as long as the resources and skills are appropriately used. Training and education is the key. WCCIP and the recent AWSSIP^{12,13} projects have demonstrated it again a gain how little changes in practice make a big difference and improvement in patient care (AWISS).

Secondary prevention

Approach to secondary prevention and the programmes designed are more or less similar to TIA or heart attack and should part of a general vascular disease prevention.^{14,15} Generally this straightforward aspect of management should not be difficult but audits always show sloppiness on part of health care professionals.

How to do it?

Education of all those involved is the key. Spending money on training and education is very worthwhile.

Training and education

Any health care programme needs the back bone of research, training and education for it to succeed. Wales is geographically different posing problems in transportation and delivery of care. Welsh population is also different especially as regards vascular risk factors. Our small stroke thrombolysis project has seen a significantly high rate of smoking in Wales as compared to the UK and rest of the Europe (45% vs. 22% vs. 20%)⁷. Research in differences in stroke pathology, social structure and care delivery in Wales's needs to be properly researched and future care developed on a local evidence base.

How to do it?

Stroke Research interest group in collaboration with the OPAN is trying very hard to promote research in stroke in Wales. A recent appointment of a stroke research portfolio development officer has resulted in a very high significant uptake of multicentre research projects in Wales. The post is part funded by the WORD and the Stroke association. However, Wales desperately needs an academic department in stroke Medicine to promote research and innovation in care. The WAG needs to fund academic posts as well as training and educational programmes.

Funding

Although significant improvements can be made just by reorganising the way we deliver stroke services there is no doubt that additional resource are needed. Although funds were made available last year they could hardly be described as adequate for the improvements needed if only to "catch up" with rest of the UK. Whatever little was granted was either delayed (if not totally lost and there is some evidence) in its appropriate and timely usage due to beaurocracy inherent to the NHS HR.

Future Stroke Care

Stroke care in Wales should not just concentrate on "catching up" , highly important though it is, but to look to the future developments and potential new treatments becoming available. We should try establishing at least 2 stroke centres in Wales where thrombolytic treatments can be given even 3 hours after stroke onset making use of imaging techniques like CT angiograms, MR/MRA etc. Such centres would also be able to deliver drugs locally to the blocked artery or even retrieve the clots (already available in some centres).¹⁶ I believe it is possible to deliver such therapies in Wales as well in not too distant future as long as we have the vision, enthusiasm and will to do it.

Conclusions

Stroke care in Wales needs to be improved vastly to save lives as reduce disability.

Prevention of vascular diseases through education and health promotion is of paramount importance.

Much can be achieved just by changing the way we work.

Any funding made available needs to be proportionate to what is required and used appropriately and timely manner.

Future stroke care in Wales should have a strong regional context.

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*Paul Gyler. Southend experience in stroke thrombolysis (kindly provided personally, attached)

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Stroke Register Figures

2007/8

	Number of strokes admitted	Total bed days	Mortality rate	Average Length of stay
Pre project figures 2006	346	9166	23.4%	26.5%
01/09/2007 – 01/09/2008	496	8415	12.9%	16.9%

	Home independent	Home with care	Home with Coll Care	Residential Home	Nursing Home	Other CICC/PKL/RNRU
Pre Project 2006	31.7%	4.9%	11.8%	6.6%	8%	8%
01/09/2007 – 01/09/2008	52.4%	6.6%	4.6%	5.8%	3.4%	9.4%