





North East England South Asia Mental health Alliance (NEESAMA)



INAUGURAL MEETING

Kathmandu, Nepal 3 & 4 November 2018





Introduction

Globally, mental ill health and neurodevelopmental and neurodegenerative disorders carry some of the highest disease of burden of any illnesses, in part because of the devastating impact that they have on individuals, impairing their ability to work and impacting relationships and family structures. In addition, these disorders are associated with significantly increased mortality, not just from suicide but also from an increased risk of physical illness e.g. heart disease.

In Western countries research into, and care of, mental illness lags behind that of physical illness, but it is catching up. Low- and middle-income countries (LMICs) have to deal with similar issues to Western countries but they also have additional factors to contend with such as: increased stigma of mental illness and the concentration of limited resources on physical illnesses, which results in mental health problems often being undetected and/or untreated. This may be particularly the case in populations with high rates of social, emotional and physical deprivation, factors known to increase rates of mental illness.

The North East England South Asia Mental health Alliance (NEESAMA) builds on the success of a meeting of the South Asia Mental Health Project funded by the British Council and facilitated by colleagues at Bangor University, which took place in Kathmandu in April 2018. This event brought together policy makers, researchers and clinicians from across South Asia and researchers from the UK. The report highlighted 4 key priorities, which sit within the World Health Organisation mental health action plan:

- 1. Provide a platform for scientists, researchers and policy makers to discuss different aspects of mental health and share knowledge and expertise
- **2.** Help fill the gap between mental health research, policy and practice
- **3.** Explore possibilities of promoting research and studies in the area of mental health
- **4.** Develop a sustainable network of mental health research, policy and practice within South Asia and with the UK

In order to begin to address these priorities The British Council, Newcastle University and Northumberland Tyne and Wear (NTW) NHS Foundation Trust have been working together to develop NEESAMA.

NEESAMA will focus on three key priority areas:

- 1. Identification of priority research questions focused on mental health, neurodevelopmental and neurodegenerative disorders.
- 2. Identification of mechanisms for the enhancement of skill sets of clinicians working with children & adolescents, working age adults and the elderly (including development of community-based services to cater to the needs of these age groups).
- **3.** Ensuring the sustainability, longevity and impact of NEESAMA through involvement of key policy makers and the identification of a clear and achievable action plan.



The Inaugural meeting: NEESAMA 2018

The inaugural meeting of NEESAMA took place in Kathmandu in November 2018. Thirty-four founder delegates representing six South Asian countries (Bangladesh, India, Iran, Nepal, Pakistan, Sri Lanka) and the UK came together for two days to form NEESAMA.

During the meeting delegates worked collaboratively, through discussions and small group work, to identify specific research questions focusing on the priorities of South Asia. The delegates identified mechanisms to improve services and skills of clinicians in South Asia in both biological and psychosocial treatments for the aforementioned conditions. Underpinning this work was a shared commitment to not only enhance the direct care of patients but also reduce the societal burden of these disorders.







Aims of the NEESAMA Inaugural meeting:

- Identification and prioritisation of key research topics, putative methods and potential funding streams for NEESAMA to take forward
- Identification of important service development needs and related staff training needs that as an alliance, countries can begin to support each other to address
- Develop mechanisms to ensure the sustainability of NEESAMA

This report outlines the main achievements of the inaugural meeting of NEESAMA. It initially summarises the research challenges (central and key) identified by delegates working with children and adolescents, adults and older adults before going on to discuss the concerns and issues associated with these challenges and some potential next steps to begin work together to address these critical, jointly identified research needs. It then reports the training and service development needs of the region, as well as a consideration of some key next steps.

Amongst the delegates there was unequivocal support for and commitment to the sustainability of NEESAMA. Therefore, the report next highlights the steps identified at the inaugural meeting to ensure that NEESAMA continues and thrives.

Finally, the report closes with some personal reflections and impressions from the delegates of the inaugural NEESAMA meeting.



Delegates

Bangladesh

Dr Farzana Islam

Child Development Centre, Apollo Hospitals, Dhaka

Professor Naila Khan

Clinical Neurosciences Center, Bangladesh Protibondhi Foundation (BPF)

Dr M.M.A. Shalahuddin Qusar Biplob

Bangabandhu Sheikh Mujib Medical University

India

Professor Sanjeev Jain

National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru

Dr Vidhu Kumar

Government Medical College, Ernakulam

Professor Rajesh Sagar

All India Institute of Medical Sciences (AIIMS), New Delhi

Professor Shekhar Seshadri

National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru

Dr Eesha Sharma

National Institute of Mental Health and Neurosciences, Bengaluru

Professor Mathew Varghese

National Institute of Mental Health & Neurosciences (NIMHANS), Bengaluru

Iran

Dr Mohammad Nami

Shiraz University of Medical Sciences

Dr Sayyed Ali Samadi

Ulster University and the Medical Sciences Division, Academic Centre for Educational, Cultural and Research (ACECR), ShahidBeheshti University, Tehran

Dr Ebrahim Moghimi Sarani

Shiraz University of Medical Science

Nepal

Dr Arun Kunwar

Kanti Children's Hospital, Kathmandu

Dr Nidesh Sapkota

B P Koirala Institute of Health Sciences, Dharan, Nepal

Dr Rabi Shakya

Patan Academy of Health Sciences, Lalitpur

Dr. Jovan Ilic,

British Council Nepal, Kathmandu

Pakistan

Dr Sabahat Haqqani

Fatima Jinnah Women University

Dr MuhammadShameel Khan

The AGA Khan University Hospital, Karachi

Nishat Riaz MBE

British Council Pakistan

Dr Siham Sikander

Health Services Academy, Islamabad Ministry of National Health Services

Sri Lanka

Dr Udena Attygalle

Teaching Hospital Karapitiya

Professor Varuni de Silva

University of Colombo

Professor Piyanjali de Zoysa

University of Colombo

United Kingdom

Dr Fatemeh Ahmadi

South Asia Science Coordinator & Iran Head of Education, British Council

Dr Sunil Bhopal

Newcastle University

Professor Zofia Chrzanowska-Lightowlers

Newcastle University

Professor Ann le Couteur

Newcastle University

Professor Hamish McAllister-Williams

Newcastle University/Northumberland Tyne and Wear NHS Foundation Trust

Dr Bruce Owen

Northumberland Tyne and Wear NHS Foundation Trust/Newcastle University

Dr Stella Paddick

Newcastle University/Northumberland Tyne and Wear NHS Foundation Trust

Dr Jacqui Rodgers

Newcastle University

Dr Adi Sharma

Newcastle University/Northumberland Tyne and Wear NHS Foundation Trust

Dr Eleanor Smith

Northumberland Tyne and Wear NHS Foundation Trust/Newcastle University

Professor Richard Walker

Newcastle University/Northumbria Healthcare NHS Foundation Trust

Programme

Day 1 Focus on Research

Morning Session

0830 - 0845	Registration and Refreshments
0845 - 1000	Welcome and introductions
1000 - 1100	Identifying mental health research priorities for South Asia (in groups: Child and Adolescent, Adult and Older People)
1100 - 1115	Refreshments
1115 - 1200	Specifying research questions based on priorities (in groups) Feedback to whole group
1230 - 1315	Lunch

Afternoon Session

1315 - 1530	Prioritising research questions (in groups) Feedback to whole group
1530 - 1545	Refreshment break
1545 - 1730	Operationalising priorities (in groups) Feedback to whole group



Day 2 Focus on Service Development and Training & Next Steps

Morning Session

0830 - 0900	Refreshments
0900 - 1100	Identify service development needs and related training needs (in groups) Feedback to whole group
1100 - 1115	Refreshments
1115 - 1200	How can we help each other to meet service development and training needs? Whole group discussion
1230 - 1315	Lunch

Afternoon Session

1315 - 1500	NEESAMA – next steps and action planning Whole group discussion
1500 - 1515	Coffee break
1515 - 1645	NEESAMA – next steps and action planning Whole group discussion
1645 - 1700	Final Remarks



Research in Child and Adolescent Mental Health

Central challenge

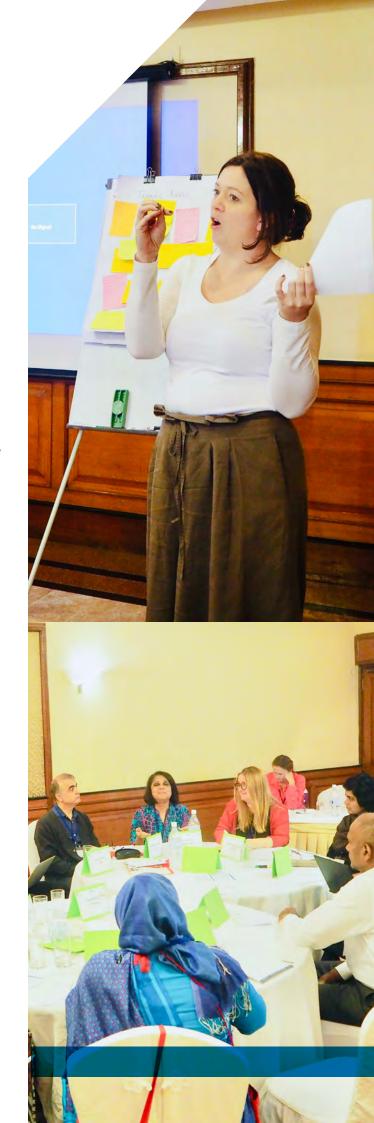
Across LMICs, including those in South Asia, it is estimated that there are a significant number of children and young people experiencing profound adversity, resulting from a range of circumstances, including conflict, environmental disasters, poverty, chronic ill health and separation from caregivers.

What is unclear at the moment is the impact this adversity may have on the mental health and developmental outcomes of these children. Whilst some excellent small-scale research has been undertaken in the region, funding is limited and no large, longitudinal studies have been possible. This makes the determination of the scale and impact of adversity across different settings/circumstances difficult, impacts on the identification of outcomes which are important to assess, and the measurement of these outcomes and how best to support children experiencing adversity.

Key challenges

Three key challenges were identified

- a. In order to identify who, the vulnerable children are in the region there is a need to first know much more about the 'potential routes to vulnerability'. That is, genetic, experiential (social, political, environmental, etc) or a combination of many.
- b. In order to understand the impact of adversity on mental health and other developmental outcomes there is a need for reliable and valid identification and outcomes protocols and measures that can be applied across settings within a country and across the region, so that comparisons can be drawn for purposes of prevention, service development and sharing of expertise and resources. Currently there are none.
- c. In order to mitigate against the impact of adversity there needs to be a better understanding of what works for whom in terms of support and intervention of the affected persons, their families, immediate and wider communities and environments.





Research in Adult Mental Health

Central challenge

Similar to the issues identified in the section on Child and Adolescent Mental Health there are a significant number of adults in South Asia who experience mental health problems which are associated with a range of psychosocial factors, such as the role of the family, levels of psychoeducation. Across the lifespan and within this age range, there is a need to improve outcomes, develop, evaluate and implement pathways of care, and reduce morbidity and mortality (particularly suicide) associated with mental health disorders. There have been excellent small-scale projects that have been undertaken across the world and in some parts of the South Asia region. However, a significant gap is the development of a well-defined research programme across the region that would help to clarify the role played by the factors listed above and identify the most efficacious, scalable and sustainable interventions to address these issues.

Key challenges

Three key challenges were identified

- **a.** Risk factors and aetiology: this work stream would focus on identifying the risk factors (including biological, psychological, social/cultural) that play a role in the development of mental health disorders.
- **b.** Early detection: this work stream would focus not only on the early detection of mental health disorders in the community but also associated difficulties such as metabolic side-effects.
- **c.** Availability of interventions: this work would focus on development of interventions and then the assessment, scalability of and implementation of these approaches beyond the research.





Concerns/issues

Often there are issues with regards to low recruitment with a subsequent impact on statistical power and effect sizes. However, by working collaboratively across the region it is hoped that these three broad areas can be addressed. Furthermore, researchers need to work with policy makers and other relevant teams to ensure scalability and sustainability.

Next steps

Develop and carry out systematic reviews to identify the appropriate screening instruments to estimate the epidemiology of serious mental health disorders (including suicide) and study putative biopsychosocial factors in the development of mental health disorders to inform development of culturally and ecologically valid interventions.

Research in Mental Health of Older People

Central challenge

The proportion of older people is increasing in LMICs, including those of South Asia, but there is a lack of basic knowledge about the burden of disease in older people, the take up of primary and secondary prevention and long term, affordable, sustainable interventions, both drug and non-drug.

Key challenges

- a. Although there are pockets of excellence there is a general lack of experienced researchers in this field and limited training opportunities.
- **b.** Funding for research in general in these countries is limited, particularly in older people as this has previously not been perceived to be a priority.
- **c.** Also, there is a variability in both the research workforce, and research funding, between the countries.





Training and service development needs

Central challenge

The health workforce for care of patients across the lifespan with mental health, neurodevelopmental and neurodegenerative disorders including doctors, nurses and allied health professionals (AHPs) is limited with few training programmes and opportunities.

Key challenges

As well as a limited health workforce there are limited numbers of trainers and training facilities. There is a general lack of AHPs, particularly psychologists, occupational therapists and speech and language therapists and in many places multidisciplinary team working is poorly developed.



Concerns/issues

Services are not well adapted to provide care for people with multi-morbidity and long-term conditions. There is a lack of specialists in the care of children, young people and the elderly and lack of training at both undergraduate and postgraduate levels.

Next steps

To determine what relevant training is available in the countries represented by NEESAMA and identify where there are gaps.

Specifically:

- To explore whether the Council of the British Association for Psychopharmacology would support the provision of online Continuing Professional Development (CPD) training opportunities at a discounted cost in NEESAMA countries.
- To explore the possibility of developing a one-week geriatric medicine training course to be run at different NEESAMA sites with a "Training the Trainers" component and for individuals interested in further training (e.g. geriatrics or old age psychiatry) to look at accessing the Medical Training Initiative (MTI) scheme in the UK for 2 years of specialist training.
- To incorporate a full day of CPD in to future NEESAMA meetings
- To identify early career researchers in each country to become members of NEESAMA to address the research training gap.

The future of NEESAMA

All delegates at the NEESAMA inaugural event expressed a clear commitment to the sustainability and longevity of NEESAMA. In order to achieve this a number of steps were identified.

Steering Committee

In order to enable NEESAMA to continue beyond the inaugural meeting and plan collaboratively for future meetings and joint initiatives a steering group has been established with each country represented as detailed below.

Sri Lanka: Piyanjali de Zoysa

India: Shekhar Seshadri

Pakistan: Sabahat Haggani

Nepal: Rabi Shakya

Iran: Mohamad Nami

Bangladesh: Naila Khan

UK: Adi Sharma/Jacqui Rodgers

Memoranda of Understanding

It was agreed that delegates would work together to establish Memoranda of Understanding (MoU) between the organisations represented by the NEESAMA members. These MoU will provide NEESAMA with a sense of identity and coherence, facilitate joint working across institutions and enable the alliance to continue to develop over time.

Ethics and Governance issues

Obtaining favourable ethical opinions and appropriate research sponsorship will, of course, be critical for work undertaken collaboratively by members of NEESAMA. Information was therefore gathered information from each NEESAMA member country to determine what the requirements are across the region. These are listed below by country.



Iran

Name(s) of institution:

Shiraz University of Medical Sciences

Name of ethics review body:

Ethical Review Board-Shiraz University of Medical Sciences, SUMS

Who provides sponsorship (indemnity):

Shiraz University of Medical Sciences

Mechanism for grant awards from UK (in Pound sterling) to be transferred to the institution?

On-Site Cash Settlement. No wire transfer is possible to Iran due to banking limitations

India

Name(s) of institution:

National Institute of Mental Health and Neurosciences (Institute of National Importance), Bangalore

Name of ethics review body:

NIMHANS Institutional Ethics Committee (Behavioural Sciences Division)

Who provides sponsorship (indemnity):

The National Ethical Guidelines for Biomedical and Health Research Involving Human Participants (2017) by the Indian Council of Medical Research are the key guidelines for compensation for research-related harm (https://www.iitm.ac.in/ downloads/ICMR Ethical Guidelines 2017.pdf). Research participants or their dependants (in case of death of participant) are entitled to financial compensation. In applications for research grants to funding agencies – national or international, government or non-government agencies – the researcher should keep a budgetary provision for insurance coverage and/or compensation depending upon the type of research, anticipated risks and proposed number of participants. In investigator-initiated research/student research, the investigator/institution where the research is conducted becomes the sponsor.

Any other relevant information:

All collaborative projects at government medical institutions (such as NIMHANS) that include human participants in any form fall under the purview of the Ministry of Health and Family Welfare. Proposals have to be submitted to the Indian Council of Medical Research for approval by Government of India through Health Ministry's Screening Committee (HMSC). ICMR reviews the project for scientific and technical purposes and after clarifications/modifications, if any, puts up the project for Health Ministry Screening Committee (HMSC) review. HMSC is the committee that provides final approval for foreign-funded and/ or collaborative project submitted by Indian collaborator. The sequence of approvals is:

- Departmental committee (e.g. Child & Adolescent Psychiatry)
- Board of Studies, NIMHANS
- Institutional Ethics Committee (Behavioural Sciences Division), NIMHANS
- Academic Council, NIMHANS
- Governing Body, NIMHANS
- Ministry of Health, Government of India (ICMR-HMSC)

Mechanism for grant awards from UK (in Pound sterling) to be transferred to the institution:

A letter along with a copy of all the aforementioned approvals has to be submitted to the Deputy Financial and Administrative Officer, NIMHANS (DFAO), who then authorizes transfer of foreign funds into the account governed by the Foreign Contribution Regulation Act, 2010 (FCRA).

Bangladesh

Name(s) of institution:

Clinical Neurosciences Centre, Bangladesh Protibondhi Foundation (BPF)

Note: BPF is a non-government non-profit organization which works towards the best interests of vulnerable children, especially those with special needs, but also others, as all their projects, schools, outreach programs, research and development projects are 'inclusive'.

Name of ethics review body:

Bangladesh Medical Research Council (BMRC)

https://www.bmrcbd.org/

Note: Ethical approval by BMRC takes time as they only convene a few times a year. BPF will try to expedite the matter, if urgent.

Who provides sponsorship (indemnity): The NGO Affairs Bureau, Prime Minister's Office, Government of Bangladesh.

Any other relevant information:

An application has to be made by BPF and the funding body to the Bureau along with the (1) Project Proposal (2) Budget (3) Letter of Intent, where the exact amount to be transferred has to be mentioned. If the project involves a one-time work it takes around a month for all formalities to be completed and an Approval Letter to be obtained.

Mechanism for grants awards from UK (in Pounds sterling) to be transferred to your institution:

The funds will be transferred directly to the Foreign Account of the BPF. The bank will only release the funds after they have the NGO Affairs Bureau's Approval Letter in hand. This has not been a problem so far in the last few decades.

Note: All international research and project funds have been obtained through this mechanism. Time factor should be kept in mind especially for funds transfer. We often get the ethical approval late, which may matter for publication etc. Date of application to BMRC should be enough to start the project, which should pre-date the start of the work.

Pakistan

Name(s) of institution (if institutional approvals differ from a national approval):

- 1. National Bioethics Committee
- 2. Fatima Jinnah Women University Research Ethics Committee
- 3. The AGA Khan University

Name of ethics review body:

- 1. National Bioethics Committee
- 2. Fatima Jinnah Women University Research Ethics Committee
- 3. Ethics Review Committee (ERC), Aga Khan University (AKU)

Who provides sponsorship (indemnity):

For Fatima Jinnah Women University the host Institute usually provides this. However, it is dependent upon the allocation of the budget percentage prior to project commencement. This is dealt through developing SOPs at the beginning.

Any other relevant information for your country approvals:

The National Bioethics Committee charges a fee of 50,000/- PKR (274 GBP converted @ 182.4 PKR= 1 GBP). Ethics review committee AKU ad Fatima Jinnah Women University Ethic's committee do not charge any fee so far.

Approval can either be obtained from National Bioethics Committee or from an institutional committee. However, National Bioethics committee requires institutional ethics committees' approval as a pre-requisite, National Bioethics Committee provides approval for a study to a maximum period of one (1) year after which a re-approval is required (free of cost). This is standard for any study submitted irrespective of its duration whether one (1), five (5) or more years.

What is the mechanism for grant awards from UK (in Pound sterling) to be transferred to your institution?

- Fatima Jinnah Women University: A separate
 account is opened and maintained for such
 a fund. This account is maintained the
 University's accounts office. The audit of the
 account is required to be done by the accounts
 office and the University's resident auditor.
- 2. Aga Khan University: The office of sponsored research at Aga Khan University provides both pre-award and post-award support to principal investigator, project directors and departmental chairs ensuring all ethical, financial and legal compliance procedures are being followed. Office of sponsored research has worked with Internal audit department to develop a close out procedure for extra-mural grants.

- ERC/ Sri Lanka Medical Association
- ERC/ Faculty of Medical Sciences
 Sri Jayawardenepura
- ERC/ South Asian Institute of Technology and Medicine
- ERC, Faculty of Graduate Studies, University of Colombo
- ERC, Postgraduate Institute of Medicine, University of Colombo
- ERC/ Health Informatics Society of Sri Lanka
- ERC/ Faculty of Medicine Ruhuna, Karapitiya, Galle.
- ERC/ Gampaha Wickramarachchi Ayurveda Institute
- ERC/ Faculty of Dental Sciences Peradeniya
- ERC/ National Institute of Health Sciences
- ERC/ FM Eastern University

Sri Lanka

Name(s) of institution (if institutional approvals differ from a national approval):

If a memorandum of understanding is to be signed between any state university and a foreign entity institutional and government approval has to be obtained.

Name of ethics review body:

Several ethics review bodies in Sri Lanka.

- ERC/ College of Paediatricians
- ERC/ Faculty of Medicine Colombo
- ERC/ Institute of Indigenous Medicine
- ERC/ Faculty of Medicine Jaffna
- ERC/ Faculty of Medicine Kotelawala Defence University
- ERC/ Faculty of Medicine Kelaniya
- ERC/ Provincial General Hospital Kurunegala
- ERC/ Medical Research Institute
- ERC/ National Institute of Mental Health
- ERC/ Faculty of Medicine Peradeniya
- ERC/ Faculty of Medicine and Allied Sciences – Rajarata
- ERC/ Faculty of Applied Sciences Rajarata

Early Career Researchers

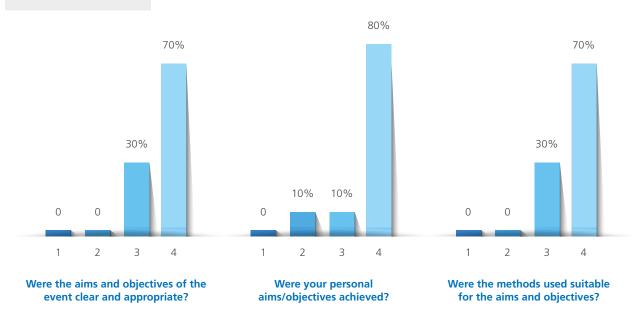
In order to ensure that NEESAMA continues to grow and thrive beyond participation of the current representatives all members will identify an appropriate early career researcher in their country to be invited to become members. Not only will this support the long-term future of NEESAMA but it is hoped it will facilitate peer to peer support and provide a training community for future NEESAMA training events.



Inaugural meeting feedback

Subsequent to the meeting all delegates were invited to complete and online survey to provide feedback out their experiences of attending NEESAMA 2018. The results of this survey are summarised on the next few pages. As can be seen the feedback is very supporting and encouraging with some helpful suggestions to take forward for future meetings.

- 1 least positive
- 2 somewhat positive
- **3** positive
- 4 very positive





Was there anything else we should have also covered?

'It was really good.'

'The programme was tight given limited time we had together as a group and so think it would have been tricky to cover more. I can't think of anything I would have removed from programme to make time for other things."

'1. Logistic issues of operationalising the research priorities identified could have been added to the program. 2. The second day program had generally been non-specific, and it could have been more structured. 3. Substance use had largely been neglected from research objectives.'

'Include CPD next time.'

'For a first meeting of this nature, I think the content was well covered, as the breadth of coverage was more important at this stage. In future meetings, I hope we will go into more details of implementation and field level discussions.'

'A brief opportunity to look at the mental health service and how it is utilised by people in the host country.'

As a delegate from your country please give us details of anything unexpected you got out of attending the meeting.

'I came across "Key measurable factors contributing/ related to Mental Health" during group discussion in adult mental health.'

'I was really impressed with the discussion methodology used for the meeting.'

'I thought that mix of both young and experienced professionals invited for the meeting was refreshing.'

'I was struck by commonality of the challenges individuals providing mental health care face, irrespective of the health care system in which they work.'

I was very interested to find out that multidisciplinary working, e.g. with therapists, is in it's infancy in many parts of South Asia.'

Please add a quote on your personal experience of the event.

'Bringing together the mental health research initiatives happening in South East Asian Countries under one umbrella and sharing of the experiences between them seems to be an important outcome of the program.'

'It was heartening to see how country representatives from the region are eager to bond and work together in the area of mental health.'

'The meeting not only gave us an opportunity to meet and share ideas, but also to be influenced by those in the UK and in other parts of South Asia to look at possibilities that arise when working together.'

'I felt that a great deal of progress was made during the meeting and the collaborative and collegial atmosphere was wonderful.'

'The seemingly impossibly ambitious aims set out at the beginning of the meeting were all achieved by the end of our two days together. Whilst we were all worked hard it was a professionally nourishing experience.'

'Great meeting that galvanised all delegates from South Asia and UK to identify areas of mutual interest and work together to address them!'

'It was informative and thought provoking.'

NEESAMA 2019: Aims and Objectives

There was a strong commitment from delegates to plan for a future meeting of NEESAMA and plans for NEESAMA 2019 are currently underway. NEESAMA hopes to host the event in Bangladesh in October 2019 and expand on NEESAMA 2018 and respond to NEESAMA members' feedback through the introduction of a one-day CPD event covering training needs identified by the NEESAMA community.

NEESAMA 2019 will have the following objectives:

- To provide an opportunity for members and early career researchers to access CPD in the following areas
 - Child and adolescent mental health
 - Adult mental health
 - Older adult mental health.
- To consolidate and develop concrete plans in relation to the key research topics identified during NEESAMA 2018, including methods and funding streams
- To further develop plans identified during NEESAMA 2018 in relation to service development needs and related staff training needs across the region
- To enable networking by members of the **NEESAMA** community
- To provide an opportunity for dissemination of pilot work undertaken by NEESAMA partners
- To host a face to face meeting of the steering committee
- To further consolidate mechanisms to ensure the sustainability of NEESAMA

























North East England South Asia Mental Health Alliance (NEESAMA)