## Appendix 4a: Summary of intervention studies: key characteristics

| Intervention category       | Title                                                                 | Disability or health condition | Country     | Target group                      | Type of stigma                                                                 | Study design                                      | Sample Size (N who received intervention and had its impact assessed) |
|----------------------------|----------------------------------------------------------------------|--------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------|
| **Education and training** | Attitudes toward mental illness and changes associated with a brief educational intervention for medical and nursing students in Nigeria (Iheanacho, 2014) | Mental illness                  | Nigeria     | Medical and nursing students      | Social stigma                                                                  | Before and after study (no controls)                    | 83                                                                  |
|                            | Stigma reduction training improves healthcare provider attitudes toward, and experiences of, young, marginalized people in Bangladesh (Geibel, 2017) | HIV-AIDS                        | Bangladesh  | Health-care providers and patients with HIV-AIDS | Range of measures used - type of stigma being considered not discussed explicitly. | Before and after study (no controls)                    | 300 providers; clients = 266 and 371 at first and second data collection points |
| Study Title                                                                 | Region          | Country       | Study Population                        | Design                  | Data Collection           |
|---------------------------------------------------------------------------|-----------------|---------------|-----------------------------------------|-------------------------|--------------------------|
| Effectiveness of a Peer-Led HIV Prevention Intervention in Secondary Schools in Rwanda: Results from A Non-Randomized Controlled Trial (Michielsen, 2012) | HIV/AIDS        | Rwanda        | Secondary school children (Years 2 and 5) | Non-randomized control trial | 1400 completed all stages of data collection (not specified within this how many in control and treatment groups - but likely around half) |
| Impacts of a peer-group intervention on HIV-related knowledge, attitudes, and personal behaviours for urban hospital workers in Malawi (Kaponda, 2014) | HIV/AIDS        | Malawi (urban) | Hospital workers (clinical and non-clinical) | None stated               | Before and after study (no controls) | Unmatched sample: 366 at baseline; 561 post-intervention. |
| Church leaders confront HIV/AIDS and stigma: a case study from Tanzania (Hartwig, 2006) | HIV/AIDS        | Tanzania      | Church leaders - including pastors, evangelists, heads of women’s groups and Bible study groups. | Not stated               | Qualitative              | 15 training participants |
| Study Title                                                                 | Disorder(s) | Country (Region) | Study Focus/Methodology                                                                 | Study Measures                                  | Study Design          | Number of Study Participants |
|----------------------------------------------------------------------------|-------------|------------------|--------------------------------------------------------------------------------------|------------------------------------------------|-----------------------|-----------------------------|
| Ethiopian community health workers’ beliefs and attitudes towards children with autism: Impact of a brief training intervention (Tilahun, 2019) | Autism      | Ethiopia (rural) | Community health workers                                                              | Study measures attitudes and social distance - not related to specific stigma type.               | Cross sectional survey | Recipients of HEAT = 104; recipients of HEAT+ = 97. |
| Effect of health education on trainee teachers' knowledge, attitudes, and first aid management of epilepsy: An interventional study. (Eze, 2015) | Epilepsy    | Nigeria (Lagos state) | Trainee teachers                                                                    | Not stated                                      | Before and after study (no controls) | 226 pre-intervention; 216 post-intervention |
| Changing Cultural Perception on Disability through Empowerment of Families and Local Leaders (Bauer, 2019) | Disability (in general) | Kenya (Kilifi county) | Pastors, traditional healers, local leaders, parents and caregivers                  | Not stated - although there is a general focus on superstitious beliefs                          | Before and after study (no controls) | 603 |
| Topic                                      | Description                                                                 | Disease | Setting | Participants               | Study Design | Before and after study | Sample Size |
|-------------------------------------------|-----------------------------------------------------------------------------|---------|---------|-----------------------------|--------------|------------------------|-------------|
| **Education with social contact**         | Evaluation of a Health Setting-Based Stigma Intervention in Five African Countries (Chirwa, 2009) | HIV-AIDS| Lesotho, Malawi, South Africa, Swaziland, and Tanzania | Nurses and people living with HIV-AIDS | Not stated | Before and after study (no controls) | 76 (40 nurses, 36 PLHA) |
| **Economic empowerment**                  | Impact of socio-economic rehabilitation on leprosy stigma in Northern Nigeria: Findings of a retrospective study (Ebenso, 2007) | Leprosy | Nigeria (Northern) | People with leprosy | Participation (Participation scale used as a proxy measure for stigma) | Mixed methods | 20 |
| **Communication, persuasion and modelling** | Impact of an educational comic book on epilepsy-related knowledge, awareness, and attitudes among school children in Ethiopia (Tekle-Haimanot, 2016) | Epilepsy | Ethiopia (rural and urban) | School children | None stated | Before and after study (no controls) | 226 |
|                                           | Effects of A Mass Media Intervention on HIV-Related Stigma: 'Radio Diaries' Program in Malawi (Creel, 2011) | HIV-AIDS | Malawi | Adults aged 16+ | Study examined fear of casual contact, shame, blame/judgement | Cross sectional survey | Two treatments examined: 100 received Radio Diaries; |
### The Era of Digital Interventions: Combating Intellectual Disability Stigma in Africa. UCL blog. (Odukoya, 2017)

| Intellectual disability | Kenya and Nigeria | Population with online access | Survey measured three aspects - cognition (knowledge about causes, rights and capabilities), affect (emotional responses) and behavioural intentions (willingness to interact in everyday life). | Case control study | 1,000+ | 100 received Radio Diaries plus discussion. |
| Category | Study Title                                                                 | Setting | Population                                                                 | Study Design | Data Collection Note                                                                 |
|----------|----------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|
|         | Combating intellectual Disability Stigma in Africa (Odukoya, 2017b)        | Nigeria | Nigeria citizens aged 18+ years                                            | Randomized Control Trial | 198 completed all stages of data collection (not stated what number in control and treatment groups) |
|         | Addressing stigma and discrimination towards mental illness: a community-based intervention programme from India (John, 2015) | India   | Schizophrenia Not stated - undertaken with one specific family.       | Case study   | Data collected from one individual.                                                   |
|         | Piloting alternative models of care                                        |         |                                                                           |              |                                                                                       |
|         | Integration of HIV care with primary health care services: effect on patient satisfaction and stigma in rural Kenya (Odeny, 2013) | Kenya (rural) | HIV/AIDS Patients with HIV-AIDS | Perceived stigma | Before and after study (no controls) Varied between 3 stages of data collection (unmatched samples): 58; 104; 133. |
|         | Effects of home-based Voluntary Counselling and Testing on HIV-related stigma: Findings from a cluster-randomized trial in Zambia (Jürgensen, 2013) | Zambia (rural community) | HIV/AIDS Patients with confirmed or suspected HIV-AIDS | Individual stigma | Randomized control trial 565 participated in pre- and post-data collection |
| Study Description                                                                 | Condition            | Country   | Participants Description                                                      | Study Design                      | Sample Size |
|----------------------------------------------------------------------------------|----------------------|-----------|--------------------------------------------------------------------------------|-----------------------------------|-------------|
| Effectiveness of a community-based intervention for people with schizophrenia and their caregivers in India (COPSI): a randomised controlled trial (Chatterjee, UNKNOWN) | Schizophrenia        | India     | Patients with schizophrenia                                                   | Range of measures taken from existing instruments, measuring different aspects |             |
| A pilot study of early intervention for families with children with or at risk of an intellectual disability in Northern Malawi (Kelly, 2012) | Intellectual disability | Malawi (north) | Families of children at risk of intellectual disabilities (under 6 years old) | Stigma and discrimination not explicitly targeted. Emerged in response to open-ended questions included in questionnaires. | Mixed methods |
|                                                                                  |                      |           |                                                                                  |                                   | Parents (10), portage staff (3), trained Community Health Visitors (4) |
## Appendix 4b: Summary of intervention studies: design details

| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on)                                                                 | Intervention types                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Education and training| Attitudes toward mental illness and changes associated with a brief educational intervention for medical and nursing students in Nigeria (Iheanacho, 2014) | Self-completion questionnaire Community Attitudes to Mental Illness (CAMI) questionnaire | None - data collected immediately after training.            | Positive                               | High         | Based on the WHO Mental Health Gap Action Program Intervention Guide                                                        | Education - Understanding of mental illness, principles and diagnoses in psychiatry Training and persuasion - role plays on skills for engaging with people with mental illness and persuasive activities to help them reflect on previous interactions with mental illness |
| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types                                                                 |
|-----------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------|-------------|----------------------------------------------------------------|----------------------------------------------------------------------------------|
|                       | **Stigma reduction training improves healthcare provider attitudes toward, and experiences of, young, marginalized people in Bangladesh (Geibel, 2017)** | Repeated self-administered questionnaires                                              | For providers, data collected 6 months after first intervention and 6 months after second intervention (which was one year after first intervention). For clients, data collected immediately before and after second intervention. | Positive                                             | Medium       | Intervention took place within the context of 'Link up' programme (undertaken in 5 countries). | **Education** - youth focused SRHR knowledge and understanding  
**Training** - interactive training on stigma and gender to increase self-awareness and skills in language, barriers for young people etc  
**Persuasion** - some element of persuasion within the training to engage an emotional response |
| Intervention category | Title                                                                 | Method of assessment            | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types                                                                 |
|-----------------------|-----------------------------------------------------------------------|---------------------------------|------------------------------------------------------------|---------------------------------------|--------------|----------------------------------------------------------------|----------------------------------------------------------------------------------|
|                       | Effectiveness of A Peer-Led HIV Prevention Intervention in Secondary Schools in Rwanda: Results from A Non-Randomized Controlled Trial (Michielsen, 2012) | Self-complete questionnaires    | 6- and 12-months post intervention                        | Positive                              | High         | The intervention was based on an integrated theoretical framework that included aspects of the Theory of Reasoned Action, the Social Learning Theory, the Diffusion of Innovations Theory, and the Health Belief Model. | **Education** - knowledge on HIV, STDs, family planning etc **Training** - skills giving in being a peer educator and interactive teaching and persuasive methods (drama, songs, counselling etc) |
|                       | Impacts of a peer-group intervention on HIV-related knowledge, attitudes, and personal | Self-administered questionnaires | 12 months                                                 | Positive                              | High         | None stated                                                        | **Education** - some basic knowledge **Training** - skills building, participatory learning and rehearsal, with corrective feedback, of health care workers to be HIV prevention |
| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/ negative/ null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types                                                                 |
|-----------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------|--------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------|
|                       | behaviours for urban hospital workers in Malawi (Kaponda, 2014)      | Modelling - a demonstration with corrective feedback by peer trainers.                | N/A                                                        | N/A                                     | None stated  | None stated                                                      | peer leaders (10 months)                                                        |
|                       |                                                                       | Enablement - space provided for peer groups, discussion and ongoing guidance by trainers | N/A                                                        | N/A                                     | High         | None stated                                                      |                                                                                  |
|                       | Church leaders confront HIV/AIDS and stigma: a case study from Tanzania (Hartwig, 2006) | Evaluation workshop involving a combination of discussions / focus groups | 3-5 months | N/A | High | None stated | Education - giving knowledge on HIV, reproductive health and gender (2 days) |
|                       |                                                                       | Training - using interactive activities to give skills; conduct root cause analysis on HIV, exploring stigma and exploring tools | N/A                                                        | N/A                                     | High         | None stated                                                      | Training - using interactive activities to give skills; conduct root cause analysis on HIV, exploring stigma and exploring tools |
|                       |                                                                       | Incentivisation - using religious script and 'being a good Christian' as an incentive to influence behaviours | N/A                                                        | N/A                                     | High         | None stated                                                      | Incentivisation - using religious script and 'being a good Christian' as an incentive to influence behaviours |
| Intervention category | Title | Method of assessment | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|-------|----------------------|-------------------------------------------------------------|---------------------------------------|-------------|---------------------------------------------------------------|-------------------|
| Ethiopian community health workers’ beliefs and attitudes towards children with autism: Impact of a brief training intervention (Tilahun, 2019) | Vignette-based questionnaire assessing beliefs and social distance, administered using face-to-face interviewing. | 16 months for HEAT; 4 months for HEAT+. | Positive | Medium | Part of HEAT group of interventions. | **Education** - mental health modules (HEAT) over 2 weeks. **Training** - pocket guide on detection, first aid and support to affected families. Skills in integration of children and how to conduct community/school awareness. **Modelling** - videos demonstrating skills, counselling and problem solving. |
| Effect of health education on trainee teachers’ knowledge, attitudes, and first aid management of epilepsy: An interventional | Self-administered questionnaires | Post-intervention data collected 12 weeks after baseline data. | Positive | Medium | None stated | **Education** - epilepsy lecture (1.5 hours) and post-lecture discussion |
| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types                                                                 |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|-------------|---------------------------------------------------------------|----------------------------------------------------------------------------------|
| Study (Eze, 2015)     | Changing Cultural Perception on Disability through Empowerment of Families and Local Leaders (Bauer, 2019) | No details provided - although appears to be a quantitative questionnaire            | Not stated                                                  | Positive                               | High        | Not stated                                                    | **Education** - knowledge on definitions, causes and rights. **Training** - building skills on their actions, referrals, HBC, funding sources, advocating, sign language. **Incentivisation and persuasion** - using religious script from the bible to incentivise change and look at empathy/emotions. **Enablement** - set up of parent support groups to allow new space for discussion and support. **Fiscal** - discussion on funding decisions for children in education, health and legislation. |
| Intervention category | Title                                                                 | Method of assessment                      | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types                       |
|-----------------------|----------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------|--------------------------------------|-------------|----------------------------------------------------------------|------------------------------------------|
| **Education with social contact** | **Evaluation of a Health Setting-Based Stigma Intervention in Five African Countries (Chirwa, 2009)** | **Two self-administered stigma questionnaires** | One month after intervention completion                        | Positive (PLHA); null (nurses). | Medium | None stated                                                   | **Education**: sharing information on impact of stigma (2 day) **Training**: design, implement and evaluate a project to reduce stigma in their health care setting. **Modelling**: example of people to aspire to or imitate through the self-designed project and direct engagement with affected group |
| Economic empowerment | Impact of socio-economic rehabilitation on leprosy stigma in Northern Nigeria: Findings of a retrospective study (Ebenso, 2007) | Retrospective questionnaire survey (Participation scale) and semi-structured interviews | Intervention 2004-2005; data collection Sept 2006 (so at least 8 months) | Positive | High | Not stated                                                   | Socio-economic rehabilitation (SER). **Service delivery**: community boreholes, electricity, markets and schools **Training**: vocational training and scholarships for education |
| Intervention category | Title                                                                 | Method of assessment            | Length of time between intervention and assessment of impact | Effectiveness (positive/ negative/ null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|----------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------|-----------------------------------------|-------------|----------------------------------------------------------------|-------------------|
| Communication, persuasion and modelling | Impact of an educational comic book on epilepsy-related knowledge, awareness, and attitudes among school children in Ethiopia (Tekle-Haimanot, 2016) | Structured self-complete questionnaire | None - assessment immediate | Positive | High | None stated | Communication: development of a visual communication tool to be used with students. Persuasive and modelling: Motivating comic for students - highly visual. Emotional connections with characters and impactful messages through storytelling and prosocial messaging. Education: knowledge on the causes of epilepsy, treatment, first aid etc. Training: give skills to students to appreciate stigma and exclusion and act to fight myths/misconceptions |
|                       | Effects of A Mass Media Intervention on | Face-to-face quantitative interviews | Data collected immediately | Mixed (some positive, | Medium | Not stated | Communication/marketing - use of a social marketing approach to develop radio |
| Intervention category | Title                                                                 | Method of assessment             | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|----------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|----------------------------------------|--------------|----------------------------------------------------------------|-------------------|
| HIV-Related Stigma: 'Radio Diaries' Program in Malawi (Creel, 2011) | post intervention.                                                   | some negative)                   |                                             |                                         |              | Modelling and persuasive: the diaries were from a positive example of a person with HIV. Enablement: space for public discussions through call in shows and expert panels. Skills and education: how to navigate interpersonal relationships, coming to terms with their condition. |                    |
| The Era of Digital Interventions: Combating intellectual Disability Stigma | Online attitudinal questionnaire repeated at three points in time.     | Data collected immediately post-intervention and at one | Positive | High | Not stated | Communication/marketing - two 6-minute films in Nigeria and Kenya. Modelling and persuasive - indirect contact through first-hand accounts by persons with |                  |
| Intervention category | Title                                                                 | Method of assessment                                      | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types
|-----------------------|-----------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------|--------------|----------------------------------------------------------------|--------------------------------------------------|
|                       | in Africa. UCL blog. (Odukoya, 2017)                                 | month follow up.                                          |                                                             |                                       |              |                                                                  | intellectual disability. Use of emotions to describe their capabilities, humanity, sense of humour and contributions to society. **Education**: facts about intellectual disability |
|                       | Combating Intellectual Disability Stigma in Africa (Odukoya, 2017b)  | Immediately post-intervention and at one-month follow-up   |                                                             | Positive                              | Low          |                                                                  | **Communications/marketing** - development of a 6 minute film **Modelling**: indirect contact with people with intellectual disabilities. **Education**: knowledge on rights |
|                       | Addressing stigma and discrimination towards mental illness: a community-based intervention | Two before and after questionnaires as well as visits to family. | Case study ongoing throughout intervention.               | Positive                              | High         | Not stated                                                        | **Education**: on mental illness, symptoms, causes and treatment. **Persuasion and modelling**: drama to allow discussion of myths and misconceptions. Experiences shared by person with schizophrenia who had |
| Intervention category | Title                                                                 | Method of assessment                  | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|------------------------|----------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|----------------------------------------|--------------|------------------------------------------------------------------|-------------------|
|                         | recovered and was working. Interaction with him and mental health team. **Incentivisation**: commitment by community members with an oath of prevention, treatment and promotion of mental health |                                      |                                                             |                                        |              |                                                                 |                   |
|                         | Service delivery: Integration of HIV services into primary care with consideration for clinic space, staff, pharmacy, laboratory, education and training. **Education**: health education at waiting bay on HIV prevention. **Training and modelling**: all staff trained in HIV care and weekly mentorship and on the job training from more experienced staff **Environmental restructuring**: |                                      |                                                             |                                        |              |                                                                 |                   |
| Piloting alternative models of care | Integration of HIV care with primary health care services: effect on patient satisfaction and stigma in rural Kenya (Odeny, 2013) | Self-administered questionnaire. | Participants followed up 3 months and 12 months post-intervention. | Mixed | Medium | Not stated |                   |
|                         |                                                                      |                                      |                                                             |                                        |              |                                                                 |                   |
|                         |                                                                      |                                      |                                                             |                                        |              |                                                                 |                   |
| Intervention category | Title | Method of assessment | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|-------|----------------------|------------------------------------------------------------|----------------------------------------|-------------|---------------------------------------------------------------|-------------------|
|                       |       |                      |                                                            |                                        |             |                                                               | changing the patient flow; supply chain networks; laboratory testing |
|                       | Effects of home-based Voluntary Counselling and Testing on HIV-related stigma: Findings from a cluster-randomized trial in Zambia (Jürgensen, 2013) | Structured face-to-face questionnaires | 8 months (on average) | Null (treatment compared with control) | Low | Not stated | Service delivery: offering Voluntary Counselling (3 month trial) and Testing to all adults in 18 villages by counsellors. Communication/marketing: of the new service through local radio and some education provided. Modelling/persuasion: individuals who had been tested gave testimonial interviews |
|                       |       |                      |                                                            |                                        |             |                                                               |                   |
|                       |       |                      | 12 months                                                  | Low                                     |             |                                                               |                   |
| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|--------------|-----------------------------------------------------------------|-------------------|
|                       | Effectiveness of a community-based intervention for people with schizophrenia and their caregivers in India (COPS1): a randomised controlled trial (Chatterjee, UNKNOWN) | Questionnaire combining range of pre-existing measures                               | Null / negative                                            |                                        |              | Service delivery: provision of community-based care services for people with schizophrenia  
Training: skills building and close supervision of community health workers.  
Guidelines: a manual was developed for CHWs for three phases of visits |
| Intervention category | Title                                                                 | Method of assessment                                                                 | Length of time between intervention and assessment of impact | Effectiveness (positive/negative/null) | Risk of bias | Models and framework (which interventions have been based on) | Intervention types |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|--------------|-----------------------------------------------------------------|-------------------|
|                       | **A pilot study of early intervention for families with children with or at risk of an intellectual disability in Northern Malawi (Kelly, 2012)** | Interview-administered questionnaires with range of closed and open-ended questions. | 9 months                                                    | N/A                                    | High         | In Malawi, the National Policy on Equalization of Opportunities for Persons with Disabilities (2006) advocates a community-based rehabilitation (CBR) approach to supporting people with a disability. However, no govt initiatives in this area, prompting development of pilot approach. | Service delivery: home based early educational support intervention. Education and Training: structured teaching method and skills building of parents in everyday situation and daily routine. Enablement: providing a new opportunity for active family involvement in partnership with home visitor, in the home situation (not medical) [Categories were harder to assess from the report]. |
## Appendix 4c: Summary of intervention studies: results

| Intervention category | Title                                                                 | Aim of the intervention (if described)                                                                 | Results                                                                                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Education and training| Attitudes toward mental illness and changes associated with a brief educational intervention for medical and nursing students in Nigeria (Iheanacho, 2014) | To change attitudes and beliefs of medical staff. Intended behaviour unknown                           | Greatest changes in attitudes favouring normalization of the lives of people with mental illness (p=0.0002), socializing with the mentally ill (p=0.01), and biopsychosocial perspectives on mental illness (p=0.01). |
|                       | Stigma reduction training improves healthcare provider attitudes toward, and experiences of, young, marginalized people in Bangladesh (Geibel, 2017) | To change attitudes of service providers (doctors, paramedics, nurses, counsellors) Behaviour - to provide more accessible and acceptable services to young people | Providers • Agreement people living with HIV should be ashamed of themselves decreased substantially (35.3%, 19.7%, 16.3%; p < .001). Decline in agreement that sexually active young people (50.3%, 36.0%, 21.7% p < .001) and men who have sex with men (49.3%,38.0%,24.0%; p < .001) engage in “immoral behaviour. View people with HIV should be ashamed of themselves decreased after initial training (35.3% - 19.7%) – then remained stable (16.3%). Similar pattern for view that people with HIV have many sexual partners (57.3%-46.7%) – though less marked. Increase in view they should be allowed to have babies (40.3%-53.0%). • NB – high baseline agreement about never testing a person for HIV without consent (85%) and maintaining confidentiality (98%). • Several positive improvements in attitudes toward sexually active young people. |
| Intervention category | Title | Aim of the intervention (if described) | Results |
|-----------------------|-------|---------------------------------------|---------|
|                       |       |                                       | **Clients** · More likely to report being member of population subject to provider stigma after second training (67.6%) · Feeling provider acted in negative way – 4.1% after first training, 0% after second · Among sexually active clients, increase in disclosure of sexual activity (64.4% and 83.6%). |
|                       |       |                                       | **Effectiveness of A Peer-Led HIV Prevention Intervention in Secondary Schools in Rwanda: Results from A Non-Randomized Controlled Trial (Michielsen, 2012)** | Increase in knowledge both in the intervention and control students, especially in the second part of the intervention. This increase was significantly slower in the intervention group, although in absolute numbers the difference was not very large. Reported enacted stigma was high at baseline, especially in the intervention group. The data showed that **the intervention significantly reduced enacted stigma**, especially in the first part of the intervention, but the trend remained visible. Respondents with a high sexual self-concept were more likely to be sexually active and to have had sex in the last six months and were less likely to report enacted stigma. |

**Effectiveness of A Peer-Led HIV Prevention Intervention in Secondary Schools in Rwanda: Results from A Non-Randomized Controlled Trial (Michielsen, 2012)**

To change HIV knowledge, attitudes and self-reported sexual behaviour of **peers** Behaviour - to reduce sexual risk behaviour and use of sexual and reproductive health
| Intervention category | Title | Aim of the intervention (if described) | Results |
|-----------------------|-------|----------------------------------------|---------|
|                       | Impacts of a peer-group intervention on HIV-related knowledge, attitudes, and personal behaviours for urban hospital workers in Malawi (Kaponda, 2014) | To build self-efficacy and confidence of health care workers to perform a HIV prevention behaviour | **Stigma-related findings:** The authors examined two different aspects of HIV stigma: whether the health worker believed a person living with HIV should be blamed because of past behaviour and whether contact with persons living with HIV should be permitted. Blaming people living with HIV declined significantly. However, acceptance of contact with persons living with HIV did not increase, mainly because the health workers were already at the top of the scale at baseline (2.97 on a scale where 3 = maximum acceptance of casual contact). |
|                       | Church leaders confront HIV/AIDS and stigma: a case study from Tanzania (Hartwig, 2006) | **Church leaders.** Unknown behaviours | Stigma not raised by participants as a barrier to HIV prevention (although discussed more broadly). In subsequent focused session, the church leaders who had conducted home visits shared that their initiative to begin visiting families affected by AIDS was talked about positively within their communities. It also had a profound impact on their personal attitudes towards PLWA and allowed them to confront their own fears and prejudices. They felt that their leadership was beginning to break down stigma within their own congregation. Several participants said that they engaged in the shunning and stigmatizing portrayed in the picture and thought it was the appropriate Christian response to ‘sinners’ until they attended the trainings. |
| Intervention category | Title | Aim of the intervention (if described) | Results |
|-----------------------|-------|----------------------------------------|---------|
| Ethiopian community health workers’ beliefs and attitudes towards children with autism: Impact of a brief training intervention (Tilahun, 2019) | Attitudes towards mental illness; beliefs and expectations | **General**  · Both treatment groups showed fewer negative beliefs and decreased social distance towards children with autism compared to the control group, with the HEAT+ group outperforming the HEAT group. · However, HEAT+ were less likely to have positive expectations about children with autism than control group. |
| Effect of health education on trainee teachers’ knowledge, attitudes, and first aid management of epilepsy: An interventional study. (Eze, 2015) | Students’ knowledge, attitudes towards students with epilepsy | At baseline the majority (61.9%) and largest proportion (44.2%) had negative attitudes and poor knowledge of epilepsy, respectively. The knowledge of, and attitudes towards epilepsy, and the first aid management skill increased in most respondents, post-intervention. The proportion of respondents with poor knowledge and negative attitudes dropped by 15.5% (p < 0.0001) and 16.4% (p < 0.0001) respectively. Correct knowledge concomitantly increased by 29.6% (p < 0.0001) and good first aid management skills increased by 25.0% (p < 0.0001) from baseline. · The proportion of those with negative attitudes decreased by 16.4%, while those with positive attitudes increased by the same margin. |
| Changing Cultural Perception on Disability through Empowerment of Attitudes and actions (to do what is unclear) of church leaders, traditional healers, | Results relating to changes in attitudes and beliefs **Pastors** 75% (n=162) reported changes in their beliefs and committed to sharing accurate information about disability causes with their congregations and communities |
| Intervention category | Title                                                                 | Aim of the intervention (if described)                                      | Results                                                                                                                                                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | Families and Local Leaders (Bauer, 2019)                            | government leaders and families                                             | **Traditional Healers** 50% (n=35) expressed interest in learning more about the medical causes and treatments of disabilities after completing our workshop and provided evidence of actions.                                                                                                                                                           |
|                       |                                                                      |                                                                            | **Government leaders** 45% (n=56) provided evidence of actions, including referring children to schools for application and enrolment.                                                                                                                                                                                                 |
|                       |                                                                      |                                                                            | All **parents and caregivers** acted to apply what they learned at the workshop including forming parent groups                                                                                                                                                                                                                                                                 |
|                       |                                                                      |                                                                            | Overall, 73% (439 individuals) worked to improve the lives of children with disabilities in their communities and/or homes.                                                                                                                                                                                                                                                                               |
| Education with social contact | Evaluation of a Health Setting-Based Stigma Intervention in Five African Countries (Chirwa, 2009) | Increasing tolerance; increasing willingness to engage with PLHA, by health care providers; improving coping strategies for dealing with HIV stigma, health care providers and PLHA | **PHLA**: significant reduction in overall perceived stigma (t=3.16, df=40, p=0.003); Significant reduction in workplace stigma (t=2.55, df=40, p=0.015); Significant reduction in negative self-perception (t=4.30, df=40, p=0.001). **Nurses**: no change in stigma but a significantly higher percentage of the nurse were tested for HIV by the end of the project (X²=12.18, df=1, p<0.001). There was no significant difference in self-esteem or self-efficacy scores of this group before and after the intervention. |
| Intervention category | Title                                                                 | Aim of the intervention (if described)                                                                 | Results                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Economic empowerment   | Impact of socio-economic rehabilitation on leprosy stigma in Northern Nigeria: Findings of a retrospective study (Ebenso, 2007) | Knowledge and belief about leprosy; improving negative attitudes towards leprosy by community members; changes in life through self-esteem, participation and support for people with leprosy. | Positive and negative results; 18/20 identified benefits from SER intervention. A majority (15) reported increased participation in family activities. They interpreted increased participation mainly as a financial contribution that facilitates both decision making and solving family problems. A majority reported improved family (15) and community (13) attitude. Improvements in attitude were classified as honour, respect, dignity, recognition, reduced verbal abuse, inclusion in activities and increased access to information. |
| Communication, persuasion and modelling | Impact of an educational comic book on epilepsy-related knowledge, awareness, and attitudes among school children in Ethiopia (Tekle-Haimanot, 2016) | Increase students’ knowledge and improve attitudes towards epilepsy. Behaviour - practice is mentioned but what that practice is unclear | **General** After brief exposure, students could extract a great deal of information, it could change misconceptions and provide correct information about epilepsy and can be an effective approach to epilepsy awareness creation. **Specific findings (relating to stigma)** · Before reading the comic book, more than half (56.5%) of the students from the urban school mentioned evil spirit/curse as a cause of epilepsy while most (53%) students from the rural school mentioned brain disease/head injury as a cause. Interestingly, the comic book had a significant positive impact on both the urban and the rural school students toward their knowledge of the causes of epilepsy except hereditary causes. · Half of the urban school students had no knowledge whether epilepsy is contagious or not, while 40.9% of the rural school students reported that it is contagious. After reading the comic, 87.1% and 70.9% of the urban and the rural school students, respectively, report that “epilepsy is not contagious” with a P value of b0.001 in both schools. · A sizable number of students (40.5% of the urban school and 42.7% of rural school) were
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|                       |       |                                       | not sure about allowing their brother/sister to marry someone with epilepsy before reading the comic. Most students (81.9% of the urban school and 85.5% of rural school) changed their thoughts and would allow their brother/sister to marry someone with epilepsy after reading the comic with a P value of <0.001 in both schools. |
| Effects of A Mass Media Intervention on HIV-Related Stigma: 'Radio Diaries' Program in Malawi (Creel, 2011) | Increase the ability to talk openly about HIV and increase perception that PLHA were similar to oneself. A more positive attitude of listeners (community members) towards PLHA | **Fear of casual contact**: significantly lower in the RD group than the control group (64% versus 80%). The RD+D group did not report significantly different fear than the control group. There was no significant difference in fear between the RD and RD+D groups. There were no significant interactions.  
**Shame**: significantly lower in the RD group than the control group (22% versus 45%).  
The RD+D group did not report significantly different levels of shame than the control group. The RD+D group did report significantly higher levels of shame than the RD-only group. There was a main effect of knowing someone with HIV on shame: participants who knew someone with HIV were overall less likely to report shame than those who did not (27% versus 41%). The reduction in shame for the RD group compared with the control group was greater for those who did not know someone with HIV than it was for those who did know someone; there |
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was no effect of the intervention for the latter group. There was also an interaction between study group and prior exposure to the RD program. Only for those who reported prior exposure to the program was there a reduction in shame for the RD group compared with the control group.

**Blame/judgment:** did not differ between the RD group and the control group but was significantly lower in the RD+D group than the control group (3.7 versus 4.1). There was no significant difference between the RD and RD+D groups. There were significant interactions between study arm and sex and between study arm and age group. The RD and RD+D groups reported lower levels of blame than the control group for men only; for women, the three study arms reported the same level of blame. For youth, but not for older people, the RD group reported lower blame than the control group. Looking at the effect of discussion, however, youth in the RD+D group reported higher blame than their counterparts in the RD group.

**Willingness to disclosure potential HIV status:** did not differ between the three groups and there were no significant interactions found.
| Intervention category | Title                                                                 | Aim of the intervention (if described)                                                                 | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|                       | The Era of Digital Interventions: Combating intellectual Disability Stigma in Africa. UCL blog. (Odukoya, 2017) | Improve attitudes towards persons with intellectual disabilities, of a group selected on social media | In both Kenya and Nigeria, participants who had watched the films focused on intellectual disability showed more positive attitudes on all three attitude components compared to baseline and these changes were maintained at 1-month follow-up. There were no such changes in participants who watched the control film. In Kenya, the film had little effect on superstitious beliefs, and in Nigeria it did not increase knowledge of causes and rights.                                                                                                                                                                                                                           |
|                       | Combating intellectual Disability Stigma in Africa (Odukoya, 2017b) | General attitudes of population, selected through social media, in Nigeria                           | **General findings** · The use of an integrated approach was found to have a small to medium size positive effect on all dimensions of attitudes except on Knowledge of Causes. Effects were maintained at follow-up. · The magnitude of attitude change is relatively high when compared to other anti-stigma interventions. **Specific findings** · For people who watched the experimental film there was a significant increase in positive attitudes post-intervention, which was maintained at follow-up when compared to baseline. · However, this group experienced a significant decrease in positive attitudes between post-intervention and follow-up. For the experimental group, the magnitude of the positive change observed at time point 2 was not maintained at follow-up. · Looking at group effects, there was a significant difference between groups post intervention (i.e. at time point 2) for both Discomfort and Sensitivity. |


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|                       | Addressing stigma and discrimination towards mental illness: a community-based intervention programme from India (John, 2015) | No measure of knowledge and attitude of community members towards mental illness - the primary audience of interventions | **Before:** caregiver scored forty (40) out of fifty in the Family Buren scale and 31 out of forty on the Stigma Item scale which again evidenced that the family was facing significant stigma and discrimination in the neighbourhood and society.  

**After:** Routine family activities, family leisure and family interaction are the major areas where the family felt decrease of burden in the post assessment. Finance remained a major source of burden. Family felt significant reduction in the stigma and discrimination they experienced in the society. In the stigma scale, worries about neighbours treat them differently, worries that others will find out about illness, worries that neighbours and friends would avoid them and worries about taking the family members out were some of the areas where family felt better in the post assessment. The family experienced better acceptance in the community. The family was able to build-up and maintained adequate interpersonal relationship with the neighbours. Local governing authority was supportive, and they initiated the procedure for availing disability benefits for the family members who were affected with mental illness. The team visited the tailoring centre where one of the daughters used to work. They were ready to take her back once she got prepared for the job. |
| Intervention category                          | Title                                                                 | Aim of the intervention (if described)                                                                 | Results                                                                                                                                                                                                                                                                                                                                 |
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| **Piloting alternative models of care**       | Integration of HIV care with primary health care services: effect on patient satisfaction and stigma in rural Kenya (Odeny, 2013) | To improve patient satisfaction and reduce perception of stigma by PLHA                               | At 12 months, men reported higher levels of agreement that people with HIV were treated the same as others, while women’s responses did not change significantly. Patient agreement with providers maintaining privacy and confidentiality did not change significantly within either sex during the assessment period. Men were less likely to agree that they were not comfortable receiving care at the clinic by the 3-month survey. Women were more likely to express discomfort at both time points compared to baseline. Assessment of the **patient-level effect** suggests that patient satisfaction remained high and that integration did not heighten perceived stigma. |
|                                               | Effects of home-based Voluntary Counselling and Testing on HIV-related stigma: Findings from a cluster-randomized trial in Zambia (Jürgensen, 2013) | Community individuals’ acceptance of counselling in testing, equity in uptake and reported negative life events following CT. | There was an overall reduction of seven per cent in stigma from baseline to follow-up. The reduction did not differ between the trial arms (p = 0.423). Being tested for HIV was associated with a reduction in stigma (p= 0.030), and there was a trend towards home-based Voluntary Counselling and Testing having a larger impact on stigma than other testing approaches (p = 0.080 vs. p = 0.551), possibly explained by a strong focus on counselling and the safe environment of the home.                                                                 |
|                                               | Effectiveness of a community-based intervention for change in symptoms and disabilities in 12 months; adherence to treatment and |                                                                                                      | Intervention modestly more effective than facility-based care. However, no significant impact on stigma (compared with facility-based care) and participants more likely to be unwilling to disclose illness.                                                                                          |
| Intervention category | Title                                                                 | Aim of the intervention (if described)                                                                 | Results                                                                                                                                                                                                 |
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|                       | people with schizophrenia and their caregivers in India (COPSI): a randomised controlled trial (Chatterjee, UNKNOWN) | experiences of stigma - all by people with schizophrenia. Knowledge and attitudes about illness, felt burden of care and experiences of stigma by caregivers | The study found that participants in the intervention group did not report lower stigma than those in the control group at 12 months post-intervention (adjusted OR for any reported alienation 1.15, 95% CI 0.66–2.02). In addition, no significant differences were seen between the intervention and control for negative discrimination among people with schizophrenia (1.02, 95% CI 0.54-1.92) and, anticipated discrimination (1.31 95% CI 0.66-2.60). |
|                       | A pilot study of early intervention for families with children with or at risk of an intellectual disability in Northern Malawi (Kelly, 2012) | Measures of relationships between professionals and family; parent perceptions and satisfaction; CHV role | Challenges encountered (in implementation of intervention) included stigma, social exclusion of families, and a lack of community knowledge on how to help. continued lack of neighbour involvement, and some community pressure |