PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Multiple barriers to participation for people with psychosocial disability in Dehradun district, North India – a cross-sectional study
AUTHORS	Mathias, Kaaren; Pant, Hira; Marella, M; Singh, Lawrence; Murthy, GVS; Grills, Nathan

VERSION 1 – REVIEW

REVIEWER	Dr N Janardhana Department of Psychiatric Social Work, NIMHANS, Bengaluru, Karnataka State, India
REVIEW RETURNED	23-Sep-2017

GENERAL COMMENTS	It can be accepted 1.Civil and political rights been part of the UNCRPD, same can be included in this paragraph Paragraph 4 line 18, page 2 2.In India, we have good number of legislations and policies, problems lies in its implementation. Health, disability, education and welfare is a state subject, hence each state have their own programmes, rules, and schemes for people with disability – same can be highlighted Paragraph 4 line 19 - 20, page 2 3.Can negative attitude be replaced by Stigma Page 4 – line 24 4Brief description of infrastructure available in the Deharadun district would have been added in the introduction. Lack of adequate human resources and infrastructure is one of the barriers for people to access mental health services in India. People with psychosocial disabilities have physically are able to access services - Not clear, does it mean that they do not have loco motor impairment for them to visit district hospital. Page 4- Line 24 5probability proportion to size sampling can authors explain this so that reader would understand clearly Page 5 line 7 61 four day data collection training was conducted – need to b e explained. Brief description of the data collectors like age, education qualification, sex etc would add value to the paper Page 5 line 16

	7.in at least two domains in the items on Kessler's scale – My understanding the two domains include depression and anxiety- is there any other domains. Does the scale has any cut off scores to indicate psychosocial disability (depression and anxiety) if so, same can be mentioned Page 5 33- 34 line 875% of participants with psycho-social disability also reported comorbid functional impairments – can this be explained clearly as it is confusing. What is the functional impairment you are explaining Page 7 – line 37 and 38 9How was comorbid functional impairment was assessed (is it retrospective assessment. If so how was recall bias was handledPage 7 line 37 - 38 10Mean age was 40.4 years, and education been assessed as those attended to schooling and those not attending schooling. Need to Know from Authors would there be other reasons like, learning problems, lack of infrastructure, economic status, distance etc as reasons for for not attending to schools. How can we relate that functional impairments can correlated as a reason for not attending school (as it is been interpreted in table 2). Have we taken impairment of functioning (retrospective account) to come to such conclusion. Table 2 demonstrates that the odds of having psycho-social disability were significantly higher in those with no schooling (2.3 times higher than those with schooling). Page 8 line 52- 53 11

REVIEWER	Jean-Francois Trani Washington University in St. Louis
REVIEW RETURNED	10-Oct-2017

GENERAL COMMENTS	Review Multiple barriers to participation for people with psychosocial disability in Dehradun district, North India – a cross-sectional study The submitted manuscript addresses the important question of barriers to participation for people with psychosocial disability in northern India. The authors have done a very interesting work of data collection and analysis. The results of this empirical exercise tend to show that people with psychosocial disability face more barriers than the rest of the population to access services and have a lower participation in various domains of social life such as education and employment. While I am sympathetic and agrees with this overall conclusion, I believe it is not totally founded on – or in other words goes beyond- the empirical analysis of this paper. In particular, I have some issues with the breadth or scale of the problem: what proportion of people with psychosocial disability are actually facing how many barriers compare to the rest of the population? In which domain is the problem of discrimination or exclusion particularly prevalent and why? Is it school? Education? Employment? Healthcare and rehabilitation?

I think these issues can be addressed by the authors and I encourage them to revise and resubmit their paper. I would also encourage them to copyedit the paper to make it easier to read and introduce links between paragraphs, particularly in the discussion.

Major comments

Introduction

The introduction starts with an ascertainment that mental illness is a leading cause of DALYs.

What is a good definition of psychosocial disability? I found the sentence “Psycho-social disability is a term increasingly preferred by people who use mental health services, and includes related negative social impacts of psychological or social disability including discrimination, and exclusion.” a bit confusing. I think the authors must clearly state that psychosocial disability is the result, in a social model of disability perspective, of how society excludes people who have been diagnosed with a mental illness. In other words, psychosocial disability results from social exclusion of people with mental illness. Maybe a short reference to the model of disability they use in this paper will be helpful.

Then the authors introduced the idea of stigma, i.e. negative i.e. attitude and resulting prejudice that creates discrimination – social exclusion- against persons with mental illness (Link and Phelan 2001). What does the literature tell us about the specific situation of people with psycho-social disability in terms of access to services, livelihoods, social participation and or exclusion? The authors mention “accessibility is significantly limited for many people with disabilities due to lack of regulation of law and policies, social attitudes, lack of financial resources and a lack of evidence-based research to quantify and implement solutions.” They should review the large existing literature about mental illness and stigma, i.e. attitude and resulting prejudice that creates discrimination against persons with mental illness. Or at least mention what are the gaps in the current literature, for instance in Low income settings where research has been more limited.

Then the authors introduce briefly the scope of the paper: psychosocial disability and social determinants of health and participation.

Concepts such as social determinants of health, stigma and poverty are discussed later on but not introduced here.

The introduction is expected to introduce the scope, context, and significance of the study, to summarize current understanding and background information about psycho-social disability and participation in Low Middle Income Countries (LMICs), and to state the purpose of the work. What do we know of associated disabilities (psychosocial and other types of disability) and social exclusion/stigma/discrimination? These points could guide the revision of the introduction in a future version of the manuscript.

Methodology:

Was the Rapid Assessment of Disability (RAD) questionnaire tested for content validity and for reliability in the context of North India?

Sampling: In reference 9, authors refer to age 15 and not 18 for selection. Why this discrepancy? How was the risk of disability established: using section 1 of the RAD? A bit more details is required here.

The authors are actually measuring anxiety and depression with the Kessler-6 (K- 6) scale: The Kessler-6 (K- 6) scale is a quantifier of non specific psychological distress.

They need to remind the reader that the Kessler-6 (K- 6) scale has been shown to be a broad screener of severe mental illness See (Kessler et al. 2010).

Please define which community services are included in the present paper.
Results
p. 8, l.57-58 and p.9, l. 1-3: I am wondering if the sample of people with psycho-social disability only (without other disability) might be too small (1.2% of 2411= 28 people) and this is why the authors do not observe a link with sociodemographic variables. I don't think they can conclude that "co-morbid functional impairment is a significant risk factor for psycho-social disability". This is not a question of absence of association but of lack of power. In fact, if one looks at the 95% confidence interval in Table 2, one can see that for age, gender, schooling, most of the interval is on one side: for instance, looking at gender, 0.95 is equivalent to 1/0.95= 1.05 and only 0.5 away from the 1 limit to be compared to an odd ratio of 2.29. In other words, the authors have to show what is the minimum effect size, and most likely a bigger sample of people with psychosocial disability alone might show an association with like of schooling, or being a woman and even maybe being poor.
Table 3: Are the differences between met and unmet services significant once one remove the "not wanted to participate" (in consultations, DPOs, social activities, religion) group ?

Table 4 p. 10, l. 1-38: What do community services encompass?
Table 5: "Lack of information about work": why is the percentage 100 for 12 out of 117 people with PSD and 10 out of 2326 for people without PSD? Overall, even if there is a gap between the 2 groups, what strikes me is that the barriers seem to affect only a minority of people with PSD (below 15%). This is a lot less that was what found in other studies about mental illness in India. What was the % of people with PSD who faced at least 1 barrier?

Discussion

p. 12: the authors introduce the notion of poverty here. It should be a concept introduced earlier on if the authors aim at contributing to the literature on poverty and PSD.
Unfortunately, we lack evidence showing if poverty is causing disability or vice versa. If the authors decide to include disability in the "social causation box of the Crick et al. diagram, they need to justify this choice.
p. 13. The authors wrote "Our study shows that people with psycho-social disability describe stigma (negative attitudes) as a significant barrier in nearly half of the domains of services described here". I am not sure where is this finding coming from. What proportion of people with PSD face barriers in how many domains of services? What domains are more discriminatory? Why?

Minor comments

Table 2 upper part needs labels for the column.

Kessler, Ronald C., Jennifer Greif Green, Michael J. Gruber, Nancy A. Sampson, Evelyn Bromet, Marius Cuitan, Toshi A. Furukawa, Oye Gureje, Hristo Hinkov, Chi-yi Hu, Carmen Lara, Sing Lee, Zeina Mneimneh, Landon Myer, Mark Oakley-Browne, Jose Posada-Villa, Rajesh Sagar, Maria Carmen Viana, and Alan M. Zaslavsky. 2010.

	"Screening for Serious Mental Illness in the General Population with the K6 screening scale: Results from the WHO World Mental Health (WMH) Survey Initiative." International journal of methods in psychiatric research 19 (0 1):4-22. doi: 10.1002/mpr.310. Link, B. G., and J. C. Phelan. 2001. "Conceptualizing stigma." Annual Review of Sociology 27:363-385. doi: 10.1146/annurev.soc.27.1.363.

VERSION 1 – AUTHOR RESPONSE

Comment Location in original paper Response (Note page and line number refer to the Tracked Changes copy provided)
Civil and political rights been part of the UNCRPD, same can
be included in this paragraph

Response: Paragraph 4 line 18, page 2 Thank you. The focus on civil and political rights is has been added p4, line 109 on:

To allow people with disabilities to fully enjoy all human, political and civil rights and fundamental freedoms, the United Nations Convention on the Rights of Persons with Disability (UNCRPD) acknowledges…
In India, we have good number of legislations and policies, problems lies in its implementation. Health, disability, education and welfare is a state subject, hence each state have their own programmes, rules, and schemes for people with disability – same can be highlighte

Response: Paragraph 4 line 19 - 20, page 2 Thank you. This is underlined now p 4, line 112:

Yet in India, and beyond, at national and state levels, this accessibility is significantly limited for many people with disabilities due to lack of implementation and regulation of law and policies. Further barriers include social attitudes, lack of financial resources and a lack of evidence-based research to quantify and implement solutions.

Response: Can negative attitude be replaced by Stigma Page 4 – line 24 This has been changed as follows p4, line 118:

While many people with psycho-social disability are physically able to access services, barriers include real and perceived stigma
Brief description of infrastructure available in the Deharadun district would have been added in the introduction. Lack of adequate human resources and infrastructure is one of the barriers for people to access mental health services in India. People with psychosocial disabilities have physically are able to access services - Not clear, does it mean that they do not have loco motor impairment for them to visit district hospital. Page 4- Line 24 We have now included a statement of limited resources and existing services in Dehradun district as follows p5, line 155:

Publicly funded human resources and infra-structure for disability in Dehradun district, Uttarakhand, are limited, and although the state provides some residential institutional care for people with intellectual disability, and runs a disability resource centre, most PPSD do not access government services. A recent study showed that as many as 96% of people screened as having depression did not have access to care[1].

We have also amended statement in the Introduction that PPSD can physically access services as this does not have a basis in evidence and have phrased as pasted below:

While people with psycho-social disability are often physically able to access services, barriers for utilisation include real and perceived stigma, limited motivation and self-belief and limited social role functioning.

probability proportion to size sampling can authors explain
this so that reader would understand clearly Page 5 line 7 We have explained this as per the pasted text below p5, line 171:

This study used a two-stage cluster random sampling where 50 clusters from 114 villages in Sahaspur block using probability proportion to size sampling, an approach that is useful when the units are of unequal sizes, and ensures the likelihood of a unit being selected is proportionate to the size of the represented population.
1 four day data collection training was conducted – need to b e explained. Brief description of the data collectors like age, education qualification, sex etc would add value to
the paper

Page 5 line 16 Thanks for this suggestion – while we did not collect data on educational qualifications we have provided further detail on the demographics of the data collectors as written below p5, line 180:

Eleven data collectors were trained: 8 females and 3 males aged between 19 and 53. Three out of the 11 data collectors had a disability.
in at least two domains in the items on Kessler's scale – My understanding the two domains include depression and anxiety- is there any other domains. Does the scale has any cut off scores to indicate psychosocial disability (depression and anxiety) if so, same can be mentioned The scoring recommended for the Kessler scales advises against a one-parameter cut off and instead proposes a fairly complex approach using multiple parameter scoring with a maximal-likelihood estimation [2]. For this reason, we decided to score the modified K-6 tool we used based on subjective experiences of disability. This is explained in the methods section as follows p5, line 171

This study reports on the psychological distress component, which is a modified version of the Kessler-6 (K-6) scale which is a tool validated to screen for both severe and common mental illness, although scoring of K-6 does not recommend a single-parameter cut-off score[3] [2].

75% of participants with psycho-social disability also reported comorbid functional impairments – can this be explained clearly as it is confusing. What is the functional impairment you are explaining Added in an explanatory phrase p8, line 236 comorbid functional impairments such as difficulties with mobility or eye-sight.

How was comorbid functional impairment was assessed (is it retrospective assessment. If so how was recall bias was handled The methods section describes that co-morbid functional impairment was assessed through the RAD disability screening tool, based on subjective response of participants.
Recall bias is certainly possible, as is the case in any household survey built on retrospective experience of participants. It is described as a limitation in the Methodological limitations section in p14, line 398.

Comment: Mean age was 40.4 years, and education been assessed as those attended to schooling and those not attending schooling. Need to Know from Authors would there be other reasons like, learning problems, lack of infrastructure, economic status, distance etc as reasons for
for not attending to schools.

Response: The reviewer suggests important reasons for non-attendance of school, and one of these is likely linked to the greater mean age of respondents. Reasons for non-attendance of school among participants was not assessed in the RAD tool survey that was used, and was beyond the scope of this study.

Comment: How can we relate that functional impairments can correlated as a reason for not attending school (as it is been interpreted in table 2). Have we taken impairment of functioning (retrospective account) to come to such conclusion. Table 2 demonstrates that the odds of having psycho-social disability were significantly higher in those with no schooling (2.3 times higher than those with schooling).

Response: Thank you - this reviewer correctly identifies that functional disability seems to be the major risk factor for psycho-social disability. We have however removed the final column analysing those with only PSD as the numbers were small and unstable.

This is summarised in the paragraph beneath Table 2 p 9, line 241.
Table 2 demonstrates that the odds of having psycho-social disability were significantly higher in those with no schooling (2.3 times higher than those with schooling), unemployed people (2.9 times higher than those employed) and people in both the middle and poorer levels of socio-economic status (3.9 and 4.6 times high respectively than those of rich socio-economic status).

Responses to reviewer BMJ Open -019443
Comments Locations
The introduction starts with an ascertainment that mental illness is a leading cause of DALYs. What is a good definition of psychosocial disability? I found the sentence “Psycho-social disability is a term increasingly preferred by people who use mental health services, and includes related negative social impacts of psychological or social disability including discrimination, and exclusion.” a bit confusing. I think the authors must clearly state that psychosocial disability is the result, in a social model of disability perspective, of how society excludes people who have been diagnosed with a mental illness. In other words, psychosocial disability results from social exclusion of people with mental illness. Maybe a short reference to the model of disability they use in this paper will be helpful.

Response: Introd-uction We have sought to clarify the stance we use for disability with revisions in paragraph 1 that are pasted below p4, starting from line 97:

Mental illness was the leading cause of years lived with disability in the 2010 Global Burden of Disease study, with the majority of people affected living in low and middle-income countries (LMIC). Psycho-social disability as a term refers to people who have either received a mental health diagnosis or who have identified that they experience limitations in functioning in basic psychological and social activities, and who have experienced the negative social impacts of psychological or social disability including discrimination, and exclusion[4].

We use this term to support our stance of a social model of disability that recognises that many barriers experienced are related to the way society limits the personal, social, political and economic power of people with disability [4 5], can be constant or episodic and can be understood assessing activities of daily living and functional ranges[6]

Comment: Then the authors introduced the idea of stigma, i.e. negative attitude and resulting prejudice
that creates discrimination – social exclusion- against persons with mental illness (Link and Phelan 2001). What does the literature tell us about the specific situation of people with psycho-social disability in terms of access to services, livelihoods, social participation and or exclusion?

Response: Introd-uction We have expanded the paragraph introducing stigma to also discuss the impact of stigma p4, line 118:

While many people with psycho-social disability are physically able to access services, barriers include real and perceived stigma, limited motivation and self-belief and limited social role functioning. Stigma and discrimination is a prevalent experience for PPSD in all parts of the world, and limits access to health care, opportunity and capacity for community participation[7] It results in unequal access to resources, capabilities and rights which leads to health inequalities [8].

The authors mention “accessibility is significantly limited for many people with disabilities due to lack of regulation of law and policies, social attitudes, lack of financial resources and a lack of evidence-based research to quantify and implement solutions.” They should review the large existing literature about mental illness and stigma, i.e. attitude and resulting prejudice that creates discrimination against persons with mental illness. Or at least mention what are the gaps in the current literature, for instance in Low income settings where research has been more limited. Introd-uction Thank you for this input. We have now expanded the section referring to the negative impacts of stigma and social exclusion for PPSD in the third paragraph of the introduction p4, line 118.

We also identify the relevant gaps in the existing literature in LMIC related to PPSD/ access to care in the fourth paragraph of the introduction p5, line 145.

There is limited research in LMIC, and particularly little evidence from setting of North India, to understand the ways that social exclusion and disability interact for PPSD in access to services and community participation [9 10] [11].

Then the authors introduce briefly the scope of the paper: psychosocial disability and social determinants of health and participation.
Concepts such as social determinants of health, stigma and poverty are discussed later on but not introduced here.
The introduction is expected to introduce the scope, context, and significance of the study, to summarize current understanding and background information about psycho-social disability and participation in Low Middle Income Countries (LMICs), and to state the purpose of the work. What do we know of associated disabilities (psychosocial and other types of disability) and social exclusion/stigma/discrimination?
These points could guide the revision of the
introduction in a future version of the manuscript. Introd-uction We have revised the introduction quite extensively to respond to these comments. Please see the tracked changes version of the paper and the 2nd, 3rd and 4th paragraphs of the introduction on p4, from line 109.
Was the Rapid Assessment of Disability (RAD) questionnaire tested for content validity and for reliability in the context of North India? Methods RAD has been validated in Bangladesh and Fiji as mentioned in the paper. Additionally it has been used in different contexts since (Philippines, Fiji in an Inclusive Education context and Vanuatu - and more recently in Bangladesh again). The tool has not been revalidated in India for this study, however, it has undergone rigorous pre-testing including

cognitive testing of the tool and pilot testing before the actual survey. This has been clarified in the paper as follows p5, line 163:

The RAD survey was developed by the Nossal Institute for Global Health and the Centre for Eye Research Australia at The University of Melbourne, and was validated in Bangladesh and Fiji, and underwent rigorous pre-testing and piloting in India to ensure content validity, prior to the actual survey[12]. Greater detail on the methods used in this study are provided in another paper which examined the prevalence of all types of disability and its' associations with health determinants and access and barriers to community services [13].

Sampling: In reference 9, authors refer to age 15 and not 18 for selection. Why this discrepancy? Methods Thank you for this detailed observation. Indeed, inclusion was 15 years and above (not 18) and we have amended this in the methods p5, line 170.

The main study was conducted on a sample of 2441 individuals aged 15 years and over from Sahaspur block in Dehradun District.
How was the risk of disability established: using section 1 of the RAD? A bit more details is required here. Methods The presence of disability was assessed in the second section of the RAD tool – we believe that this is explained in the Methods section titled "Data collection and survey tool" in the second paragraph. We have amended this and the new text is pasted below p5, line 195 :

As this study was focusing on subjective experiences of limited functioning, participants were considered to have a disability if they had difficulties "most of the time" or "all of the time" in at least two domains in the items on Kessler's scale.

The authors are actually measuring anxiety and depression with the Kessler-6 (K- 6) scale: The Kessler-6 (K- 6) scale is a quantifier of non specific psychological distress. They need to remind the reader that the Kessler-6 (K- 6) scale has been shown to be a broad screener of severe mental illness See (Kessler et al. 2010). Methods Thank you for this comment. In addition to screening for severe mental illness, several studies show that the K-6 and K-10 versions of the Kessler scale are validated also for identifying and screening for common mental disorders/ distress[14]. This is clarified now in the paper text as pasted below p6, line 191:

This study reports on the psychological distress component, which is a modified version of the Kessler-6 (K-6) scale which is a tool validated to screen for both severe and common mental illness, although scoring of K-6 does not recommend a single-parameter cut-off score [3] [2].

Please define which community services are included in the present paper. Methods We have provided further detail on the community services assessed in this paper p6, line 201:

Section four assessed the level of access to different services and participation in the community under domains of employment, health services, community consultations, disabled persons' organisations, social activities, sanitation, safe drinking water and religion.
p. 8, l.57-58 and p.9, l. 1-3: I am wondering if the sample of people with psycho-social disability only (without other disability) might be too small (1.2% of 2411= 28 people) and this is why the authors do not observe a link with sociodemographic variables. I don't think they can conclude that "co-morbid functional impairment is a significant risk factor for psycho-social disability". This is not a question of absence of association but of lack of power.

In fact, if one looks at the
95% confidence interval in Table 2, one can see that for age, gender, schooling, most of the interval is on one side: for instance, looking at gender, 0.95 is equivalent to 1/0.95= 1.05 and only 0.5 away from the 1 limit to be compared to an odd ratio of 2.29. In other words, the authors have to show what is the minimum effect size, and most likely a bigger sample of people with psychosocial disability alone might show an association with like of schooling, or being a woman and even maybe being poor. Results Thank you for this comment. We vacillated about whether to include this analysis in the originally submitted paper, and following your very valid comments we believe the numbers in this final column of Table 2 are too small, and the confidence intervals are too wide to merit inclusion of this sample of people and propose to exclude it from the paper. Table 2 has been amended and the text analysis edited to reflect this change. P8, line 239.
Table 3: Are the differences between met and unmet services significant once one remove the "not wanted to participate" (in consultations, DPOs, social activities, religion) group ? Results Thank you for this comment. We responded to this query by re-analysing data from this table. After removing not wanted to participate groups, there was no statistically significant difference between met and unmet need for Disabled Persons organisations. We have clarified this in the text below Table 3 with the following statement p10, line 254.

In Table 3, across different access domains the unmet need was significantly higher in every domain for people with psycho-social disability, however when we removed the group who described that they did not want to participate, the difference between met and unmet need was not significant for Disabled Persons Organisations.
Table 4 p. 10, l. 1-38: What do community services encompass? Results The text introducing Table 4 has been expanded to read p10, line 261 :

Barriers faced in the different domains of daily life described above are summarised in Table 4 below. And the title of Table 4 has been changed to clarify that community services refers to the domains of community services summarised in Table 3 and is pasted below:

Table 4. Summary of barriers experienced to access domains of community services
Table 5: "Lack of information about work": why is the percentage 100 for 12 out of 117 people with PSD and 10 out of 2326 for people without PSD? Overall, even if there is a gap between the 2 groups, what strikes me is that the barriers seem to affect only a minority of people with PSD (below 15%). This is a lot less that was what found in other studies about mental illness in India. What was the % of people with PSD who faced at least 1 barrier? Results Thank you for this acute observation. We have reviewed Table 4 and Table 5 as there appeared to have been some transcribing errors and corrected them. NOTE - we did not use track changes in the document for correcting tables as the formatting became disorderly. With the corrected numbers, the 100% number is now brought to a more reasonable % - see tables on pages 10 and 11.

It is interesting that these figures are lower than some other studies of mental illness in India. We could not easily extract the detail of the % of PSD as the data who faced at least one barrier so we have not included this detail. We have added a comment on the % of people encountering barriers in the discussion section, which is pasted below:

This study presents one of the first accounts of barriers experienced by people with psycho-social disability for access to services in India. While the total percentage numbers of PPSD who identify barriers to access community services are lower than expected, it is notable that PPSD are significantly more likely to describe barriers in multiple domains of life, when compared to matched controls.

p. 12: the authors introduce the notion of poverty here. It should be a concept introduced

earlier on if the authors aim at contributing to the literature on poverty and PSD.
Unfortunately, we lack evidence showing if poverty is causing disability or vice versa. If the authors decide to include disability in the “social causation box of the Crick et al. diagram, they need to justify this choice. Discussion Thank you for this comment. The concept of poverty and the contribution of social determinants of health to psycho-social disability are now included in the introduction. Furthermore, we have included a caveat that the correlation between poverty and psycho-social disability is primarily found in common mental illness. We believe that the inclusion of Figure One is merited given the contribution of depression as the largest cause of Years Lived with Disability. The text referring to this in the discussion is pasted belowp12, line 305 .

In this study, we cannot determine the direction of causation however a systematic review that assessed links between common mental disorders and poverty similarly found strong relationships between education, housing, socio-economic status and common mental disorders, a finding supported by other key publications on social determinants of mental health. [15 16]. Figure 1 shows a possible model for the two-way interaction of poverty and common psycho-social disability in a vicious cycle. We propose that with a social model of disability, disability itself, and other functional limitations can be located under the title of ‘social causation’.

p. 13. The authors wrote “Our study shows that people with psycho-social disability describe stigma (negative attitudes) as a significant barrier in nearly half of the domains of services described here”. I am not sure where is this finding coming from. What proportion of people with PSD face barriers in how many domains of services? What domains are more discriminatory? Why?

Discussion We have included more explicit statement below Table 5 to underline the finding of perceived stigma limited access to services by PPSD into the results section, and have listed the domains of community services where this was experienced. See below p12, line 279:

‘Negative attitudes towards you’ was identified as a significant barrier to services for PPSD compared to controls in 6 of the 10 services described above. There was also a significant difference in negative attitudes perceived by people with psycho-social disability compared to controls in over half of the domains i.e. in domains of workplace, health, community consultations, rehabilitation services, safe drinking water and Government social welfare services.

Reasons why negative attitudes were not identified as limiting access to some community services is not clear and we have suggested as an area requiring further research. See added comment to Discussion section p12, line 347.

Reasons why negative attitudes were not identified as limiting access to some community services is not clear and this is an area that requires further research.

Table 2 upper part needs labels for the column.
Kessler, Results - MINOR The label of the column has been amended and now reads p8, from line 239:

Prevalence of psychosocial disability using Kessler screening tool (%) Sample n=2411

REFERENCES (Please note this list and numbering of references cited are different to the reference order used in the main paper, and pertains only to the literatures cited in the responses to reviewers).

1. Mathias K, Goicolea I, Kermode M, Singh L, Shidhaye R, Sebastian MS. Cross-sectional study of depression and help-seeking in Uttarakhand, North India. BMJ Open 2015;5(11) doi: 10.1136/bmjopen-2015-008992[published Online First: Epub Date]|.

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VERSION 2 – REVIEW

REVIEWER	Dr N Janardhana Additional Professor department of Psychiatric Social Work, NIMHANS, Bangalore
REVIEW RETURNED	17-Nov-2017

GENERAL COMMENTS	same can be accepted

REVIEWER	Jean-Francois Trani USA
REVIEW RETURNED	08-Dec-2017

GENERAL COMMENTS	The authors have done a great job at addressing my comments. Two issues remain in the new version particularly around some of the descriptive statistics. Comment 1: Table 3 to 5 need to be revised. Table 3 : The row referring to "disabled people organizations" has not been redone adequately. The p value still shows significance. The number of observations is small. It does not compare to the overall n for people with PSD and without PSD. I would remove this row all together. Tables 3, 4 and 5: I did not pick up this issue before but I realize with this second review that the n for combined rows does not correspond to the n for each column in many instances in all three tables. The gap is particularly high for people without PSD. For instance work has 106+27=133 responses while n=2326 for people without PSD in Table 3. Similarly in Table 4, lack of information concerns 168 people (104+64) but n=2326 for people without PSD. Could the authors explain these discrepancies? In table 4 lack of information (n=146) and physical inaccessibility (n=128) have more observations for people with PSD than the overall number (n=117). Table 5 does not have a n for people without PSD, and I assume it is 2326. Tables 3 through 5 should present percentage in column. As it is presented, I still don't understand what those percentage mean. For instance, in Table 3, "met need for work" among people without PSD is 106 out of 2326 people which is 4.55%. the table indicates 56.08%... Similarly in Table 4, 104 out of 2326 people without PSD face a barrier "lack of information" to access community services. That is 4.47% (=(104/2326)*100) of the total number of people without PSD not 30.7%. Similarly, in Table 5, "place of work", lack of information among people without PSD is not 5.29% but 0.51% ((10/2326*100). All these figures must be corrected before considering publication and the results and discussion sections must be updated based on the possible changes observe in the results. Comment 2: I have another comment about the Strobe checklist. In the right column, I expect the authors to indicate what has been done to address the topic and what is the page where this is reported as requested by the guidelines.

VERSION 2 – AUTHOR RESPONSE

Reviewer One
No response required
Reviewer Two
Comment One – Tables for descriptive statistics

Comment 1: Table 3 to 5 need to be revised.

Table 3: The row referring to “disabled people organizations” has not been redone adequately. The p value still shows significance. The number of observations is small. It does not compare to the overall n for people with PSD and without PSD. I would remove this row all together.

Response – this row has been removed

Tables 3, 4 and 5: I did not pick up this issue before but I realize with this second review that the n for combined rows does not correspond to the n for each column in many instances in all three tables. The gap is particularly high for people without PSD. For instance work has 106+27=133 responses while n=2326 for people without PSD in Table 3. Similarly in Table 4, lack of information concerns 168 people (104+64) but n=2326 for people without PSD. Could the authors explain these discrepancies?

Response - These discrepancies come about because we did not clarify the denominator for these tables - we have now added an explanation about why there is a lower denominator for this data in the methods section, and we have corrected the tables with information on denominators - details of changes made are provided below

In table 4 lack of information (n=146) and physical inaccessibility (n=128) have more observations for people with PSD than the overall number (n=117).
Table 5 does not have a n for people without PSD, and I assume it is 2326.
Tables 3 through 5 should present percentage in column. As it is presented, I still don’t understand what those percentage mean.

Response – we have amended the methods section to explain the denominator of study participants who responded to sections 3 and 4 to say the following on page 5 "In the survey only 306 people were interviewed for sections 3 and 4 (which address well-being and adult access to the community), and of these, 117 had psycho-social disability and 189 did not have psycho-social disability."

For instance, in Table 3, “met need for work” among people without PSD is 106 out of 2326 people which is 4.55%. the table indicates 56.08%...

Response – when the correct denominator is shown (106/189)*100 then the correct % of 56.08 is reached.

Similarly, in Table 4, 104 out of 2326 people without PSD face a barrier “lack of information” to access community services. That is 4.47% (=(104/2326)*100) of the total number of people without PSD not 30.7%.

Response – we have re-done Table 4 as there were some computational errors and have also clarified the denominator for each section - so that these problems are now resolved.

Similarly, in Table 5, “place of work”, lack of information among people without PSD is not 5.29% but 0.51% ((10/2326*100).

Response – when the correct denominator is shown (10/189)*100 then the correct % of 5.29 is reached.

All these figures must be corrected before considering publication and the results and discussion sections must be updated based on the possible changes observe in the results.

Response – the changes in Tables have not impacted the results in a way that needs a change to discussion

Comment 2:
I have another comment about the Strobe checklist. In the right column, I expect the authors to indicate what has been done to address the topic and what is the page where this is reported as requested by the guidelines.

Response – the Strobe checklist has been updated and the page numbers included.

Thank you for your consideration of our revised manuscript and please note request in the cover letter to give us a further ten days of grace as due to the holiday period of Christmas and New Year some of the manuscript details need confirmation and I myself am away from internet until perhaps 2nd January 2018.

Kaaren Mathias on behalf of the author team

VERSION 3 – REVIEW

REVIEWER	Jean-Francois Trani Washington University in St Louis
REVIEW RETURNED	10-Jan-2018

GENERAL COMMENTS	The tables are clearer. The Strobe form better compiled.