Investigating the Relationship between Gender, Social and Cultural Barriers, and Mental Health in Rural Bangladesh

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Figure-1: Women suffering from mental health problems

Abstract
Mental health is an important yet often ignored agenda in ICTD and HCI4D research [1], with prior HCI research focusing on mental health primarily targeting people living in Western contexts. Our work aims to fill this gap by studying the relationship between gender, social and cultural challenges, and mental health among women in rural Bangladesh. Specifically, this paper presents early findings from a one-month long ethnographic study conducted in 13 villages of Jessore, Bangladesh. Our findings show that women in rural Bangladesh face numerous social and cultural challenges, including heavy workloads, lack of access to basic resources such as food, and frequent emotional and physical abuse inflicted by their husbands and in-laws. These challenges often result in women suffering from severe mental health issues – including depression, anxiety, and self-harm – that are deeply rooted in the social and cultural context. Through our work, we hope to identify opportunities for designing appropriate and usable new digital tools and technologies that might improve the quality of life for these women. Our work contributes to several on-going debates in the "HCI Across Borders" community.

Author Keywords
ICTD; HCI4D; mental health; women; rural; Bangladesh.

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
Mental health issues are extremely prevalent across the world. For example, approximately 350 million people worldwide suffer from depression, with depression being identified as one of the leading causes of disability [2]. Depression is the primary cause of disease burden for women between the ages of 15 and 44 [4,5]. In Bangladesh, which is where our research took place, the prevalence of depressive disorders is 4.6% [3]. Bonari

Figure-2: Our target population and their lifestyle

reports that at least 20% of women are depressed during their pregnancy [6]. Studies of depression and anxiety show their incidences to be approximately 5% in non-pregnant women, approximately 8–10% during pregnancy, and about 13% in the year following delivery [4]. Adams et al. reported that there are high levels of antenatal depression among rural women, who also have limited access to diagnosis and treatment [17]. Gausia argues that 14% of women with depression admitted to subconscious self-harm during pregnancy [18].

In countries such as Bangladesh, mental health issues may be further exacerbated by a complex set of social and cultural challenges that affect women. For example, physical and emotional abuse of married women is commonplace, with women frequently being beaten or abused by their husband or their husband's family [12]. Researchers found that a woman who is subjected to abuse by her husband has the highest probability of suffering from depression, followed by an unhelpful or unsupportive mother-in-law [13,14,15]. In many cases, it is a preference for a male child and the woman's failure to produce one that make the husband and/or the mother-in-law unhelpful and unsupportive [16].

There is also a link between mental health and complex socio-cultural factors [11]. For example, society is often uncomfortable addressing and/or talking about mental health problems due to the social stigmas and cultural beliefs, including a belief that personal or marital problems should not be discussed in public [10]. As a result, many women suffering from mental health problems live in the fear of what might happen if they are discovered to be seeking mental health treatment, and are also terrified of being labeled mad or "pagol" (a Bengali word that means mentally disordered), which might destroy their reputation and raise the possibility that they would become an outcast [10]. Literature in the psychiatric community suggests that cultural practices and norms may add value to affective wellbeing and highlights the need for culturally oriented approaches to addressing mental health challenges through non-pharmacological management [7].

To investigate the complex relationship between women's daily lives, existing social structures and cultural norms, and the challenges and barriers that women face due to gender, we conducted an ethnographic field study with women in rural Bangladesh. By gaining a deep understanding of these women's lives, desires, and the challenges that they face, we hope to identify opportunities for designing appropriate and usable new digital tools and technologies that might improve their quality of life.

Research questions

The research questions that we aim to address in our study are: (1) What social and cultural challenges do rural women in Bangladesh face? (2) How do these women currently access and use digital technologies in their daily lives? and (3) How do the challenges that women face impact their quality of life and mental health?

Methodology

Our study consisted of semi-structured interviews, observations, and focus group discussions. Access to women in rural villages was facilitated by the Rural Reconstruction Foundation (RRF), a non-profit, non-political, and non-sectarian voluntary development organization. Workers at the RRF helped us to reach

participants by taking us to their villages and introducing us to them. After arriving in the village, we held a public community meeting in association with the RRF to explain the purpose of the research to the entire community and ask if there were any questions, concerns, or objections. Following this community meeting, participants were recruited through snowball sampling with the help of our partner organization.

We conducted 30-minute focus groups and one-on-one semi-structured interviews with participants during which we asked participants questions regarding their daily life, their work and household responsibilities, their experiences and treatment by their families (e.g., husband, in-laws), their current use of technology (such as mobile phones), and the challenges that they face in their lives. We also asked participants questions about what makes them feel sad, frustrated, depressed, or helpless. We took detailed notes and audio-recorded the sessions for later transcription.

In addition to one-on-one interviews, we also observed our participants to understand their daily lifestyle. The observation included their daily work, hang outs, regular meetings with other women, and doing fun activities. The mode of observation was participatory, with the first author taking part in each of these activities with the participant (with their permission). During the observations, we asked situated and spontaneous questions to better understand participant activities.

Findings

Although we are still in the process of formally analyzing the data that we collected, this section highlights several of our preliminary and emerging themes.

Women frequently suffer physical and emotional abuse

Most of our participants described that they frequently suffer physical and emotional abuse that is inflicted by their husbands and/or in-laws. The reasons for this abuse vary widely, but frequently include failure to produce children (especially male children), not obeying the husband or in-law's wishes or disagreeing with them, and not completing all their household and domestic work according to the family's wishes. The types of abuse that women described include: beatings and other types of physical abuse, sexual violence, not receiving enough food to eat, being verbally abused, being isolated, threats of divorce or abandonment, and more. In addition, there is a tendency in the villages that we visited for society to view this kind of abuse as acceptable, and as a result the women are often blamed by the village for their own abuse and do not have access to any services that would help them to cope with or escape abusive environments.

Women are often isolated from their support networks

When they get married, the women typically move from their own family's village and go to live with their husband's family. Many of our participants described how their husband controls if they have access to a mobile phone, and though this, they also control also if and when the women are able to reach out and communicate with their own family, friends, and support networks. As a result, not only do women often find it challenging to communicate with their friends and family, but permitting this communication also becomes another source of power or control that a husband has over his wife.

Women frequently suffer from mental health issues

Our findings suggest that the women we spoke to suffer from a variety of mental health issues, including depression, anxiety, schizophrenia, break downs, identity crises, and more. However, the vast majority of women suffering from these issues do not seek or receive formal diagnoses or medical treatment for their condition for a variety of reasons, including the social stigma surrounding mental health disorders. In addition, the women are frequently shamed, rejected by their husband or in-laws, or shunned by society because they are 'abnormal' and suffering from mental health issues.

Discussion: HCI Across Borders

Although our analysis is still in progress and the findings we present above are very preliminary, we believe that our work will contribute to several broader conversations that are relevant to the symposium's theme of "HCI Across Borders", as we discuss below.

Gender

Our work is clearly relevant to the on-going discussion within the HCI4D community that focuses on the 'borders' associated with gender inequality and discrimination. Many of the women in our study lack control of their own lives and the ability to make their own decisions, are completely dependent on their husbands for their livelihood, and feel helpless to do anything to improve their situation. Our work also focuses on a particularly hard-to-reach population of women: low-income, illiterate, and rural women who frequently do not even have access to a basic phone. As a result, our insights will add depth and a new dimension to the discussion within the HCI4D community on how to empower women.

Access, Use, and Non-Use

As mentioned above, many of the women in our study do not even have access to a basic mobile phone, and any interaction with technology is controlled by their husbands or in-laws. As a result, many women are also afraid of technology and hesitant to use it by themselves. The experiences of our participants are a stark reminder that the 'mobile revolution' has limitations, and that there are many populations who still lack access to mobile devices. By analyzing both the use and the non-use of technology by the women in our study, we hope to gain insights into how HCI4D research is currently often limited to those that are able to access and use technology in ways that they choose.

Social and Cultural Barriers in Mental Health

Finally, our research reveals numerous cultural and social challenges that affect the diagnosis and treatment of mental health issues. In many scenarios, even acknowledging that someone is suffering from mental health problems could cause serious harm to their family relationships and be highly detrimental to their place in society. As a result, thinking about how to design health systems or interventions that aid people suffering from mental health issues in HCI4D contexts will require careful navigation of these social and cultural norms combined with strong educational and support systems.

Conclusion

This paper discusses our on-going study exploring the relationship between gender, social and cultural challenges, and mental health issues as they affect rural women in Bangladesh. Although preliminary, our findings reveal several interesting themes that will contribute to "HCI Across Borders" conversations centered on gender, access, and use (or non-use) of digital technologies, among others. We look forward to

discussing our work with the HCI4D community at the symposium.

References

[1] World Health Organization. "Investing in mental health." (2003).

[2] Depression. (n.d.). Retrieved March 10, 2017, from http://www.who.int/mediacentre/factsheets/fs369/en/

[3] Firoz, A. H. M., M. E. Karim, M. F. Alam, A. H. M. Rahman, M. N. Zaman, and V. Chandra. "Community based Multicentric Service Oriented Research on mental illness with focus on prevalence, medical care, awareness and attitude towards mental illness in Bangladesh. WHO published data, 2003–2005."*Bangladesh Journal of Psychiatry* 20, no. 1 (2006): 9-32.

[4] Mary Alice Byrn. "Gestational Diabetes, Depression, and the Impact on Maternal Child Health Outcomes." (2011).

[5] Women and mental health. (n.d.). Retrieved March 10, 2017, from http://www.who.int/gho/women_and_health/diseases_risk_factors/mental_health_text/en/

[6] Lori Bonari, Natasha Pinto, Eric Ahn, Adrienne Einarson, Meir Steiner, and Gideon Koren. "Perinatal risks of untreated depression during pregnancy." *The Canadian Journal of Psychiatry* 49, no. 11 (2004): 726-735.

[7] Shiv Gautam, and Nikhil Jain. "Indian culture and psychiatry." *Indian journal of psychiatry* 52, no. 7 (2010): 309.

[8] Anna-Clara Hollander, Henrik Dal, Glyn Lewis, Cecilia Magnusson, James B. Kirkbride, and Christina Dalman. "Refugee migration and risk of schizophrenia and other non-affective psychoses: cohort study of 1.3 million people in Sweden." *bmj* 352 (2016): i1030.

[9] Glorisa Canino, and Margarita Alegría. "Psychiatric diagnosis–is it universal or relative to culture?" *Journal of Child Psychology and Psychiatry* 49, no. 3 (2008): 237-250.

[10]Https://newcomerhealthmatters.com/2016/01/12/this-country-is-totally-different-addressing-mental-health-issues-for-bangladeshi-immigrants/

[11] R.T. Naved, Rimi, N.A., Jahan, S. and Lindmark, G., 2009. Paramedic-conducted mental health counselling for abused women in rural Bangladesh: an evaluation from the perspective of participants. *Journal of Health, Population and Nutrition*, pp.477-491.

[12] Asmita Basu, Indira Jaising, and Lawyers Collective. "Violence against women: a statistical overview, and challenges and gaps in data collection and methodology and approaches for overcoming them." *Retrieved March* 4 (2005): 2008.

[13] Paul E Mullen, ValerieA Walton, SarahE Romans-Clarkson, and G. Peter Herbison. "Impact of sexual and physical abuse on women's mental health." *The Lancet* 331, no. 8590 (1988): 841-845.

[14] Mst Taslima Khatun and Khandaker Farzana Rahman. "Domestic violence against women in Bangladesh: Analysis from a socio-legal perspective."*Bangladesh e-journal of Sociology* 9, no. 2 (2012): 19.

[15] Ruth L. Fischbach and Barbara Herbert. "Domestic violence and mental health: correlates and conundrums within and across cultures." *Social science & medicine* 45, no. 8 (1997): 1161-1176.

[16] D.H. Peters and Kayne, R.D., 2003. Bangladesh health labour market study: Final report. *Johns Hopkins Bloomberg School of Public Health*, *72*.

[17] Alayne M. Adams, Tanvir Ahmed, Shams El Arifeen, Timothy G. Evans, Tanvir Huda, and Laura Reichenbach. "Innovation for universal health coverage in Bangladesh:

a call to action." *The Lancet* 382, no. 9910 (2014): 2104-2111.

[18] Kaniz Gausia, Colleen Fisher, Mohammed Ali, and Jacques Oosthuizen. "Antenatal depression and suicidal ideation among rural Bangladeshi women: a community-based study." *Archives of women's mental health* 12, no. 5 (2009): 351.