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The mental health needs of deaf adults in Nepal

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Abstract
The purpose of this article is to report the findings of the mental health needs and community support systems for deaf and hard of hearing (HOH) adults in Nepal. Ninety-nine deaf Nepali adults completed a household-by-household, researcher-administered survey. The survey contained two World Health Organization instruments: the Self-Report Questionnaire and the Rapid Assessment of Mental Health Needs. The results indicated that 38 percent of the sample met the threshold score for the presence of mental health problems; 24 percent met the threshold for the presence of negative environmental influences. A multiple regression analysis indicated that the RAMH score was a significant predictor of SRQ-20 scores. Gender and age were not significant predictors. Respondents indicated that basic needs, assistive devices, such as hearing aids, job and educational opportunities, and supportive community programs are lacking. Several indicators also suggest that they are somewhat isolated from the surrounding community. Implications for social work and future research are noted.

Keywords
Deaf, disabilities, international, mental health

Introduction

Nepal is among the poorest and least developed countries in the world (CIA, 2013; Regmi et al., 2004). Nearly a third of its population lives below the poverty line. The country, while rich in its ethnic, cultural, and religious diversity, presents many obstacles to it citizens who are both disabled

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and mentally ill. There are numerous factors that complicate this, such as poverty and associated conditions, such as infectious diseases, high mortality rates, low life expectancy rates, and lack of education, rigid caste systems which breed stigma and discrimination, political instability, and inadequate legislation and policies that protect these citizens, all of which contribute to a lack of resources. All of these issues create additional barriers for people who are disabled and suffer from mental health problems.

Environmental and social demographics in Nepal

The total population in Nepal is estimated at 30.4 million people spread over 147,181 km^2 of land (CIA, 2013). Nepali residents are at high risk of infectious diseases due to food and waterborne contaminants. Approximately 29 percent of the children under five years old are born underweight. On average, Nepali citizens receive approximately nine years of schooling.

According to 2013 estimates, the largest age group of citizens in Nepal is 25–54 years old, which comprises approximately 35 percent of its total population (CIA, 2013). The second largest age group is 0 to 14-year-olds, which comprises approximately 33 percent. Individuals aged 55–64 years comprise 5.5 percent of the population; those 65 years and older comprise 4.5 percent. In 2012, life expectancy in the country was 66.51 years, with men living to 65.26 years and women living to 67.82 years.

The country's health expenditures total 5.5 percent of its gross domestic product (CIA, 2013). In comparison, the United States spends 17.9 percent of its GDP (CIA, 2013). The number of hospital beds and Nepal's physicians are 5 and .21 per 1000 individuals respectively. Nepal's mental health services are not located in organized catchment areas (WHO, 2006). In 2006, Nepal had 18 outpatient mental health facilities, none of which were dedicated to children and adolescents. There are three day-treatment facilities and 17 community-based psychiatric services, such as general and teaching hospitals. These mental health services are primarily located in the urban areas of the country, leaving the outlying areas with few resources.

Nepal's ethnic and religious systems are diverse. According to the 2001 census, the largest ethnic groups are: Chhettri (15.5% of the population), Braham-Hill (12.5%), Magar (7%), Tharu (6.6%), Tamang (5.5%), Newar (5.4%), Muslim (4.2%), Kami (3.9%), Yadar (3.9%), other (32.7%) (CIA, 2013). The predominant religions are: Hindu (80.6% of the population), Buddhist (10.7%), Muslim (4.2%), and Kirant (3.6%). The country's social system is structured using a caste system (GoNepal, 2013; Sakdapolrak et al., 2013; Shneiderman and Turin, 2011). Nepal's social system includes four hierarchical castes: 1) Brahmin (includes priests and scholars), 2) Kshatriya (warriors), 3) Valsya (merchants and traders), and Sudra/'Untouchables' (laborers). Membership in these castes is hereditary and permanent. Society discourages inter-caste marriages. Typically, those of the lower caste, Sudra, are among the poorest of the population. Though discrimination based on caste, gender, or religion is prohibited by law, these practices remain prevalent in rural villages.

Given that poverty is associated with poor access to health care, including mental health services, discrimination based on caste can exacerbate the problem (Sakdapolrak et al., 2013). Add stigma, lack of legal services and health insurance, and limited governmental resources, and the problem of mental illness is huge (Regmi et al., 2004).

Mental health and disability in Nepal

Mental health disorders are prevalent all over the world, but access to services among developing countries, like Nepal, is lacking (Patel, 2008; World Health Organization, 2010). Many factors affect those living in underdeveloped countries that make receiving treatment difficult.

Factors such as poverty, lack of physical health care, disabilities, lack of employment opportunities, lack of education, exposure to violence, restriction of human rights, discrimination, and stigma can have negative effects on individuals' lives.

Many studies indicate that significant psychological and social problems arise from mental health disorders (Bener and Ghuloum, 2011; Omar et al., 2010; Rossler, 2007; WHO, 2010). Individuals from developing countries who suffer from mental health problems often do not receive adequate care (Omar et al., 2010; Rossler, 2007; Wang et al., 2007; WHO, 2010). Barriers, such as poverty, inaccessibility, stigma, and discrimination prevent people from receiving treatment. Left untreated, people with mental illness may be unable to secure basic life necessities such as food, shelter, education, and employment.

Stigma plays an influential role in mental health services. The perception of mental health and illness is bound to culture and context. Mental illness is sometimes viewed as a punishment from God, due to religious or supernatural forces (Bener and Ghuloum, 2011; Patel, 2008; Rossler, 2007). Social disapproval and fear often lead to social distancing, which serves to alienate and isolate those who have mental illnesses. Taken further, these misperceptions can lead to an absence of or weak social policies (Omar et al., 2010; Wang et al., 2007). Without a policy agenda, there is little hope that services will be created for people with mental illness.

Several studies indicate a link between mental health disturbances and income even in developed countries (Caron and Liu, 2010; Palomar-Lever and Victorio-Estrada, 2012). Poverty is associated with higher psychological distress, mental illness, and substance abuse. In addition, poverty can also lead to poor health outcomes. Economic factors have a direct effect on unemployment, poverty, and social insecurity (Cooper, 2011). The lack of resources can also lead to limited funding for services. In low-income countries, these services may be one of the last on the list to fund.

Mental disorders are pervasive and a significant cause of disability, yet these needs largely go unmet (Wang et al., 2007; WHO, 2009). Though the Nepali Civil Code 1963/4 states that the responsibility for treatment of people with a mental illness is the responsibility of the state, the country lacks a permanent and stable mental health policy (Koshish, 2013). The National Mental Health Policy of 1996 was formulated, but not implemented. This policy aimed to: a) ensure the availability and accessibility of minimal mental health services by 2000, b) provide mental health training, c) protect the rights of those with mental illness, and d) improve public awareness of mental illness.

Part of the problem may be attributed to the fact that since the hereditary monarchy was absolved in 1951, the country has experienced political unrest, party insurgency, and subsequent legislative instability (CIA, 2013; US Department of State, 2012). In March 2013, the Chief Justice of Nepal's Supreme Court, Khil Raj Regmi, was sworn in as the Chairman of the Interim Council of Ministries for Elections. His task is to lead an interim government and hold elections of the Constituent Assembly. Political discord and disruption affect the country's ability to address many political, social, and health-related issues. These governmental conflicts make establishing a substantive mental health policy difficult to attain.

To add more complexity to the problem, there is no established system of tracking people who have mental health problems. Without accurate counts of those who have additional disabilities, it is nearly impossible to provide services with accessibility for those groups. In addition, specialized disability groups, such as deaf and hard of hearing individuals, go unnoticed.

The Nepal government defines disability as '. . . the condition of difficulty in carrying out daily activities normally and in taking part in social life due to problems in parts of the body and the physical system as well as obstacles created by physical, social, cultural environments and by communication' (Nepal Government, 2006, p. 2). See Table 1 for the seven categories of disabilities exist.

Table 1. Categories of disability in Nepal.

Type of disability	Description
Physical	The problems that arise in operation of physical parts, use and movement in a person due to problems in nerves, muscles and composition and operation activities of bones and joints.
Vision	The condition where there is no knowledge about an object's figure, shape, form and color in an individual due to problem with vision. Types: blindness, poor vision.
Hearing	Problems arising in an individual related to discrimination of composition of the parts of hearing and voice, rise and fall of position, and level and quality of voice constitute a disability related to hearing. Two types: deafness, hard of hearing.
Deaf-blind	An individual who is without both hearing and vision.
Voice and speech	Due to difficulty produced in parts related to voice and speech and difficulty in rise and fall of voice to speak, unclear speech, repetition of words and letters.
Mental	The inability to behave in accordance with age and situation and delay in intellectual learning due to problems arising in relation to implementation of intellectual activities like problems arising in the brain and mental parts and awareness, orientation, alertness, memory, language, and calculation. Three types: intellectual, mental illness, autism.
Multiple	A problem of two or more types of disability mentioned above.

Source: Nepal Government (2006: 3–4).

The National Federation of the Deaf and Hard of Hearing in Nepal (2002) estimates that there are approximately 192,000 deaf and hard of hearing people in Nepal. Like many in developing countries, the NFDH indicates that conditions for the Nepali deaf are insufficient. The Federation suggests that scientific inquiry is a priority.

The ultimate goal of this and follow up studies is to help to empower and educate deaf people about mental health services users and providers by providing preliminary information about the population. This exploratory study is a beginning step in investigating the issue of mental health needs among deaf adults in Nepal.

Research questions

1. What are the mental health issues of deaf and hard of hearing adults in Nepal?
2. What are the environmental factors that impact the mental health of Nepali deaf adults?
3. How are the mental health needs of deaf and hard of hearing adults currently being met (i.e. through the family, clergy, individual advocates, professional services)?

Methodology

Participants

The researchers employed a purposive sampling strategy because of the isolation and difficulty in gaining access to the deaf community in Nepal. An employee of the Volunteer Initiative–Nepal, a non-governmental organization (NGO), who is also the daughter of deaf parents went door-to-door to solicit participation. The researcher contacted participants through the small deaf community

Table 2. Regions in Nepal where deaf participants lived.

Region in Nepal	Percentage of the sample	*N*
Central Kathmandu	44.4%	44
Western	18.2%	18
Eastern Bisatnagar	10.1%	10
Eastern region (specific area not specified)	9.1%	9
Eastern Thapa	4.0%	4
Far Western	4.0%	4
Midwestern	3.0%	3
Western Kathmandu	2.0%	2
Eastern Ithari	1.0%	1
Eastern Sungari	1.0%	1
Kathmandu	1.0%	1

network. This type of sampling is often conducted in research studies that use deaf participants because a) there is no registry of who is deaf and, b) there is often an informal network of deaf individuals from which to build a snowball sample.

Sixty-three men and 36 women comprised the sample ($N = 99$). Ages ranged from 16 years old to 55 years old. The mean age of participants was 27.51 years (SD = 8.57); the median age was 26 years. See Table 2 for information about the geographic area where the participants lived. All participants identified themselves as deaf.

Measures

Researchers used two instruments in order to assess the mental health needs of deaf and hard of hearing Nepali individuals.

- Self-Reporting Questionnaire (SRQ-20) is an instrument developed by WHO in 1994 *to screen for psychiatric disturbance*, especially in developing countries. The SRQ consists of 20 questions which have to be answered as yes or no regarding whether a particular symptom was present within the last 30 days (see Appendix A). It may be used either as a self-administered or as an interviewer-administered questionnaire. The SRQ as a screening instrument is used as a case-finding instrument. To date, this instrument has been used in 30 different studies internationally. The items are scored using 0 (meaning the symptom is not present) to 1 (symptom is present); the maximum score is 20. The literature suggests that the cut-off score for 'normal function' versus 'mental health problems' ranges from 5 to 11. The cut-off score used in this study is 8. A reliability analysis revealed a Cronbach alpha of .821, which is adequate for the analyses.
- The RAMH was also developed by WHO in 2001. The data collected from this tool provides information about the type of immediate and long-term community-based mental health programs needed. Some items from the Rapid Assessment of Mental Health Needs of Refugees, Displaced and Other Populations Affected by Conflict and Post-Conflict Situations (RAMH) tool will be used. The RAMH is divided into seven sections: 1) information about the conflict, 2) affected populations, 3) mental health needs, 4) cultural, religious, political, and socioeconomic issues, 5) cultural aspects, 6) mental health policy and resources, and 7) conclusions and recommendations. The researcher selected relevant items from the mental health

section, cultural, religious, political and socioeconomic sections, and mental health resources section (see Appendix B). This tool is intended to be used by mental health professionals, non-mental health personnel and others involved in mental and psychosocial community support. It is a rapid assessment instrument designed to gather data quickly in order to make quick assessments, especially during an emergency. Eighteen items were selected from the RAMH for this sample. The scoring is from 0 (meaning there is no experience with this problem) to 1 (has experienced this problem). The maximum score is 18. The cut-off score used in this study was 6. A reliability analysis revealed a Cronbach alpha of .656.

Procedures

Prior to the submission to the Institutional Review Board, the researchers confirmed with Nepali professionals that the research protocol and instruments were understandable and relevant. One item on the RAMH was discussed, clarified, and a consensus reached. The researcher submitted materials to the Institutional Review Board that included: a) a culturally appropriate methodology based upon feedback from colleagues in Nepal, b) consent forms translated into Nepali written language, and c) a protocol for sign language instrument-translation by the researcher collecting data directly from participants. After the IRB approved the study, key staff members in the Volunteer Initiative Nepal (VIN) agency traveled throughout Nepal to meet with deaf participants. As part of VIN's programming, the deaf community is identified as an area targeted for services. Thus, key staff members knew where to locate deaf participants. Using Nepali sign language, they explained the purpose of the study and asked for their participation.

Results

What types of mental health issues do deaf and hard of hearing individuals in Nepal have?

Respondents took the Self-Reporting Questionnaire (SRQ-20) to identify which types of mental health issues they experienced within the past 30 days. Table 3 ranks the incidence of the symptoms from highest to lowest.

The mean score of participants on the SRQ-20 was 6.70 (SD = 4.27), which was below the cut-off score for the presence of mental health problems. However, 38 percent of the sample scored at least eight or higher.

What environmental factors impact the mental health of Nepali deaf individuals?

Respondents took the Rapid Assessment of Mental Health Needs (RAMH) to identify factors that contribute to mental health problems and to evaluate available resources that can address these needs. See Table 4.

The mean score of participants on the RAMH was 4.10 (SD = 2.77), which was below the cut-off score for the presence of negative environmental influences. However, 24 percent of the sample reported a score of six or higher.

A correlation comparison between scores on the SRQ-20 and RAMH produced a significant, positive, moderately strong relationship ($R = .509$, $p < .0001$), meaning that the presence of mental health issues is related to the presence of negative environmental factors in one's life.

A multiple regression analysis was performed with the SRQ-20 score as the dependent variable and gender, age, and RAMH score as the independent variables. The model was a poor fit

Table 3. Respondents' answers to the SRQ-20 (presence of a particular mental health symptom within 30 days) ranked from highest incidence to lowest.

Mental health issue	Present within 30 days: YES *N* (% of the sample)
Hands shake	56 (56.6%)
Trouble thinking clearly	55 (55.6%)
Difficult to make decisions	53 (54.1%)
Nervous, tense, or worried	51 (51.5%)
Daily work suffering	49 (49.5%)
Easily frightened	45 (45.5%)
Difficult to enjoy daily activities	43 (43.4%)
Easily tired	39 (40.6%)
Poor sleep	35 (35.4%)
Cry more than usual	34 (34.7%)
Lost interest in things	22 (22.7%)
Unable to be useful	22 (22.2%)
Feel worthless	21 (21.4%)
Poor appetite	21 (21.2%)
Headaches	19 (19.2%)
Uncomfortable feelings in stomach	16 (16.5%)
Feel unhappy	16 (16.2%)
Tired all the time	11 (11.2%)
Thoughts of suicide	8 (8.2%)
Poor digestion	16 (16.2%)

(R^2_{adj} = 25.2%), but the overall relationship was significant ($F_{3,91}$ = 11.54, $p < .0001$). Results showed that when the other variables were held constant, the RAMH score was a significant predictor of SRQ-20 scores ($t = 5.89$, $p < .0001$). Gender and age were not significant predictors of mental health issues.

Negative environmental impacts?

The researchers asked respondents open-ended questions about aspects of their environment and home that may be a factor in creating mental health difficulties.

Environment. Most respondents noted that their environment is generally good, but polluted. Several remarked that natural occurrences, such as landslides, heavy rains, and floods sometimes create problems.

Political conflicts. Several respondents noted a multi-party political system in Nepal. However, most respondents did not know about the political climate and whether conflicts occur within their regions. Below are comments that illustrate the level of political knowledge about politics within the deaf community:

> I don't understand anything about politics.
> I have no idea about politics.
> I don't know about politics, conflicts because I am unable to speak and hear.

Table 4. Respondents' answers to the RAMH (the presence of a particular environmental issue that affects mental health) ranked from highest incidence to lowest.

Environmental issue	Present within last 30 days: YES *N* (% of the sample)
Separation of family	44 (44.4%)
Lack of privacy	42 (42.4%)
Sudden move	37 (37.4%)
Disruption of status (economic decline, loss of power in community)	35(35.7%)
Domestic violence	30 (30.3%)
Ethnic, political, religious disputes	30 (30.3%)
Torture	29 (29.3%)
Witness to killings, execution, missing persons	28 (28.3%)
Breakdown in traditional family roles & support networks	23 (23.2%)
Disruption of cultural and social rituals, family, & community structure	20 (20.4%)
Extortion	17 (17.2%)
Imprisonment	16 (16.2%)
Deprivation of food & water	15 (15.2%)
Abduction	12 (12.2%)
Ongoing daily exposure to violence	8 (8.2%)
Sexual abuse	8 (8.1%)
Armed attacks, artillery, shelling, bombing	5 (5.1%)
Epidemics with death	4 (4.1%)

Degree of violence in the region. With a few exceptions, the majority of respondents indicated that there is no extreme violence within their regions. Many remarked that there are racial conflicts, but did not explain further.

> Racial discrimination and violence of it exists.
> There are no such types of violence except for some racial discrimination.

Lack of basic needs. Respondents reported that several basic needs are lacking, including food, water, and job opportunities. Almost all respondents noted that they lack hearing aids and education. Some noted their educational needs as follows:

> Hearing aids and special education for people like us [are lacking].
> Ear machine [is lacking].
> Hearing aids and supportive programs for us.
> Job-oriented training for [deaf] people like me.

Income. All respondents indicated that they engaged in work, mostly unskilled labor. Presumably, the lack of education creates barriers for deaf Nepalis to obtain high paying jobs. Several reported they worked in the fields. Others worked in restaurants, NGOs, for their parents, or as servants to others.

Education. Responses about the level of education varied. Four out of 99 respondents indicated that they are studying in college. Five out of 99 respondents said they completed at least to Class 9. Nineteen respondents reported that they have never been to school.

Household. Nine out of 99 respondents reported they lived alone. The vast majority lived with their spouses and children, and sometimes with their parents.

Ethnicity of respondents. The most common categories of ethnicities were as follows: Newar (N = 18), Chhetri (N = 18), Brahmin (N = 15). Other respondents reported the following categories less frequently: Damai, Husan, Tamang, Magar, Tharu, Gurung, Dalit, Thakuri, Mandal, Sherpa, BK, and Rai.

Religious practices. Eighty respondents reported that they were Hindu. Sixteen respondents reported they were Buddhists. Two reported they were Muslim. One reported he was Kirant.

Community support. Respondents reported varying degrees of community support, yet they believe that their community is resilient and able to consider people with mental illnesses. Some reported that the community was generous and treated them well, while others said they felt like a burden to the community. Below are some respondent comments that highlight this issue:

> They are beautiful and very nice people, helpful and kind too.
> The community is helpful and generous; it is like a family.
> The community is indifferent and very rude with each other.
> The community sees me as a burden of the earth and a curse to the family.

Most respondents, approximately 86 percent (n = 85), reported that they go to friends or family when they have problems as opposed to seeking professional help. Only four respondents contacted mental health professionals or organizations for support. They reported that the community sees mental health problems as a curse, but their community's response is beginning to change slowly. For example, two respondents stated the following:

> Some think it [mental illness] is normal, whereas some still take it as a curse or burden.
> In the early times, [mental illness was seen] as a curse, a burden, but the concept is changing nowadays.

Almost all respondents reported that they are not prohibited from participating in community traditions or rituals. However, some exceptions existed as was noted by one respondent.

> The higher Brahmins do not allow their rituals to be practiced by a lower caste.

Despite their lower standing in the community, most of the respondents (n = 70) said that they stand up for their rights or negotiate a solution when there is conflict or disagreement.

Self-help or advocacy resources. Thirty-five respondents indicated that they knew of community resources to which they could turn for help. They identified the following resources: National Association of the Deaf and Hard of Hearing (NADH), Gandaki Association of the Deaf (GAD), National Federation of the Disabled–Nepal (NFDN), Kathmandu Association of the Deaf (KAD), Nepal National Federation of the Deaf and Hard of Hearing (NFDH), and Children-Women in Social Service and Human Rights (NGO) (CIWISH). The remaining respondents (n = 64) indicated that they did not know of any community resources that could help them.

Discussion

Mental health screening

The sample as a whole did not exceed the threshold scores for both the SRQ-20, which measures the presence of mental health problems, and the RAMH, which measures the presence of negative environmental factors that can impact mental health. However, 38 percent of the sample reported a score of eight or higher on the SRQ-20; 24 percent of the sample reported a score of six or higher on the RAMH. This finding suggests that there are mental health problems for some members of the deaf community.

Respondents' answers to the SRQ indicated that at least half of the sample experienced shaking hands, trouble thinking clearly, difficulty making decisions, nervousness or worry, and daily work suffering. Though these experiences can be symptomatic of a number of mental health disorders, many of which can be easily treatable, the difficulty a deaf individual can experience in gaining access to psychotherapy or other treatment may be greater than for those without hearing loss. The access to simple basic needs, such as a hearing aid, an interpreter, or other types of communicative devices, could help an individual resolve relatively minor mental health issues before they become unmanageable. Because of this lack of resources, deaf/hard of hearing individuals' conditions may go untreated and negatively affect their quality of life.

Despite the fact that a quarter of the sample reported having mental health problems, only 4 percent of respondents reported that they sought help for them. This finding is not surprising given a number of considerations. First, the way in which deaf Nepalis define mental health problems may be different than traditional conventions of diagnosis. A deaf individual may not recognize the signs or symptoms of mental illness per se, but rather consider it an idiosyncratic trait. Given that most hearing parents of deaf children in the United States (90%) do not communicate with their deaf child using sign language (Shantie and Hoffmeister, 2010), it is very likely that the Nepali deaf individual's hearing family and friends may not communicate well and thus, be unable to recognize signs of mental illness as well. In addition, given the lack of resources for the country as a whole, the finding that very few deaf participants sought outside professional help with problems is not surprising.

Impact of environmental issues on mental health

Even under conditions in which an individual is functioning healthily, the impact of environmental factors can negatively affect mental health and emotional states. These effects can be at a minimum, temporary and easily treatable and at their worst, diagnosable mental health disorders which are more challenging to treat. Less than half of the respondents reported the presence of environmental factors that can affect mental health, but some issues were reported more often than others. Separation of family and lack of privacy were the two most frequent experiences (in 44.4% of the sample and 42.4%, respectively). In and of themselves, these issues can present sadness, upset, and discomfort. However, when added to current mental health issues, such as those listed in the SRQ-20, overall mental health functioning and coping abilities may be severely strained and even lead to full blown disorders. The ways in which respondents experienced the environmental impacts and their effects on functioning were beyond the scope of this study. However, their effects on mental health can be serious and can lead to dysfunction and maladaptive coping.

Awareness of environment and political climate

The respondents' reports of environmental pollution and natural occurrences coincide with environmental indicators for the area. The respondents indicated that they were aware of the general

political environment, but not knowledgeable about the specifics. This finding is not surprising in that basic communication is lacking. Lack of communication is not only between respondents and their families, but also between the government and its deaf citizens because the country lacks an implemented policy for people with disabilities that includes accommodating for accessibility.

Basic needs, income, education, and household

Respondents indicated that not only are basic needs lacking, but assistive devices, such as hearing aids for those who are hard of hearing, are as well. The lack of assistive devices for those who have some residual hearing may be particularly frustrating because access to a hearing aid, for example, can make a vast difference in the degree to which an individual can integrate with the general community, including access to jobs and education. Thus not surprisingly, they reported a lack of job and educational opportunities as well as supportive community programs. The only university designed for the higher education of deaf individuals is in Washington, DC in the United States, which is virtually unavailable to deaf Nepalis because of limited resources and education. Several indicators suggest that they are somewhat isolated from the surrounding community. For example, the majority of respondents indicated that they did not know the details about the political climate of their country. Only a third of the respondents identified deaf-oriented agencies that would provide assistance to them. Approximately 90 percent of the respondents indicated that they live with either their parents or their spouses. This may account for the finding that more than three-quarters of the respondents said they would turn to their friends and family members if problems arose.

Community support

Community and family support may have different meanings among members of the deaf community in Nepal. As a global community and especially given technological advances, deaf individuals all over the world seek one another for support and friendship. This type of support may be due more to having access to someone who uses another visual language rather than a forum upon which to resolve problems. In the general community, deaf people of all international backgrounds make up a minority of the population. In developing countries or nations that do not provide adequate legislation and policies that allow deaf people to have communication access to the very limited services that are provided to others. In these situations when problems arise, a deaf individual may be forced to seek support from a hearing family member or family friend. For example, if a deaf Nepali experiences a physical altercation with a family member, the individual may turn to another family member for immediate support. The deaf individual may view this as family support, but it may not be the kind of ongoing, emotional and psychological support that can arise when two people can communicate well and connect with one another.

Thus, when the respondents indicated that they felt they had family support, the individual may have been referring to situational support in particular events or perhaps an experience of ‘lesser’ discrimination in comparison with individuals outside the family. Respondents were more apt to disclose community stigma and discrimination, but may have been less willing to do so when addressing family support.

Conclusion

In summary, the results of this study indicate that despite evidence that deaf individuals in Nepal experience psychosocial problems, the sample as a whole appears to have found ways of coping with these difficulties. The deaf individuals, like their hearing counterparts, suffer the effects of

poverty and limited resources. In addition, they suffer from limited access to communication and educational and social services which further 'disables' them. However, they also indicate they use different strategies to overcome barriers. They seek connections with their families and communities. They acknowledge that basic needs particular to deaf people, such as hearing aids, closed-captioning, and videophones, are difficult to attain. At the same time, they have created an internal deaf network comprising community members and sometimes family members to enhance the quality of their lives. For example, the researcher who collected this data is the daughter of deaf parents in Nepal. Though hearing, she used her knowledge and skills to help this study proceed for the purpose of bettering the lives of her parents and other deaf people in her country.

The findings also suggest that there are some deaf individuals who are experiencing mental health problems and need professional assistance and social support. The community and family networks, while providing support in varying types and degrees, are currently functioning as a primary form of support as opposed to governmental or professional support. However, family and friends may likely lack the knowledge and skills required to adequately treat these issues. Deaf members appear to be marginalized and stigmatized as evidenced by reports of discrimination, isolation, and deprivation of basic needs, such as hearing aids. Lack of knowledge, education, and service provision currently impedes individuals from receiving treatment and thus, improving their quality of life.

Strengths and limitations of the study design

The reliability estimates of both the SRQ-20 and RAMH indicate that the measures were adequate for this study. The use of the instruments were used previously with the hearing community in Nepal and also found to be adequate. Half of the sample, approximately 47 percent, lived in the urban areas around Kathmandu, an area where resources for hearing individuals are more prevalent. The effects of this geographic cluster may have influenced the responses of some individuals, especially questions about community support. Despite difficulties in accessing the deaf and hard of hearing population, the participants represented diversity, ethnicity and religion. The sample size exceeded the researcher's expectations; however, 99 respondents underrepresent the deaf community at large in Nepal. The inability to randomly sample may also lead to a biased interpretation of the results. Finally, there were specific measures that were not included in the instrument that may have been helpful with other analyses. For example, the questionnaire did not include specific questions related to the level of education, household composition, access to sign language both inside and outside the home, specific functioning levels, and the effects of ethnicity, caste, or religion. Other types of follow up questions would have been helpful, such as more in-depth questions about the types of support the individuals receive from their families, friends, and community. A comparison of these types of support with the deaf communities of other more developed nations would help to gain an understanding of the context in which support occurs. More narrow questions regarding the types of issues and support present among specific regions would have been helpful. Geographic and regional differences could be explored deeper.

Implications for social work and future research

The preliminary data suggest several courses of action. First, researchers should collect more data in order to gain a broader understanding of mental health needs, family and social supports, and coping strategies in this population. Second, social work researchers and practitioners should examine the capacity for existing support systems (i.e. mental health agencies and providers) to integrate deaf clients. Third, social workers, community members, and family advocates, both deaf and

signing hearing individuals, should receive training about mental health issues, such as recognizing signs and symptoms of mental illness, connecting community members with support, and educating families about how best to support them. Because a disabled person remains connected to the particular caste in which he or she is born, deaf individuals in each caste should receive training in order to provide advocacy to those in need. Fourth, providers should implement an advocacy network for both individuals with mental health problems and the providers who care for them. They need to reach out to those familiar with the deaf community in order to understand how best to access this under-recognized and under-served population. Finally, policy-makers should create a timeline for implementations of protections for those who have multiple disabilities (e.g. deaf and mentally ill). They can include both deaf individuals and those familiar with the issues that affect deaf people to help create a feasible and practical plan to include provisions for this population.

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Appendix A. SRQ-20

1.	Do you often have headaches?	yes/no
2.	Is your appetite poor?	yes/no
3.	Do you sleep badly?	yes/no
4.	Are you easily frightened?	yes/no
5.	Do your hands shake?	yes/no
6.	Do you feel nervous, tense, or worried?	yes/no
7.	Is your digestion poor?	yes/no
8.	Do you have trouble thinking clearly?	yes/no
9.	Do you feel unhappy?	yes/no
10.	Do you cry more than usual?	yes/no
11.	Do you find it difficult to enjoy daily activities?	yes/no
12.	Do you find it difficult to make decisions?	yes/no
13.	Is your daily work suffering?	yes/no
14.	Are you unable to play a useful part in life?	yes/no
15.	Have you lost interest in things?	yes/no
16.	Do you feel you are a worthless person?	yes/no
17.	Has the thought of ending your life been on your mind?	yes/no
18.	Do you feel tired all the time?	yes/no
19.	Do you have uncomfortable feelings in your stomach?	yes/no
20.	Are you easily tired?	yes/no

Appendix B. RAMH (selected items)

1. What are the general and environmental (natural) characteristics of the affected area?
2. What types of political divisions or conflict exist?
3. What are the types and degree of violence in the area?
4. What types of basic needs are lacking?
5. How is income generated?
6. What is the current educational level of the individual?
7. What is the household composition?
8. What is the ethnicity of the individual?
9. What are the religious practices of the individual?
10. Check if the following mental health issues are present:
    a) Sudden move?
    b) Witness to killings, executions, missing persons?
    c) Ongoing or daily exposure to violence?
    d) Torture?
    e) Sexual abuse?
    f) Domestic violence?
    g) Armed attacks, artillery shelling, bombing?
    h) Separation of family?
    i) Disruption of cultural and social rituals, family and community structure?
    j) Abduction?
    k) Imprisonment?
    l) Deprivation of food/water?
    m) Epidemics with deaths?
    n) Breakdown in traditional family roles and support networks?
    o) Ethnic, political, religious disputes?
    p) Lack of privacy?
    q) Disruption of status (economic decline, loss of power in the community)
    r) Extortion
11. Cultural questions:
    a) How does the community treat and consider people with physical illness and handicaps?
    b) Ways conflict and disagreement are dealt with by people in the current situation.
    c) How does the culture/traditions consider and react to mental illness and problems?
    d) How do people ask for psychological support when they need it?
    e) How do people deal with death, burial, bereavement, and loss?
    f) In the current context, are there any situations in which traditions and rituals cannot be practiced?
12. Resources and coping skills of the community and/or individual:
    a) What is the general resiliency and functioning of the community?
    b) Does the community show cohesion and solidarity?
    c) Is there communication between groups?
    d) Do formal or informal educational activities exist?
    e) Are there any self-help or advocacy groups that help the community?