

MOBILE LEGAL CLINICS AS A RESPONSE TO DISASTERS: A CASE STUDY FOR PROVIDING FUTURE ASSISTANCE

—SETH FRYE, B.S.^{*}, PROFESSOR DAVID W. TUSHAUS^{**}
AND NIRMAL K. UPRETI^{***}

This article explores the use of Mobile Legal Aid Clinics to assist survivors of disasters over a four-year period. The article is a case study of the relationship between the earthquakes in Nepal in 2015 and Mobile Legal Clinics deployed as part of the disaster relief that followed. But the lessons are transferable to other venues and other disasters, including India and including pandemics like the present COVID-19 disaster. Mobile clinics can be adaptable in terms of delivery, from a tent to a virtual outreach. The goal here is to help spur development of new approaches.

The people who survive disasters often face many unique, complex legal issues such as loss of income and documents, land ownership questions, landlord tenant disputes, disaster relief eligibility, and more. Due to these issues, it is important to provide this vulnerable population with legal assistance. Furthermore, this paper explores the efficacy of mobile legal clinics and their potential for applications in other present and future disasters. This is an important area of research because it helps to provide insight into the needs for legal assistance in disaster situations. This information should be considered in allocating resources for further development and attunement for future mobile clinics, whether they are for disaster situations like this or other legal issues.¹

Keywords: Nepal earthquake, mobile legal clinics, disaster relief

^{*} Criminal Justice/Legal Studies Candidate.

^{**} Criminal Justice & Legal Studies, Missouri Western State University.

^{***} Executive Director Forum for Nation Building (FNB).

¹ The NGO and Professor co-authors who worked together to create the mobile clinics to address the Nepal earthquake have also worked together to create and study mobile clinics for sex and gender based violence in Nepal.

I. EARTHQUAKES IN NEPAL

Nepal experienced a series of destructive earthquakes on April 25, 2015.² Natural disasters like earthquakes, floods and drought can add a strain on any nation and its people, especially lower income persons. This is only one of the many problems Nepal faced in 2015. The government response was limited due to the disaster-related damage to infrastructure and relative poverty, as well as continued political turmoil.³ Despite these challenges, Nepal had created a plan in case of a devastating earthquake. Because of its high-risk location, Nepal had developed a Mass Casualty Management Plan [MCMP] alongside various non governmental organizations.⁴ However, these plans fell through due to how remote the region's most afflicted by the earthquakes were. There were 14 highly affected regions, with many being essentially unreachable directly after the earthquake, except by foot or helicopter.⁵ This added to the complications in adequately responding to this disaster.

Unfortunately, inadequate response to disasters is the situation in most low-income countries, especially if disasters continue to become more commonplace. The rate of natural disasters, as well as their financial burden, is rising at an alarming rate.⁶ Nepal is one of the best examples for shortcomings occurring due to a lack of money and resources. About 80% of its population lives in rural communities and depends on subsistence farming.⁷ This translates to the nation being ranked in the bottom quartile of international development standings and ranking 145th out of 187 countries on the United Nations Development Program's Human Development Index.⁸ This is a significant shortcoming because typically the international community sends volunteers, not money, to help disaster-stricken countries. The focus of international aid is on distribution of existing resources, and not provision of them. Additionally, paying for disasters does not seem to be getting any easier for poor countries like Nepal. Impoverished communities are more vulnerable to the effects of a disaster because of their lack of resources and infrastructure, which directly affects their ability to adequately prepare for disaster.⁹ This is why disaster response is so important. The effect on impoverished communities is disproportionately more devastating than on wealthier or well-off

² Bulletin of the World Health Organization, Nepal Health Emergency, 93 Bull. WHO 363 (2015).

³ Michel D. Landry, Phillip S. Sheppard, Kit Leung, Chiara Retis, Edwin C. Salvador, and Sudha R. Raman, "The 2015 Nepal Earthquake(s): Lessons Learned from the Disability and Rehabilitation Sector's Preparation for, and Response to, Natural Disasters", 96 PTJ 1716 (2016).

⁴ *Id.*, 1717.

⁵ *Ibid.*

⁶ *Id.*, 1715.

⁷ *Ibid.*

⁸ *Ibid.*

⁹ Jenny R. Hernandez and Anne D. Johnson, "A Call to Respond: The International Community's Obligation to Mitigate the Impact of Natural Disasters", 25 Emory Int'l L. Rev. 1090-91 (2011).

communities.¹⁰ One of the unique challenges faced by people in poorer regions is their lack of wealth precludes them from inclusion in the preparedness discussion, stunting their disaster-readiness and participation in discussions deciding what precautions will be taken.¹¹ This is to say, that they possess distinctly less power and therefore their voices are less likely to be heard or the preparation is less likely to reflect their needs and desires than it otherwise would be if their voices were equally heard.

II. DISASTER RESPONSE

One of the difficulties in responding to a natural disaster in any country, but especially a developing country or one with a limited tax base and safety net for the people who are directly affected, is the limited government reserves. The massive amounts of mobilization that are needed immediately following a disaster can only be sustained for a few weeks.¹² Responses need to be longer because there is a significant limit to how much of a rebuild that can actually take place within a few weeks. This is because reserves are limited, and deployment of these reserves is difficult. The difficulty in reserve deployment is compounded when one considers that infrastructure may have been damaged in the disaster. Even if the infrastructure is intact, storing massive quantities of resources is cost-prohibitive in and of itself. Maintaining government reserves is very costly, with distribution being a very difficult task, which implies that large-scale government reserves cannot be considered a viable strategy for disaster relief.¹³ In the case of Nepal, the international community had a massive outpouring of support for it. There were 36 National and 137 international medical teams that responded to Nepal's appeal for humanitarian aid.¹⁴ The goal of foreign disaster relief aid is to fill the space between what is needed and what the government can supply. It is this gap between supply and demand that presents the need for an international response,

¹⁰ Chiaki Ota, Note: "Legal Humanitarian Assistance: Instituting Disaster Response Clinics and Law Firm Engagement", 19 *Geo. J. Poverty Law & Pol'y.* 516 (2012).

¹¹ Karen da Costa and Paulina Pospieszna, "The Relationship between Human Rights and Disaster Risk Reduction Revisited: Bringing the Legal Perspective into the Discussion", 6 *J. Int'l Hum. L. S.* 73 (2015).

¹² Sophie Goyet, Rajan Rayamajhi, Badry Nath Gyawali, Bhola Ram Shrestha, Guna Raj Lohani, Damodar Adhikari, Edwin Salvador, Roderico Ofriin, Jos Vandelaera and Reuben Samuela, "Post-Earthquake Health-Service Support", 96 *Bull. WHO* 286 (2018).

¹³ Jiang-Hua Zhang, Xiao-Qing Sun, Rui Zhu, Ming Li, and Wang Miao, "Solving an Emergency Rescue Materials Problem under the Joint Reserves Mode of Government and Framework Agreement Suppliers", 12 *PLoS ONE* 2 (2017).

¹⁴ Sophie Goyet, Rajan Rayamajhi, Badry Nath Gyawali, Bhola Ram Shrestha, Guna Raj Lohani, Damodar Adhikari, Edwin Salvador, Roderico Ofriin, Jos Vandelaera and Reuben Samuela, "Post-Earthquake Health-Service Support", 96 *Bull. WHO* 286 (2018).

with the goal of reducing disaster-related disability in both the short and long term.¹⁵

Our collective vulnerability to natural disasters is what creates a moral obligation for the international community to respond to natural disasters.¹⁶ This is because there is no international legal mandate expressing how the international community should respond to natural disasters.¹⁷ International volunteers typically begin by distributing preexisting government resources, while procuring additional resources for distribution after the backstock runs out.¹⁸ This is where Nepal was caught off-guard, their existing reserves were not well stocked, and this was a significant road block on the road to recovery. Both the country and its supporters had to overcome an initial lack of infrastructure, as well as repairing or replacing damaged infrastructure, some of which was damaged in the earthquake.

Not only has Nepal had the support of other countries, but it has had support from various non-government organizations as well. One of Nepal's biggest supporters has been the World Health Organization. WHO has contributed more than \$1.1 million U.S. to Nepal's recovery in the form of medical supplies.¹⁹ By December 2016, 375 of the 662 damaged health care facilities having been repaired or rebuilt.²⁰ This progress has allowed for focus to shift from emergency response to processing and recovery. As conditions continue to improve, the question shifts from an emergency response to helping to create a sense of normalcy for the Nepalese.

One of the most pressing needs immediately following a disaster is economic relief and recovery. This is because basic needs skyrocket in price due to scarcity and private property is damaged or even ruined. Despite this, economic activity following a disaster is typically higher than previous levels due to rebuilding efforts, particularly by the government and NGOs.²¹ Experts tend to believe this is due to all of the economic activity stimulated by government and

¹⁵ Michel D. Landry, Phillip S. Sheppard, Kit Leung, Chiara Retis, Edwin C. Salvador, and Sudha R. Raman, "The 2015 Nepal Earthquake(s): Lessons Learned from the Disability and Rehabilitation Sector's Preparation for, and Response to, Natural Disasters," 96 PTJ 1716 (2016).

¹⁶ Jenny R. Hernandez and Anne D. Johnson, "A Call to Respond: The International Community's Obligation to Mitigate the Impact of Natural Disasters," 25 Emory Int'l L. Rev. 1091 (2011).

¹⁷ *Id.*, 1092.

¹⁸ Jiang-Hua Zhang, Xiao-Qing Sun, Rui Zhu, Ming Li, and Wang Miao, "Solving an Emergency Rescue Materials Problem under the Joint Reserves Mode of Government and Framework Agreement Suppliers," 12 PLoS ONE 5 (2017).

¹⁹ Bulletin of the World Health Organization, Nepal Health Emergency, 93 Bull. WHO 363 (2015).

²⁰ Sophie Goyet, Rajan Rayamajhi, Badry Nath Gyawali, Bhola Ram Shrestha, Guna Raj Lohani, Damodar Adhikari, Edwin Salvador, Roderico Ofri, Jos Vandelaera and Reuben Samuela, "Post-Earthquake Health-Service Support," 96 Bull. WHO 286 (2018).

²¹ Anita A. Pena, Sammy Zahran, Anthony Underwood, and Stephan Weiler, "Effects of Natural Disasters on Local Non profit Activity," 45 Growth and Change 591 (2014).

non profit rebuilding efforts.²² However, when the government and non profits are rebuilding, small and family-owned businesses are typically left to fend for themselves, meaning that they are disproportionately affected by these types of disasters, despite the fact that their resilience is often seen as key to community revitalization.²³ The only problem is traversing this minefield of legalese in order to claim their property and receive replacements. This task calls for legal counsel, an amenity that is usually too expensive for a person ravaged by a disaster, but a practice that could see growth due to the advent of resources like mobile legal clinics.

So, if individual citizens are insulated from the economic depravities of disaster relief, who is the most vulnerable population? In the same vein as citizens, large corporations are also insulated from it due to their relative wealth and resources.²⁴ The most disproportionately affected group is small businesses, particularly family-owned businesses.²⁵ This is because typically these small businesses are relied on for immediate disaster relief due to them being on the frontlines of the disaster and typically being a pillar for community economic activity.²⁶ This is particularly devastating to smaller, local NGOs that are the first responders and are relied on until larger national or international aid bodies can assist. Additionally, providing disaster relief is not something that can be claimed by insurance, meaning that all of their disaster relief efforts are at the direct detriment to themselves. Many of these smaller businesses find themselves in dire economic circumstances following a disaster, due to them being less financially stable than their larger business counterparts, as well as lacking the access to resources that the larger businesses may have.²⁷

III. MOBILE LEGAL CLINICS IN A DISASTER

Part of the rebuilding process in a country after a natural disaster is to provide more resources to the people afflicted by the disaster. In order to meaningfully provide resources, the focus must be improving the community long-term by educational resources to allow for meaningful forward progression.²⁸ Providing

²² *Id.*

²³ Anita A. Pena, Sammy Zahran, Anthony Underwood, and Stephan Weiler, "Effects of Natural Disasters on Local Non profit Activity, 45 Growth and Change 592 (2014).

²⁴ Anita A. Pena, Sammy Zahran, Anthony Underwood, and Stephan Weiler, "Effects of Natural Disasters on Local Non profit Activity, 45 Growth and Change 591-592 (2014).

²⁵ *Id.*, 592.

²⁶ *Id.*

²⁷ Anita A. Pena, Sammy Zahran, Anthony Underwood, and Stephan Weiler, "Effects of Natural Disasters on Local Non profit Activity", 45 Growth and Change 592 (2014).

²⁸ Michel D. Landry, Phillip S. Sheppard, Kit Leung, Chiara Retis, Edwin C. Salvador, and Sudha R. Raman, "The 2015 Nepal Earthquake(s): Lessons Learned from the Disability and Rehabilitation Sector's Preparation for, and Response to, Natural Disasters", 96 PTJ 1721-1722 (2016).

these resources can not only help rebuild, but provide long term prosperity that could mitigate future disasters. This is because merely surviving the disaster is not enough, it has real, long-term impacts. Medical advancements mean that the focus is no longer on survival so much, but instead should be on helping survivors resume their daily lives with their newfound disabilities.²⁹ These disabilities impact every aspect of everyday life and must be considered in the healing of a community. Part of fending for and protecting the injured is creating a forum for personal advocacy because it creates a structure of stability and refuge for those who need it.

Immediately after a person is safe from a disaster, their legal issues begin to roll in, another complication for which resources must be allocated. Natural-disaster victims face a slew of complex legal questions about their rights, duties, and options for disaster recovery as it relates to landlord-tenant disputes, foreclosure, and public benefits.³⁰ These are questions regarding what their rights are, who they can trust, and where they can go, which are tough to answer and require an individualized response. These are typically considered “right-to-return” concerns, whereby the concern is how the community will move forward, how an individual can make their return, and what will be left for them when they do.³¹ Additional thought must be given to children because their rights and needs are often forgotten as well.³² Take for example the New York Legal Assistance Group after Hurricane Sandy in 2013. It provided much needed legal advice to victims as well as ongoing assistance and even representation needed to resolve post-disaster legal issues.³³ Or New Orleans after Hurricane Katrina, where all of the existing legal infrastructure was heavily affected by the hurricane, out of state help proved vital to bring order.³⁴ Keep in mind, these issues were prevalent in a much richer nation, the United States, so one can only imagine the legal issues that people in poorer regions such as Nepal face. A wealthier nation will have more access to well-developed infrastructure and therefore is better able to mitigate the effects of a natural disaster.³⁵

Considering both the unique legal issues that arise following a disaster, as well as the damage to, or outright lack of legal infrastructure, makes the issue of

²⁹ *Id.*, 1716.

³⁰ Jordan Ballard, Julia Howard-Gibbon, Brenda Muñoz Furnish, and Aaron Scheinwald, “Natural Disasters, Access to Justice, and Legal Services”, 17 CUNY L. Rev. 5 (2013).

³¹ Jenny R. Hernandez and Anne D. Johnson, “A Call to Respond: The International Community’s Obligation to Mitigate the Impact of Natural Disasters”, 25 Emory Int’l L. Rev. 1094 (2011).

³² *Id.*

³³ Jordan Ballard, Julia Howard-Gibbon, Brenda Muñoz Furnish, and Aaron Scheinwald, “Natural Disasters, Access to Justice, and Legal Services”, 17 CUNY L. Rev. 2 (2013).

³⁴ Chiaki Ota, Note: “Legal Humanitarian Assistance: Instituting Disaster Response Clinics and Law Firm Engagement”, 19 Geo. J. Poverty Law & Pol’y. 524 (2012).

³⁵ Jenny R. Hernandez and Anne D. Johnson, “A Call to Respond: The International Community’s Obligation to Mitigate the Impact of Natural Disasters”, 25 Emory Int’l L. Rev. 1090 (2011).

access to justice even more pressing in regions afflicted by disasters, even years after the fact. This is even disregarding the preexisting legal issues that the poor and disenfranchised had not been able to reconcile prior to the disaster. Here lies one of the key issues in dispatching mobile clinics, they are typically only around for a short period of time before leaving. The issues with a lack of longevity in their deployment is two-fold, first it means that they cannot adequately appreciate their cultural relevance and the situation around them creating the need for legal assistance, and second, they cannot help everyone with their problems if they are not deployed long term. Lawyers for mobile legal clinics must be sensitive to the cultural climate in an area afflicted by disaster, as well as the foreign rule of law that governs them.³⁶ These lawyers are usually good at taking cultural values into consideration. Lawyers who work for mobile legal clinics are often engaged in a practice called cause lawyering, which is a system where an attorney takes a case because they believe in the larger social message or the cause behind the case.³⁷ These causes can be anything the lawyer values, socially, culturally, politically, economically, or legally.³⁸

Understanding the process of justice is even more important when one considers that the goal of clinics like these is not just to alleviate individual issues, but also to provide the tools necessary for community activism to continue the struggle for access to justice long after they leave, a process referred to as “long-haul justice”.³⁹ Therefore, a key to legal services following a natural disaster is to have the focus be on human rights, because a human-rights based approach leads to greater individual empowerment.⁴⁰ Luckily for the citizens of Nepal, their government is supposed to take a human-rights based approach according to their 2009 National Strategy for Disaster Risk Management, however this is a policy document and is not legally binding.⁴¹ A policy like this is positively correlated to improved general human rights in a country.⁴² Empowerment can be boiled down to three core principles: participation, information, and non-discrimination.⁴³

- Participation involves encouraging those who are marginalized to take an active, and even proactive, stance.

³⁶ Sarah Buhler, “The View from Here: Access to Justice and Community Legal Clinics”, 63 UNB LJ 4 (2012).

³⁷ Chiaki Ota, Note: “Legal Humanitarian Assistance: Instituting Disaster Response Clinics and Law Firm Engagement”, 19 Geo. J. Poverty Law & Pol’y. 520 (2012).

³⁸ *Id.*

³⁹ Sarah Buhler, “The View from Here: Access to Justice and Community Legal Clinics”, 63 UNB LJ442 (2012).

⁴⁰ Karen da Costa and Paulina Pospieszna, “The Relationship between Human Rights and Disaster Risk Reduction Revisited: Bringing the Legal Perspective into the Discussion”, 6 J. Int’l Hum. L. S 68 (2015).

⁴¹ *Id.*, 77.

⁴² *Id.*, 68.

⁴³ *Id.*, 73.

- Information is informing people of their rights and abilities.
- Non-discrimination means mitigating preexisting factors that preclude minorities from being actively involved.

Being able to understand the political backdrop to their actions makes legal actions more effective and provides the people with tools for meaningful future changes. The longer a mobile clinic is engaged, the more meaningful an impact it can make. Urgent legal issues must be attended to, but the clinic must be there a long-term commitment.⁴⁴ A long-term approach is necessary for both providing resources and rebuilding infrastructure in regions ravaged by natural disasters. In addition, it provides people with the tools they need in terms of personal healing, and the ability to move on with adequate legal and physiological resources.

IV. THE SURVEY RESULTS

The mobile legal clinics deployed in Nepal have collected five sets of feedback surveys. These surveys took place first in early 2016, early 2017, late 2017, mid 2018, and late 2019. The dates between the disaster and surveys range from about six months post-disaster to about four years post-disaster. The turn-around time on the earliest set of surveys gives some insight into the earliest implementation stages of the mobile legal clinic because these surveys had to be created, issued, and sent to the United States for tabulation within this span of about six months. For comparison purposes, this paper has decided to analyze the results in a dichotomy. The cut off period between the two sets for analysis is 2018, so the first three sets from 2016 and 2017 will be included. The second set will analyze the two data sets from the 2018 and 2019 surveys.

All surveys conducted used the same survey format with the same survey questions. The survey itself was 10 questions asked in Nepalese. The first three questions asked about what legal issues the clients had. Specifically, the first question asked, "I have the following legal problems because of the earthquake:". The second question asked, "What issues did you seek help on from the Mobile Clinic (check all that apply)". The third question asked, "What kind of help did you receive from the Mobile Clinic (check all that apply):". The fourth question asked, "How helpful has the Mobile Clinic been for you?"

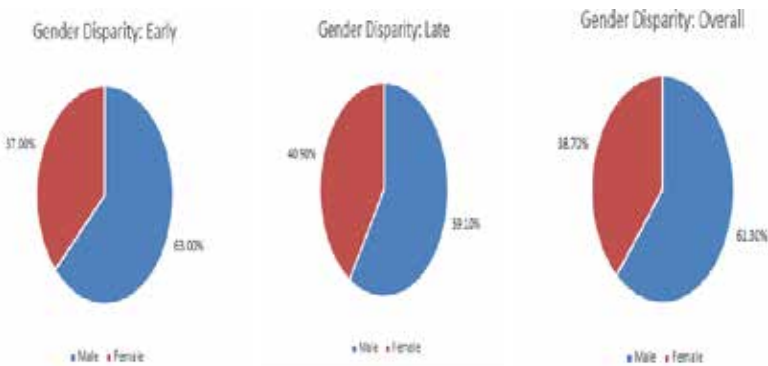
The next five questions were all about demographics. These questions asked for the participant's gender, age, monthly household income, education level, and family size, in that order. The tenth and final question was open ended. It asked, "Please describe what additional training would be helpful?" and "Other

⁴⁴ Jordan Ballard, Julia Howard-Gibbon, Brenda Muñoz Furnish, and Aaron Scheinwald, "Natural Disasters, Access to Justice, and Legal Services", 17 CUNY L. Rev. 5 (2013).

information you think may be helpful". This was to introduce a section for specific written feedback from the recipients of the aid, on the clinic in terms of what additional training the individual thought would be helpful for the Mobile Clinic to introduce.

This paper will focus on the first three questions to see how the needs of the community shifted over time. It will also analyze any gender disparity. Questions eight and nine had a problem in their construction, specifically letting their answers overlap which makes using this part of the demographic data difficult because of its ability to be skewed. We will discuss its results, particularly in how the demographics shifted from early to late survey sets.

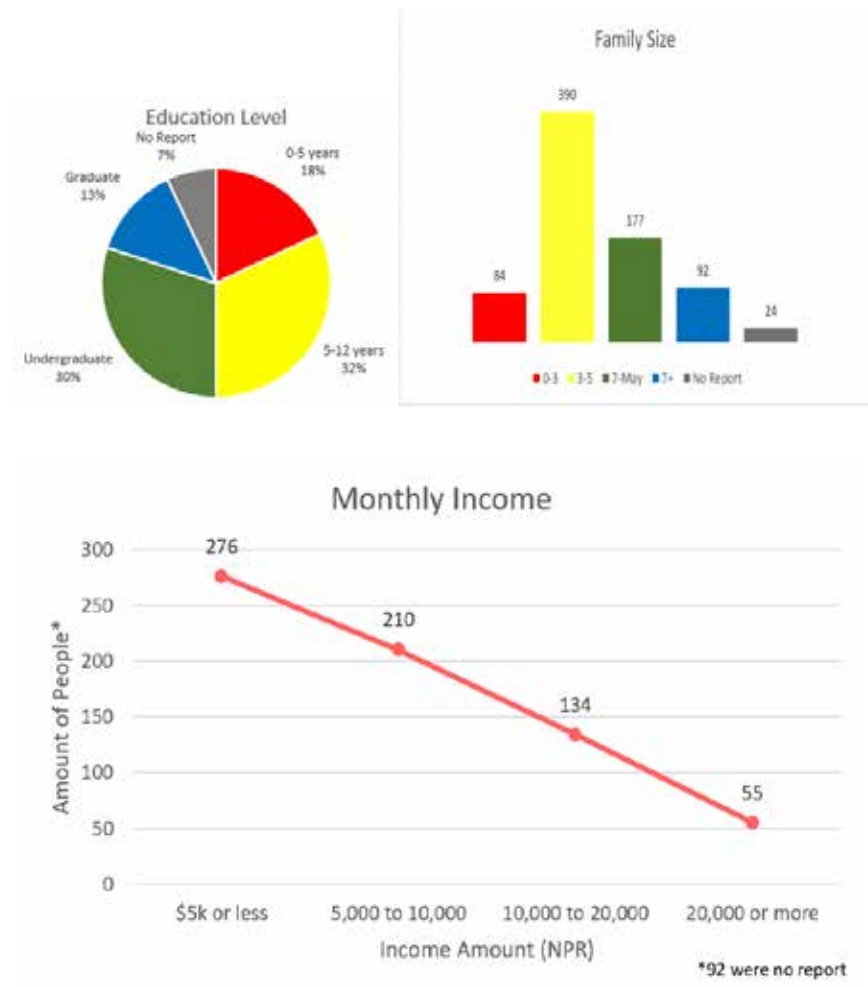
Question seven, "Monthly income of household:" is one of the most important questions to analyze due to relative wealth having an impact on what needs came about due to the natural disasters. The tenth question, "Please describe what additional training would be helpful?" and "Other information you think may be helpful", is interesting, but it also proved to be unwieldy because: one, it was often left blank, so therefore analyzing it would not necessarily be indicative of the populations' feelings as a whole, and two, because it was a write-in question, translating the Nepalese is difficult and often times, infeasible. Question six, "What is your age?" is also a write-in, however, that will be analyzed with its best approximation, along with gender from question five to give at least a rough idea of demographic statistics.



There were 767 total participants. The first set of surveys given at the early clinics right after the earthquake had 432 participants, which is 56.3 percent of the total surveyed population. The second set had 335 participants, which is 43.7 percent of the total population. In terms of demographics, for the entire population of the surveys, there was a 61.3 percent male population and a 38.7 percent female population. In the second set, there was an increase in female participation from 37.0 percent early to 40.9 percent late, however, it did not prove to be a

statistically significant increase. On question five, “What is your gender?”, there was a third gender option “Other”, however, none of the 767 participants marked it.

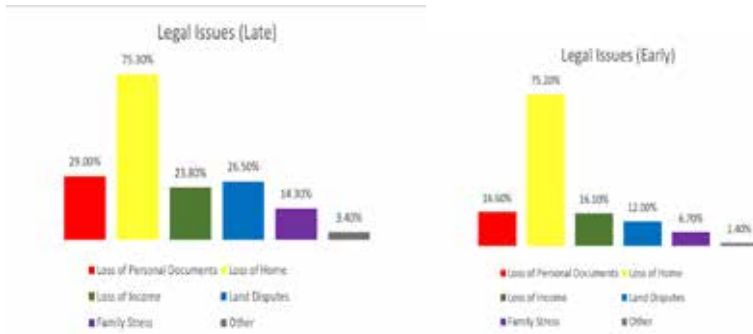
The first section had an average age of 36, ranging between 15 and 77. However, 11.9 percent of the surveyed population in the first section neglected to fill it out. Our later section saw a reduction in average age, at 34, as well as having a much narrower range of between 16 and 70. The second section also saw a reduction in leaving this question blank, however, 9.8 percent of the population still neglected to fill it out.



In terms of other demographics, education level, monthly income, and family size will be analyzed separately due to the aforementioned difficulty in construction. First, in terms of educational levels: 18 percent had between zero and five years of formal education representing primary education. Another 32 percent had between five and twelve years of formal education, representing secondary education. Overall, 43 percent of the survey's participants had some post-secondary education, with 30 percent doing some undergraduate course work, or completing an undergraduate degree. Another 13 percent of the overall population had some graduate degree level coursework. Seven percent of the survey population declined to answer this portion of the survey. Average monthly income roughly correlated with education level. Monthly income was measured in Nepalese rupee. Only 675 people from the overall 767 surveyed population answered this question. About 35 percent of the overall population made 5,000 Nepal Rupees⁴⁵ or less per month, the largest section of the survey, of the section that answered this question the percentage was about 41 percent. Another 27 percent of the overall population stated that they made between 5,001 and 10,000 Nepal Rupees per month. The second smallest population of 17 percent said that they made between 10,001 and 20,000 Nepal Rupees per month. Finally, only seven percent said that they made more than 20,000 Nepal Rupees per month. Roughly 12 percent of the overall population declined to answer this section of the survey.

Outside of demographics, the answers to the first three questions saw significant variance in many situations. In this case and throughout the paper, significant variance refers to it both passing the Chi-Square test and having a Phi value that denotes significant variance. The Chi-Square test measures the observable distribution if the distribution fits what is expected given every variable is independent, which in this case where every single individual is different and comes from different circumstances, all variables are. The value of Phi is a measure of correlation which is a predictive measure that calculates whether a data set is within acceptable margins of error based on the preceding data set, and this is not the best single measure of significance, but when included with Chi-Square provides a complete picture of each data set as they relate to each other.

⁴⁵ An income of 5,000 Nepal Rupees a month is about \$43 per month at the exchange rate at the time this article is written.



The first question asked which legal issues a person had because of the earthquake. Respondents could choose more than one issue, so the percentages add up to greater than 100. There were six options: loss of personal documents (like identification, land deed, etc.), loss of home, loss of income (please specify), land disputes, family stress resulting in violence or fear of violence, or other.

Loss of documents was chosen 21.9 percent of the time overall by all the respondents. Surprisingly, the earlier respondents chose it far less at 16.6 percent of the time, as opposed to the later respondents who chose loss of personal documents 29.0 percent of the time. This is a very significant increase in the later population. The research did not probe into why this is. It could be that right after the earthquake the population had more immediate concerns, or they did not realize documentation was missing or a potential legal issue. Whatever the reason, it would appear that the mobile clinics continued to serve a need, but that the need just changed over time.

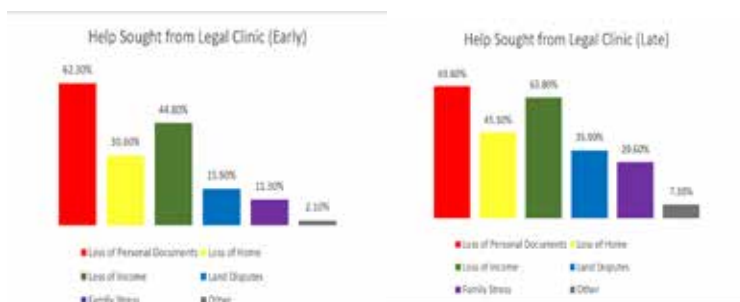
On the other hand, the loss of the home did not seem to change much over time. When you look at this issue it is the most prevalent one affecting those attending the mobile clinics. Roughly three fourths of the respondents identify this as one of the issues affecting them after the earthquake. This is an indication the mobile clinics were attracting people who were the most seriously affected by the 2015 earthquake. Unfortunately, and perhaps not surprisingly, this issue does not appear to be getting solved between the group in the first mobile clinics and those in the second mobile clinics. This is a sizable percent of the population. Homelessness is a serious problem that has been exacerbated in Nepal by the earthquake.

Loss of income is another issue that was chosen more often by the second group than it was by the first group. These are not necessarily the same groups of people attending the early and late mobile clinics. The research did not try to determine how many of the respondents had come to earlier mobile clinics. In either case, there was nearly a 50 percent increase in loss of income for

respondents between the first group and the second group. This is statistically significant and worth noting that so many people suffered a loss of income.

When you look at land disputes overall, this problem was chosen by the respondents 18.2 percent of the time overall. Perhaps a more interesting concern is how much this issue seems to have grown among the clients of the earliest clinics and those that took place later. The first mobile clinic clients chose land disputes as a problem only 12.0 percent of the time. However, the later mobile clinic clients chose land disputes 26.5 percent of the time. This is a significant increase, of over twice the percent of people choosing it between the early clinics and the later clinics.

The research also explored whether family stress was an issue. Overall, 10.0 percent of our mobile clinic clients identified family stress as an issue. However, only 6.7 percent of the early mobile clinic clients identified this as an issue. This percent more than doubled to 14.3 percent of the time in the later clinics. Some of the earlier issues may be a contributing factor for this increase. The continued homelessness coupled with increased issues around loss of documents and land disputes would understandably increase family stress. So this statistically significant change is consistent with the other issues measured in the part of the study.



The second question asked which issues the individuals came to the Mobile Clinic seeking help for. The most common issue respondents sought help for was the loss of personal documents. Personal documents are often needed for individuals to make claims for government assistance or to help resolve land disputes. So, while at first glance the loss of personal documents may not seem important, this is a common problem for disaster survivors. The respondents in Nepal were no different than other disaster survivors. This can help other programs to recognize where assistance may be needed. There was a slight, but statistically significant variance in how many respondents chose this option. It was chosen by 65.4 percent of the entire population of respondents. However, the earlier respondents chose it 62.3 percent of the time, while the later mobile clinic respondents chose it 69.6 percent of the time. In both groups it was the most common issue

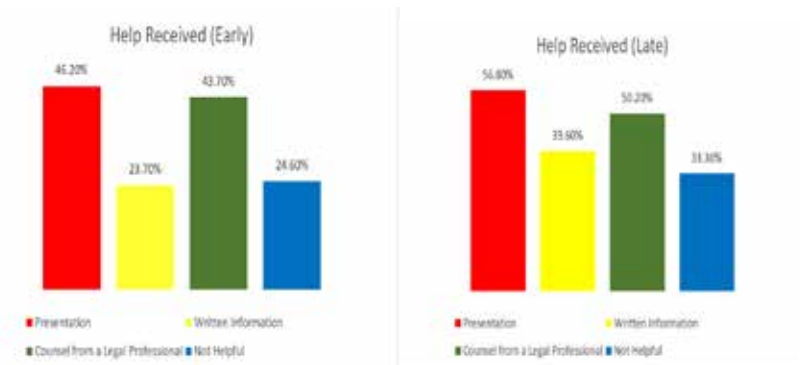
respondents sought help for. Personal documents remain an important problem survivors of disasters need help with, even, and perhaps especially, four years after the disaster occurs.

The loss of home showed a much higher percent increase in respondents seeking help from the first group to the second group at a nearly 50% increase. This was also a statistically significant change. It was chosen 36.9 percent of the time overall; but it was only chosen 30.6 percent of the time in the first mobile legal clinics. This increased to 45.3 percent of the time in the later clinics. The research does not address the reason for this increase. Causes may include a delay in some housing becoming uninhabitable. Some respondents may not have realized they needed legal help with their housing problem until the later clinics were conducted. The more important lesson may be that disaster responses should recognize that some of the long term problems like loss of housing may go on for years after the disaster, and it may take years before help is sought for them.

Loss of income also saw a significant increase in help sought from the early to the later clinics. Over half the respondents sought help for this problem across all mobile clinics operated. But in the first mobile clinics help was sought for loss of income 44.8 percent of the time. This increased over 40 percent to nearly 2/3rds of the respondents seeking help in the later mobile clinics. This is a statistically significant increase as well.

Land dispute requests more than doubled from the early to the later clinics. This was not as prevalent a problem as the first three problems discussed, but it became more prevalent as time went on. Respondents in the first mobile clinics only identified land disputes as a problem 15.9 percent of the time. This percent more than doubled by the time the later clinics were conducted, 35.9 percent of the respondents identifying land disputes as part of their problem. This difference is statistically significant.

Stress in the family can be caused by any of these disasters related issues. As the issues stretch on over the years, the number of families feeling stressed from them is likely to increase. A close look at our mobile clinic responses appears to support this assumption. Overall, family stress was chosen by 18.7 percent of the mobile clinic respondents. This is a significant number of families. But what a comparison between earlier and later clinic respondents shows is that only 11.3 percent of the early mobile clinic respondents said there was stress in the family. This number grew significantly to 28.6 percent of the later mobile clinic respondents saying there was stress in the family. This is greater than a 150% increase and a statistically significant change.



We wanted to know what kind of assistance the respondents found helpful from the Mobile Clinic. We wanted to know whether the respondents found the presentation helpful, or if they also received written information or counsel from a legal professional that was helpful. Finally, we wanted to know if the clinic was just not helpful at all.

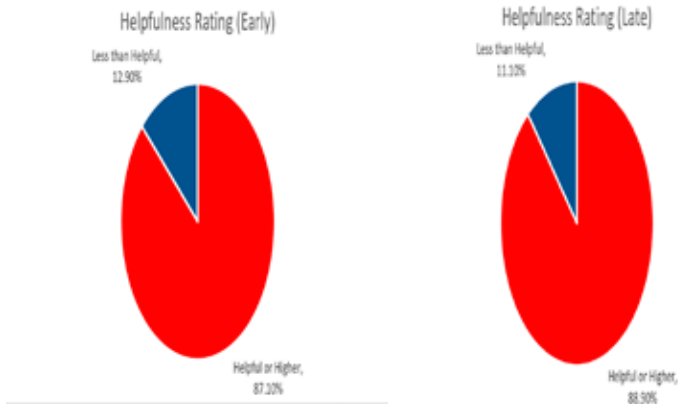
Unfortunately, over one-fourth of the respondents did not find the mobile legal clinic helpful. It would have been good to find out why they did not find it helpful, but that was not a part of the research project. This number of respondents who found the early mobile clinic not helpful is actually lower at 24.6 percent of the time. The later clinic attendees found the clinic unhelpful 33.3 percent of the time. This was a statistically significant difference.

While there were a significant number of respondents who found the clinic to not be helpful, there were many who did find its various aspects helpful. In terms of the presentation, over half the respondents found this part of the clinic helpful. The later mobile clinic respondents were a little more likely to find the presentation part of the clinics more helpful than the earlier respondents. As you can see in the chart above, the earlier clinic respondents chose presentations to be helpful 46.2 percent of the time, while the later clinic respondents finding it helpful increased by over 10 percent to 56.8 percent of the time. This was statistically significant.

Written material was rated as helpful 30.6 percent of the time by all respondents. The early mobile clinic respondents only found the written material helpful only 23.7 percent of the time. This helpfulness rating increased by over 60 percent to 39.6 percent in the later clinics. This difference was also statistically significant.

Counsel from a legal professional was found helpful much more often than the written material. Overall, 46.5 percent of the respondents found this part of

the mobile clinic helpful. Respondents in the early mobile clinics found counsel and advice helpful 43.7 percent of the time. But the later clinic respondents found counsel and advice helpful half the time. However, this difference was barely statistically significant. Unfortunately, we do not know whether only about half the respondents received counsel and advice. We also do not know if respondents did not find something helpful because they learned there was nothing that could help them.



Question four tried to get at helpfulness a little differently. There are no categories, so the responses may seem. Respondents were able to rate the clinic on a likert scale. The researchers asked how helpful the Mobile Clinic was for the individual. There were five choices on the scale, and the options ranged from very helpful to not at all helpful. In order to analyze this, the results were split into two categories: Helpful or higher (Very helpful and Helpful) and Less than helpful (A little helpful, Not very helpful, or not at all helpful). Helpful or higher was answered roughly 88 percent of the time in whatever way you split out the results. Less than helpful was answered 12.1 percent of the time. The first section answered it 12.9 percent of the time and the second answered it 11.1 percent of the time.

V. SURVEY COMPARISONS AND ANALYSIS

As a whole, the most prevalent issue was the loss of the home. This seemingly corresponded to the answer “earthquake reconstruction authority information relevant to victims” in question two. However, despite over 75 percent of respondents answering that they suffered loss of home, only 53 percent sought that information from the Mobile Clinic. One explanation for this is that they could have dealt with that issue before seeking help for other issues. All other issues were only experienced by less than a quarter of the population surveyed.

The most common help sought was earthquake survivor benefits from the government, which nearly two-thirds of the population sought. The least prevalent issue was domestic violence or the fear of violence. Individuals most often received either presentations or counsel from professionals concerning their issues. Both were received by about half of the population. Written information or other were both prevalent options as well, received by approximately 30 percent of the population each.

Through the first three questions, “I have the following legal problems because of the earthquake:”, “What issues did you seek help on from the Mobile Clinic (check all that apply):”, and “What kind of help did you receive from the Mobile Clinic (check all that apply):”, not a single answer was answered fewer times in the second set of surveys, than in the first set. This seems to indicate that as time went on between the disaster and the relief sought, demand for aid increased rather than decreased. Normally it would be expected that the further from a disaster we get, the more problems ought to be solved and therefore demand for the mobile legal clinics should decrease. If the goal of disaster relief is to help a person by solving their issues as they relate to the disaster, then in the long term, less people will be seeking disaster relief and aid because as time passes, more will have their problems addressed by institutions like the Mobile Clinic.

A few explanations will be offered to try to explain this gap. First, there may not have been a large enough supply of resources initially to adequately meet the demand for help from the clinic. Therefore, the disaster relief aid was only able to accept a small number of people at any given time, leading to a steady flow of recipients as they are accepted, due to having to wait. This is instead of a model that can accept a large influx of clientele, that then because of a lack of wait times, there is less demand for their services as more time passes post-disaster. This could be due to a couple of different reasons: either too much demand or not enough supply or preparation. If there were too many people seeking rectification for their legal issues, then it is more likely that the Mobile Clinic could not supply every individual with help due to limited resources, mostly personnel availability.

There are a few issues like this. First, if there were fewer materials available and therefore individuals did not receive adequate help for their issues, individuals would be less likely to rate the clinic positively. We see that this was not the case in question four. Despite receiving more help across the board, the later survey did not rate the Mobile Clinic as highly. If we refer to question three, “What kind of help did you receive from the Mobile Clinic (check all that apply):” answer five, “not at all helpful” was answered 3.4 percent of the time which is higher than question four “How helpful has the Mobile Clinic been for you?” answer five, “not at all helpful” which was only answered 1.3 percent of the time.

It is possible that if question three's answer was the result of misinterpretation, and that it meant that the individual did not receive materials, that they would be more likely to rate the clinic helpfulness poorly. Or if the answer was indicative of helpfulness, they would answer the questions the same, and there would be no discrepancy in answer rates. Another issue with this is that the surveys were made based on the services that the clinic actually provided. For example, in question one the first five choices are all issues they anticipated people seeking help for. So, therefore, it would follow that the clinic would tend to be prepared to address those issues.

Another potential explanation for the discrepancy in issues is when the issues were discovered. An individual may either try to solve the issues on his or her own before coming to the Mobile Clinic, or be unaware of any other potential solutions to the problems, such as using the Mobile Clinic. This could then either prove that they could not solve them on their own or uncover more issues that they would then attend the Mobile Clinic seeking help. The big flaw with this theory is that there were more people who attended the first section than the second. Therefore, if a significant proportion of people waited, we would see a surge of people later in the clinic. This also does not explain discrepancies in people seeking help for legal documents, which would seemingly be necessary immediately following the disaster in order to help combat all other issues, such as receiving healthcare or rebuilding a home.

Question four also has other associated problems with it. The majority chose that the Mobile Clinic was helpful overall, however, this data must be scrutinized. If these surveys were conducted by volunteers to the Mobile Clinic, then participants would be more likely to answer the question positively. This is not to say that the Mobile Clinic was not helpful, as it has been shown that the Mobile Clinic or operations similar to it are very viable strategies in disaster relief efforts.

In terms of demographics, there are multiple problems that come with adequately measuring and analyzing these factors. Within gender, it is important to note that there were three options, female, male, and other, in that order, and despite other being an option, it was never chosen across all 767 surveys. Education level is an important factor to study because it gives the ability to analyze the levels of skilled labor and give predictive tendencies as to how complex the provided materials can be. However, a little bit of the accuracy is removed due to the overlap in answers. Particularly the no education to grade five and the grade five to grade twelve options. This issue could have been avoided with a better survey design.

Family size also has this issue, in that all of the options overlap. The answers were: "0-3", "3-5", "5-7", and "7+". It can create slight inaccuracies within the analysis because if an individual has three members in their family, which

answer, “0-3” or “3-5” ought they choose? Monthly income also had problems with its construction. In this case, it was inaccurate in terms of how large the variance in answers were. Specifically, answers one and two, “\$5k or less” and “5,001 to 10,000”, had ranges of 5,000 rupees, whereas answer three, “10,000 to 20,000” had a range of 10,000 rupees. However, in this one case, this format worked in the favor of the researchers because each answer progressed linearly allowing for a relatively easy predictive practice. Each answer was chosen about 70 to 80 times less than the preceding answer. It is also important to note that for future data collection purposes, the survey has been modified from its original version going into 2020 and for future survey sets. In addition, demographics are relatively private matters, so a concern of privacy may lead individuals to either not fill out certain sections limiting the amount of available data, or they may fill out certain demographics in a way that they believe the researchers want them to answer. For example, answering with a lower monthly income than actual in the hopes to receive more aid, or answering a higher monthly income in order to avoid embarrassment over their individual economic circumstances.

Speaking on the first issue more, that of a lack of responses, this project was relatively successful in that regard. Overall, the average question was only between five and fifteen percent likely to be skipped or left blank. This is skewed because our demographic questions were much more likely to be left blank intentionally. The questions about the Mobile Clinic were answered a vast majority of the time, only being left blank a few percentage points of the time. Obviously, there are other factors that may render the data inaccurate, but it was not due to a large lack of participation.

VI. CONCLUSION

Overall, the unique circumstance of Nepal and its disaster relief response is a place for great observation. The inclusion and deployment of mobile legal clinics could become a prevalent strategy for ensuring that all needs of a community are adequately addressed following a similar disaster in Nepal or any country.⁴⁶ Natural disasters are common to developed and developing countries. Often survivors need assistance with housing, lost or destroyed personal documents and loss of income. The importance of the use of mobile legal clinics as a tool for community assistance in disasters as well as other issues cannot be understated.

⁴⁶ It is important to note that the COVID-19 global pandemic occurred at the end of writing this article and while no academic writings are available at this time, mobile clinics have popped up to help mitigate the effects that this pandemic is having. This shows the flexibility and versatility mobile clinic's can have. COVID-19 Legal Response (2020), <<https://www.disasterlegalaid.org/advocates/covid-19/>>.

However, it is important to note that mobile legal clinics cannot thrive in a vacuum. First, it is important to delegate the necessary resources to them. A mobile legal clinic is only as good as the information that it provides. This is both in reference to its attorneys and legal practitioners and to its access to government resources to help people find all of the necessary information. Second, and most importantly, knowledge of the community that the legal clinic is working to serve is vital to the short-term and long-term success of both the clinic as a structure and the community following its rebuilding. This is in reference to knowledge of the local laws, the local culture, and in what needs may have predated the disaster.

These Mobile Legal Clinics for disaster assistance are some of the first clinics of this type that we are aware of. We know of no mobile clinics that have been evaluated and written about like this. There have been numerous setbacks in its implementation and its analysis, yet despite this, it is still succeeding in its goal, to help the people of Nepal rebuild their communities. A clearer survey being implemented going into 2020 helps with the analysis portion of the clinic. The analysis and reflection of the clinic is the most important part regarding its success, as if it is not doing what the community needs it to, it will certainly fail long-term.

One the most stunning successes of this clinic is its utilization of advertising in order to make sure that community members knew that it was a resource that they had at their disposal. Yet, we failed to measure the effectiveness of these marketing efforts. While the knowledge we gained is useful for developing future clinics, we also hope to learn from the mistakes made and opportunities lost.