TRADITIONAL HEALTH-SEEKING PRACTICES AMONG RURAL AND URBAN NEGEV
BEDOUIN POPULATIONS IN ISRAEL

by

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ABSTRACT

Despite the establishment of Israel’s 1995 National Health Insurance Law which provided biomedical healthcare to citizens of Israel, there remains a large number of Bedouins living in Israel’s Negev region with inadequate health-care. The goal of this project is to determine how Israel’s universal provision of health-care has shaped patterns of knowledge, use, and attitudes towards traditional and biomedical treatments among Negev Bedouins. This project is a cross-sectional, mixed methods design that included 40 participants from four sub populations: 15 urban Bedouins, 15 rural Bedouins, 6 traditional healers, 4 biomedical practitioners.

The first phase consisted of a historical analysis of health policy among Negev Bedouins to identify transformations in health seeking behaviors over time. The second phase consisted of participatory mapping to gauge geographic distances between homes, traditional healers, and government clinics. The third and fourth phases consisted of open ended structured interviews to identify sociodemographic information, patterns of health seeking behaviors, and the availability, accessibility and satisfaction of traditional and biomedical healers. Correlations, chi-square tests, and t-tests were conducted for associations between Negev sub-populations and the dependent variables. Qualitative ethnographic data was analyzed for key sentences and central concepts that demonstrates similarities and differences in health seeking behaviors within and between the two groups.

It was hypothesized that despite universal healthcare in Israel, due to limited accessibility of health-care clinics, the desire to maintain traditional healing practices and the
dismissal and lack of understanding of cross-cultural healing by biomedical practitioners, rural Negev women would more frequently seek traditional healers over biomedical practitioners, than would urban Negev women. Findings reveal no significant evidence for differences in accessibility, differences in healer preference, or differences in the frequency of visits to biomedical practitioners. Despite no significant difference between the two groups, evidence suggests that there is an overwhelming preference for visiting traditional healers for both groups. Evidence for linguistic barriers was found between the rural group and the biomedical practitioners. Quantitative and qualitative findings suggest differences in satisfaction with the health insurance law between the two populations.
**LIST OF ABBREVIATIONS AND SYMBOLS**

<table>
<thead>
<tr>
<th>Symbol</th>
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<tr>
<td>n</td>
<td>Study sample size</td>
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<td>p</td>
<td>Probability associated with the occurrence under the null hypothesis of a value as or more extreme than the observed value</td>
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<td>t</td>
<td>t-statistic</td>
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<td>r</td>
<td>Pearson correlation</td>
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CONTENTS

ABSTRACT .................................................................................................................................ii
LIST OF ABBREVIATIONS AND SYMBOLS ..............................................................................iv
ACKNOWLEDGMENTS ..............................................................................................................v
LIST OF TABLES .....................................................................................................................viii
LIST OF FIGURES ..................................................................................................................x
LIST OF ILLUSTRATIONS ........................................................................................................xi
CHAPTER ONE: INTRODUCTION ................................................................................................1
CHAPTER TWO: TREATMENT CHOICE ......................................................................................5
CHAPTER THREE: BACKGROUND INFORMATION ..................................................................10
CHAPTER FOUR: METHODS .......................................................................................................17
CHAPTER FIVE: RESULTS ........................................................................................................26
CHAPTER SIX: DISCUSSION .....................................................................................................62
CHAPTER SEVEN: CONCLUSIONS ..........................................................................................76
REFERENCES ..........................................................................................................................79
APPENDIX A: INSTITUTIONAL REVIEW BOARD .................................................................83
APPENDIX B: COPY OF INFORMED CONSENT .....................................................................84
APPENDIX C: INTERVIEW SCHEDULES .................................................................................89
LIST OF TABLES

Table 1: Demographic Characteristics of Healers and Urban and Rural Bedouin Women...........28
Table 2: Age, Number of Co-Wives, Number of Children, and Annual Individual Income of Healers and Urban and Rural Bedouin Women.................................................................28
Table 3: Demographic Characteristics of Urban and Rural Bedouin Women..........................30
Table 4: Correlation Coefficients among Healers Demographic Characteristics.......................31
Table 5: Correlation Coefficients among Urban and Rural Women’s Demographic Characteristics.................................................................................................................................32
Table 6: Correlation Coefficients among Urban Women’s Demographic Characteristics.........33
Table 7: Correlation Coefficients between Rural Women’s Demographic Characteristics........34
Table 8: Table of Biomedical Medical Treatment Choice Patterns..........................................38
Table 9: Table of Moalej Bel Koran Medical Treatment Choice Patterns....................................43
Table 10: Table of Hogama Medical Treatment Choice Patterns..............................................46
Table 11: Table of Attar Medical Treatment Choice Patterns..................................................48
Table 12: Table of Fataha Medical Treatment Choice Patterns..................................................52
Table 13: Table of Tamreej Medical Treatment Choice Patterns..............................................55
Table 14: Comparison of Distances to Biomedical Doctor.......................................................56
Table 15: Participants Healer Preference for Any Traditional Healer vs. Biomedical Doctor........57
Table 16: Chi-Square of Healer Preference for Any Traditional or Self Help vs. Biomedical Doctor..........................................................................................................................57
Table 17: Number of Participants Who Visited Any Traditional Healer vs. Biomedical Doctor in the Past Year..................................................................................................................58
Table 18: Group Compared to Language Spoken by Biomedical Doctor..................................58
Table 19: Total Number of Visits to Traditional Healer vs. Biomedical Doctor in the Past Year

Table 20: Chi-Square of Urban and Rural Women’s Satisfaction with the Health Insurance Law

Table 21: Chi-Square of Group Compared to Difference the Law Has Made in One’s Life
LIST OF FIGURES

Figure 1: Map of Negev Region in Israel Where Bedouins Live....................................................11
LIST OF ILLUSTRATIONS

Illustration 1: Rural Bedouin Woman Rotating Roof Solar Panel in Al-Sare, Israel.....................18
Illustration 2: Rural Bedouin Home Located in Al-Sare, Israel.................................................20
Illustration 3: The Attar’s Herb Shop Located in Rahat, Israel.................................................47
CHAPTER ONE
INTRODUCTION

Biomedicine is underutilized by indigenous populations historically reliant upon traditional medicine (Al-Krenawi & Graham, 2006). In 1995 Israel passed The National Health Insurance Law granting universal, biomedical health services to all citizens. However, the impact of this law on the medical treatment choices of Bedouin populations in Israel’s Negev region has not been sufficiently examined (Morad, Shvarts, Merrick & Borkan, 2006).

Various studies documenting biomedical health-seeking behaviors confirm little attention is given to Bedouin’s medical beliefs and preferences (Al-Krenawi, 1998; Al-Krenawi & Graham, 2006; Morad, Shvarts, Merrick & Borkan, 2006; Ben-Arye et al. 2009; Greenberg, 2016). It has been suggested that future research directions should identify patterns of traditional medicine use, including who accesses these services and what forms of treatment are available (Greenberg, 2016). Greenberg (2016) also encourages exploration of whom nomadic Bedouins regard as traditional healers and which illnesses require traditional or biomedical treatments. The purpose of this research project is to explore how Israel’s universal provision of health-care has shaped Bedouin people’s knowledge, preferences and attitudes towards traditional and biomedical treatments. It is hypothesized that despite universal healthcare in Israel, due to limited accessibility of health-care clinics, the desire to maintain traditional healing practices and the dismissal and lack of understanding of cross-cultural healing by biomedical practitioners, rural Negev populations would more frequently seek traditional healers over biomedical practitioners, than would urban Negev populations.
Data collection included six weeks of ethnographic fieldwork during the summer of 2017. This research is a cross-sectional, mixed methods design with an additional ten individual case studies. Stratified random sampling was used to select 1 urban site from among 8 government-established towns and 1 rural site from among 36 unrecognized villages.

A non-probability, convenience sampling strategy was employed to recruit n=15 urban-dwelling and n=15 rural-dwelling Bedouins in order to examine differences in medical treatment choice between the two sub-populations. The remaining 10 informants were case studies on each of the available healers and biomedical practitioners. Sociodemographic information such as gender, age, marital status, number of wives, number of children, education, annual income, ethnic and religious group, occupation, place of birth and places lived was collected. Qualitative data collection consisted of participant observation and open-ended structured interviews to assess who uses traditional versus biomedical treatments, the frequency with which people visit traditional versus biomedical healers, how the treatment process unfolds and in which cases each form of treatment is used. Informants were also asked about attitudes toward, and availability and accessibility of traditional and biomedical treatments. T-tests, chi-square tests and correlations were conducted for associations between Negev sub-populations and the dependent variables such as frequency with which they used each healer. Qualitative ethnographic data was analyzed for key sentences and central concepts that demonstrated similarities and differences in health seeking behaviors within and between the two groups. Knowledge about Bedouin health related behaviors and treatment choice may help researchers understand the impact of the National Health Insurance Law as well as improve health policy and services via awareness of health issues and behaviors among Negev Bedouins.
The goal of this research project is to identify how Israel’s provision of universal health-care shapes patterns of health seeking behaviors, the availability and accessibility of traditional and biomedical healers, and attitudes towards traditional and biomedical treatment choice among urban and rural Negev Bedouin women. Specifically, I explain differences and similarities between urban and rural medical treatment choice and healer preference, and determine whether rural Negev populations more frequently seek traditional healers over biomedical practitioners than urban Negev populations.

In the second chapter, I focus on the theoretical orientations used to explain medical treatment choice and patterns of health seeking behaviors. In the third chapter I provide background information about Negev Bedouins. I provide a comprehensive explanation of the most current research on Negev Bedouin medical treatment choice. Here, I present a number of contradicting sources on what is known about Bedouins patterns of health seeking behaviors. In the fourth chapter, I explain the mixed-methods used in the study. The methods include a historical analysis of Israel’s health policy and an understanding of the trajectory of Negev Bedouin health seeking behaviors, participatory mapping used to understand geographic distances between homes and important social services, and open ended structured interviews with rural women, urban women, and traditional and biomedical practitioners (n=40). T-tests, chi-square tests and correlations along with qualitative data analysis were used to identify similarities and differences between the two groups. In the fifth chapter I present the results of my research. I include demographic information for all three sub-populations, hypothesis testing, and quantitative descriptions of my results. This section also includes notable similarities and differences between the two groups and themes from the semi-structured interviews. In the sixth chapter I discuss these results. I provide explanations for what these findings mean and I include
the limitations of the study. In the seventh chapter, I summarize the findings and provide concluding comments and future directions for this field of research.
CHAPTER TWO

TREATMENT CHOICE

Medical anthropology is a subfield of cultural anthropology that is dedicated to studying the origins of disease and the cultural beliefs and practices associated with them (Singer and Baer, 2007). Medical anthropologists are concerned with understanding the human experience of disease through cross-cultural, historical, and evolutionary lenses (Joralemon, 2010). The theoretical orientation of medical anthropology concentrates on the impact of cultural beliefs about illness and disease, specifically, how these beliefs shape patterns of health seeking behaviors (Fabrega, 1972). According to the World Health Organization, health, “is a state of optimal physical, mental, and social well-being and not merely the absence of disease or infirmity.” (World Health Organization, 2000). Although illness and disease are oftentimes used interchangeably, these two words are not equivalent. Disease is the measurable deviation of the body from its homeostatic equilibrium. Disease involves a physiological abnormality that produces objective disorder of an organism’s structure or function (Ross, 2013). Illnesses are the subjective experiences of distress associated with the sickness. Illnesses may be present in the absence of disease and vice versa. Physiological evidence of malfunction is not necessary for an illness episode and disease states with organic sources may not necessarily produce illness (Dressler and Oths, 1997).

All human societies around the world have developed medical systems to handle diseases and illnesses (Baer, Singer, and Susser, 1997). According to Kleinman (1980), there are three sectors within the health-care system: the popular, folk, and professional. Treatments
administered by the sick individual, the family, the social network, or the community are
categorized as popular sector treatments. Home remedies, over the counter medication, physical
exercise, rest, and dieting are all examples of popular sector therapies. Folk healers, midwives,
herbalists, religious healers, and bonesetters are all examples of the second sector within the
healthcare system, the folk sector. This category consists of traditional medical healers that are a
part of the informal subdivision of medicine (Coreil, 1983). The remaining sector is the
professional sector, which largely consists of modern biomedical practitioners and
professionalized medical systems. Biomedical practitioners, physical therapists, surgeons, and
pharmacists are all examples of practitioners who are a part of the professional sector (Kleinman,
Eisenberg, and Good, 1978).

The widespread penetration of biomedicine in non-Western societies has produced an
intricate web of treatment choice patterns representative of medical pluralism (Oths, 1994). The
coexistence of multiple medical traditions yields a complicated system of cooperation and
competition between these medical sectors (Tabishat, 2014). In rural settings, where biomedicine
has more recently appeared, communities must make decisions whether to utilize their well-
established medical traditional practices that have been practiced and passed down over
numerous generations, or to adopt the newly settled Western biomedical treatments (Young,
1981). Some anthropological studies that categorize illnesses as treatable via biomedicine or via
traditional or folk healing methods– oftentimes create misconceptions about patterns of health
seeking behaviors. This dichotomous illusion leads one to believe that medical patterns of resort
are strictly either biomedical or traditional (Popper-Giveon, 2012). While these two sources of
treatment may be the most dominant in a given society, this categorization largely ignores self-
help treatment, sequential treatments, and simultaneous patterns of resort (Young, 1981).
Help-seeking behaviors vary between individuals and despite this polarized view of treatment choice, help-seeking behaviors may be sequential or simultaneous. Sequential help-seeking behaviors occur when individuals utilize one form of treatment from either the popular, folk, or professional sectors at one time and proceed to the next healer or sector after the first form of treatment has been completed and found unsatisfactory. Contrary to this linear approach is the simultaneous pattern of resort, which is depicted by the employment of one or more forms of treatment from any of the three sectors at any time, oftentimes temporally overlapping (Ell and Castaneda, 1998). A question that is important to medical anthropologists is, when individuals seek out one or more treatment methods from a collection of cooperating, competing, and coexisting health-care systems, how do they decide which ethnomedical system to choose. The ethnographic examination of medical beliefs and how individuals approach their healing process is called medical treatment choice (Singer and Baer, 2007).

Cultures play a crucial part in the organization and understanding of disease and illness. Good, Brodwin, and Good (1994), believe that humans experience their material surroundings and “realities” of their world through their own cultural perspectives. Cultural medical beliefs and behaviors construct illness episodes so that they have form and meaning. All medical systems are culturally constructed and provide culturally appropriate explanations and understandings of illness and disease. Despite the common misconception of biomedicines “objectivity” and basis in the “scientific method,” this medical system is nonetheless a belief system that provides a culturally constructed understanding of illness (Pool and Geissler, 2005).

The elicitation of individual’s explanations of their illness beliefs is central to investigating medical treatment behaviors in medically pluralistic settings (Garro, 1994). Arthur Kleinman’s cultural interpretive model poses the idea that the illnesses and diseases provide
explanatory models that are riddled with medical cultural information. Underlying beliefs within these explanatory models influence illness behaviors such as the treatment process, adherence to medical advice, and one’s evaluation of therapeutic efficacy (Kleinman, 1988). This model aims to examine people’s experience with illness and disease as well as the influence of culture on an illness event.

Some studies show that societies that have historically used traditional healing practices frequently underutilize modern biomedical services compared to their more modernized counterparts (MacPhee, 2012). Two explanations for this finding are the influence of traditional cultural beliefs about illness and disease on the treatment seeking process and the influence of folk or traditional practitioners, and the other explanation is that factors such as high cost or inaccessibility constrain uninhibited treatment choices. The benefit of the decision-making approach is that it provides insight into the factors considered in the treatment choice process and also sheds light on the factors considered in the treatment rejection process (Young, 1981).

Cultural beliefs are one of the most powerful ways in which individuals experience illness and choose specific treatments. One globally pervasive belief system is the humoral theory of disease etiology, otherwise known as a cognitive system of binary opposition of elements (Erickson, 2007). This theory poses the idea that balancing several forces such as hot and cold maintains a body’s equilibrium, and thus, one’s health. The imbalance of one of these forces results in a breakdown of normal functioning and results in sickness. An example of this oppositional forces that require balance are temperature regulation, hot and cold weather, and exertion and inactivity (Foster, 1994). Besides natural causations of disease etiology such as infection, stress, and accidents, supernatural causes such as those that are mystical, animistic, and magical, are also widely held beliefs about the causes of disease. An example of these
supernatural causes are the intentional acts of sorcery intended to result in harm or healing (Murdock, 1980). Besides the influence of culturally patterned beliefs about illnesses and treatments, another influence on the medical treatment choice process are the real-world constraints placed on decision-making. For example, medical decision-making may be constrained due to the high costs associated with particular treatments or simply the unavailability or inaccessibility of certain treatments (Garro, 1998).

An important factor to keep in mind when researching treatment choice are the implications associated with the types of study conducted to obtain this data. Studies that only focus on medical treatment choice patterns oftentimes fail to depict individual treatment choices and the nuances seen within and between different groups of people. Although correlations between treatment choices and treatment outcomes may be similar, the variability found within the decision-making process provides valuable insight into the potentially different treatment paths taken in medically pluralistic regions. Through the application of the decision-making approach, ethnographic investigation is more representative of the actual community’s choice because findings are what ultimately determine the health behavior seeking model (Young, 1981).
CHAPTER THREE
BACKGROUND INFORMATION

Despite Israel’s provision of universal healthcare to all citizens, there remains a large number of unsettled Bedouins with inadequate healthcare services. Moreover, data regarding traditional and biomedical health-seeking practices are insufficient. The Bedouin-Arabs are a traditionally nomadic group of people who inhabited several areas in North Africa and the Middle East prior to the founding of Islam and Christianity (Al-Krenawi, 1998). Bedouins living in Israel have inhabited the Negev Desert region since the 5th century A.D and rely predominantly on travel, trade, and animal husbandry. There are approximately 200,000 Bedouins living in the Negev today, comprising 3.5 percent of Israel’s population (Ben-Arye et al., 2009).

In 1948 Israel was established as a state and Bedouin villages were regarded as a hindrance to the modernization and geographic settlement expansion plans (Al-Krenawi & Graham, 2006). The Israeli government portrays itself as Western, democratic, modern and educated, while Bedouin Arabs are seen as premodern and irrational. Consequently, the Israeli government designed eight permanent towns for the Bedouin communities to occupy in an attempt to maintain a democratic and progressive image. However, little input from the Bedouin-Arabs was taken into consideration during the construction process and the urban transition broke down tribal social structure, ushering in a more individualistic lifestyle. The forced shift created conflict between the Israeli and Bedouin communities, with the latter group being left with few rights and little territorial stability. Approximately 55 percent of the Bedouins settled
into “officially” recognized villages while the remaining Bedouins continued living in unplanned settlements and encampments surrounding the permanent sites. Those who resist the government implemented transition and maintained semi-nomadic lifestyles are continually at risk of losing their homes and debates about where the Bedouin may settle are ongoing (Borkan, Morad & Shvarts, 2000).

**Figure 1:** Map of Negev Region in Israel Where Bedouins Live

Eight government-constructed, “officially recognized” villages (black circles) surrounded by 36 shantytowns, or “unrecognized” Bedouin encampments (red dots). The urban town of Rahat is highlighted in yellow. The rural town of Al-Sare is highlighted in purple.
Traditional Bedouin culture is founded on collective decision-making. One’s sense of self is strongly group oriented and individuals attempting to assert their independence are seen as deviant. Bedouins adhere to a patriarchal model with males exercising household authority. Polygamy is also a common practice among many (Al-Krenawi, 1998). Prior to 1995, Bedouins primarily utilized traditional healers for both mental and physical ailments. A khatib or hajjab is a healer who create amulets to ward off evil spirits. A dervish is a healer who treats illness by religious and cultural means. A moalj bel koran is a religious healer who lifts evil spirits through the reading of the Koran. A fataha is one who “reads” the future, sometimes through the remains in patient’s coffee cup. Lastly, an attar is a traditional herbal healer who mixes native herbs to treat physical and mental illness (Al-Krenawi, 1998). In 1995 Israel passed The National Health Insurance Law which guaranteed biomedical health services to all citizens of the state of Israel. In an effort to incentivize adoption of non-nomadic lifestyles and abandonment of traditional villages, Israel strategically developed health clinics, schools and other urban infrastructures within the eight established towns. Those who resisted the transition were disadvantaged because health funding, education and other social services were not readily available to them (Borkan, Morad & Shvarts, 2000).

Currently, there are approximately 36 unrecognized Bedouin villages or shantytowns, home to about half of the Negev region’s Bedouin-Arab population. These unofficial villages are at risk for having their homes destroyed by the state and must travel to the permanent settlement villages for health, education and other social services (Al-Krenawi & Graham, 2006). Most research on the Negev point out the inadequate allocation of health-related resources among both permanent settlements and unplanned encampments. The Negev Bedouin have the lowest overall socioeconomic status and the highest rates of unemployment and welfare support of any social or
ethnic group in Israel. Compared with Jewish and other Arab communities in Israel, the Negev region has higher morbidity and neonatal mortality (Morad, Shvarts, Merrick & Borkan, 2006).

There is little knowledge regarding Bedouin health seeking behaviors and existing research is mixed with no conclusion or overall consensus (Ben-Arye et al., 2009). According to Borkan, Morad & Shvarts (2000), until the 1960s, local traditional healers, including herbalists, bone setters, dervishes and others, provided nearly half of all health-care for Negev Bedouins. However, Al-Krenawi (1998), reports that 70 percent of Negev Bedouins have used both traditional healers and biomedical treatments since the 1970s. Almost all studies, however, verify that Bedouins living outside government established villages have disproportionately unequal access to healthcare (Al-Krenawi, 1998).

Borkan, Morad & Shvarts (2000) assessed Negev Bedouins’ experience with and evaluation of health services and health policies. They found that traditional Bedouin healers were consulted frequently, though did not state how frequently these healers are called upon. Rather, their research focused on opinions about health status, life expectancy, and accessibility of health services, not traditional medicine use. There is a large gap between actual and desired health-care opportunities for the Negev Bedouins and these disparities are more prevalent for those in small semi-nomadic communities who do not benefit from government services unless they travel long distances to seek them out (Borkan, Morad & Shvarts, 2000). In another study, Said, Khalil, Fulder & Azaizeh (2002), discovered more than 2,600 plant species in Israel, of which more than 700 are currently being used for their medicinal properties. However, the extent to which these are utilized by Bedouins is unknown.

In contrast to existing evidence, the Israel Institute for National Health Policy and Health Services Research and the Israel Ministry of Health Research funded a study the results of which
claimed that the universal health insurance law gave consumers freedom of choice when making health-care decisions. They further report that traditional medicine use accounted for only 6 percent of Bedouin health seeking behaviors over the course of their two-month study (Morad, Shvarts, Merrick & Borkan, 2006).

Ben-Arye et al., (2009) explain that Israeli-Arabs are more oriented towards Traditional Islamic Medicine and use a significant number of traditional herbal remedies when compared to the Jewish population in Israel. They also report that Bedouins’ use of traditional medicine is declining, and overall, they report less traditional, folk, and herbal medicine use compared to the non-Bedouin community in Israel. However, the study used a standard biomedical five question, closed ended questionnaire, ignored half of the Bedouin population located in shantytowns and unofficial settlements, and surveyed only those living in government established communities who use public clinics (Ben-Arye et al., 2009).

Al-Krenawi and Graham (1996) propose that Bedouins seek traditional healers more often than biomedical practitioners because of the lack of communication, trust and understanding shared between patient and doctor. Al-Krenawi (1998) explains that there is a gap between modern clinicians and traditional clients which breeds distrust in Bedouins who adhere to traditional beliefs. Doctors trained in biomedicine are dismissive of traditional beliefs and prescribe interventions and treatments foreign to what this population is accustomed to. Similarly, many doctors in Israel are Jewish, do not speak Arabic, or ascribe to the notion that patients play an active role in diagnosis and treatment. Many Israeli doctors diagnose and treat the patient without asking about their cultural beliefs or healing practices. These ethnic, cultural and linguistic differences are some barriers that deter Bedouins from seeking biomedical
practitioners, whom they do not view as adequate healthcare providers because they cannot communicate in Arabic nor do they understand their culture (Al-Krenawi and Graham, 1996).

Unsurprisingly, data on traditional medicine in peripheral Negev communities in Israel is limited. In fact, the only comprehensive reference of Bedouin traditional medicine is an edited volume of research conducted in the seventies (Abu-Rabia, 2015). However, this book only discusses the different types of traditional medicine and not the extent of the use of traditional medicine. No studies have focused on continuity and changes to traditional medical practices among unrecognized and unplanned Bedouin settlements. Furthermore, existing research on biomedical and traditional health-seeking behaviors and treatment choice among Bedouins has paid little or no attention to their preferences, beliefs, and satisfaction with current treatment options since the passing of the universal health-care law (Borkan, Morad & Shvarts, 2000). Studies that have briefly surveyed the Negev Bedouins focus primarily on those living in government established towns. No comprehensive study has yet examined Bedouin satisfaction with the health services offered to them. Morad, Shvarts, Merrick & Borkan (2006) suggest that social scientists should study the effects of urbanization on Bedouins health conditions, as well medical service compatibility with the cultural needs of Bedouin populations.

This project seeks to help policymakers consider the ramifications of The National Health Insurance law and shed light on the differential awareness and utilization of public health-care services by Bedouins. Research findings may help improve health policy by encouraging the health ministry to more evenly distribute health services to Bedouins, and educate policy makers on issues such as accessibility and increase awareness of health issues prevalent among Negev Bedouins (Al-Krenawi & Graham, 2006). Also, this research aims to shed light on Bedouin beliefs, culture, religion and traditional healing methods in a manner that will enhance the
cultural understanding and sensitivity of non-Bedouin Biomedical practitioners who strive to improve clinical communication with their patients and integrate traditional health beliefs into their treatment procedures.
CHAPTER FOUR
METHODS

A. Setting

The Negev desert region in Israel consists of a cluster of urban and rural towns that have pluralistic health-care systems. Biomedical care is one of several treatment options. This analysis of medical treatment choice is a product of six weeks of ethnographic data collection in the urban town of Rahat, Israel and the rural town of Al-Sare, Israel (See Figure 1). Rahat, Israel is the largest government established, or “official,” Bedouin city in Israel. In fact, it is the largest Bedouin city in the world with approximately 65,000 inhabitants (Merrick-Kenig, Morad, and Merrick, 2013). Rahat and Al-Sare are located in the southern district of Israel, a rocky desert area with sparse vegetation and miles of sand dunes. The Negev climate is extremely hot and arid with temperatures climbing to about 105 each day.

Compared to Beersheba, the predominantly Israeli region in the southern district, both Rahat and Al-Sare looked like poor, developing areas. Because Israel is officially an Israeli state, the presence of the Arabic language and the appearance of Arabic culture is largely contained within the Bedouin villages and kept out of mainstream sight. In the areas where mainly Bedouins lived, all signs were written in Arabic and sometimes in Hebrew. In the areas where mainly the Israelis lived, all signs were written in Hebrew and sometimes in Arabic. Needless to say, the country is highly segregated. The very northern part of Israel, the Golan Heights region, is inhabited by many individuals who immigrated from Syria or Lebanon and is religiously Druze and politically liberal. Nazareth, the region between the Golan Heights and the Negev is
mainly inhabited by semi-liberal Christians. The Negev region is nearly polarized into extremely conservative Muslim Bedouin towns and politically liberal Jewish Israeli cities. It is evident that tension exists geographically near the Israeli Palestinian border, interpersonally between Arabs and Israelis, culturally between Syrians, Lebanese, Palestinians, and Israelis, and religiously between Muslims, Christians, Druze, and Jews.

In Rahat, since it is a government recognized “official” town, there are paved roads and some super markets, although it is nowhere near as developed and manicured as the Israeli cities. In Al Sare, however, since this is not an officially recognized town and inhabitants are considered squatters, the government does not pave their roads, provide them with electricity, or make any infrastructures legally available to them. Homes have tin roofs, roads are rocky and extremely difficult to drive on, the nearest stores are in the officially recognized towns, and every home had solar panels attached to its roof for power.

**Illustration 1:** Rural Bedouin Woman Rotating Roof Solar Panel in Al-Sare, Israel
Nearly all inhabitants of Rahat and Al-Sare are very conservative Arab Bedouins with all females wearing hijabs and some wearing niqab. The overwhelming majority of women in the Bedouin towns were not permitted or taught how to drive. Many were also not permitted to leave their homes without a male chaperone. Despite stark cultural differences and political tension between Arabs and Israelis, these two populations exist within close proximity of each other. During my time in Israel, I lived about 20 minutes away from Rahat in an apartment in Beersheba, with two Israeli students near Ben-Gurion University of the Negev from July 1, 2017 to August 12, 2017.

Every day, except Friday, the day of prayer, I drove my rental car to Rawan’s house where we discussed our interview plans for the day. Rawan was not permitted to drive, nor did she know how to, and she was also not permitted to leave home without her husband. This posed a significant obstacle to my research progress considering her husband came home around 8pm each day and the majority of women’s free time was during the day, when children were participating in summer activities and the women’s only duty was to cook and clean. I managed to convince her husband, for the sake of my academic research, to allow Rawan to leave her home with only me and only via my rental car. He granted Rawan permission only under the condition that we also took her children with us. Each day we piled all four kids into my mini Fiat and drove around to the homes of healers and women whom Rawan contacted for interviewing. All interviews were carried out by myself in Arabic, with the assistance of Rawan. Through participatory mapping I learned that both the urban and rural Bedouin towns were disadvantaged in comparison to the Israeli towns. The rural were the most disadvantaged because urban infrastructure and social services were nowhere nearby so they had to travel to Beersheba for nearly all services. Rural women told me it took approximately 15 minutes by car to get to
the nearest gas station or cemetery, 20 minutes to the nearest school, clinic, or mall, 25 minutes to get to the nearest police station, 30 minutes to get to the nearest driver’s license office, and 40 minutes to get to the nearest hospital.

Rural Bedouins are considered squatters on Israeli land since they do not live within the confines of the eight government established towns, therefore, they are not provided with paved roads, trash removal services, or electricity. In order to have roads, homes, mosques, and any other infrastructure, they must build it themselves. In order to remove trash, rural Bedouins burn it. In order to have electricity, every home must have solar panels. These services are purposefully withheld in order to pressure the rural Bedouins into moving into the urban, government established towns. Due to these differences between the urban and rural regions, the rural regions appear as if they were poor and developing. One may mistake the rural Bedouins as being poor, however, many explained that they were not poor, their homes, roads, and other infrastructures appear disadvantaged because they are not allowed to contract builders to build these infrastructures.

**Illustration 2:** Rural Bedouin Home Located in Al-Sare, Israel
Several rural women told me that the state oftentimes arbitrarily destroys homes to provide an example for the remaining rural Bedouins of what could potentially happen to their homes. One woman told me that recently the government destroyed a couple’s home the day before their wedding night. Bedouin and Israeli towns are segregated and the ability for a Bedouin to live in an Israeli town is highly unlikely. Bedouin’s who desire to live in Israeli regions are required to pay twice as much as an Israeli individual to purchase the same land. The Bedouin women told me that the government does this to reduce fraternization between the two groups. Furthermore, one informant stated that the official school system is evidence of increased tensions between the Israelis and Arabs. Israeli students are required to learn Hebrew and English and have the choice to also learn Arabic, but many choose French or another language. On the other hand, Arabic student are not required to learn Hebrew and oftentimes, as a desire to maintain their heritage and cultural identity, they opt to learn Arabic. This poses a major threat to Bedouin educations because the official language of the university and business interactions is either Hebrew or English. Therefore, Bedouin students are at a disadvantage because they are unable to communicate in Hebrew or are able to do so only poorly.

B. Participants

A total of n = 40, participants age 18 and older, from three subpopulations, were interviewed: 15 urban-dwelling Negev Bedouins living in a government-established town, 15 rural-dwelling Negev Bedouins from an unrecognized encampment, and 10 modern and traditional healers. Four of the healers were biomedical doctors: a family doctor, a psychologist, a neurologist, and an internal medicine doctor. Six of the healers were traditional healers: two Tamreej healers, or women who massaged for pain relief, but more often to induce conception, one Moalej Bel Koran, or a religious healer who lifts evil spirits, one Hogama, or a healer who
combines physical therapy, chiropractic work, and Traditional Chinese medicine, one Attar, or herbalist, and one individual who gave me insight about a Fataha healer, which is a fortune teller and one known to retrieve lost items.

Prior to conducting this research, approval was obtained from The University of Alabama Institutional Review Board. Participants were not involved in research without their informed consent. Verbal informed consent was obtained in Arabic after the informant understood the nature and procedure of the investigation, their freedom to withdraw at any time for any reason, measures taken to maintain confidentiality and anonymity, and the name and contact information of the researcher responsible for the study. Informants were reminded that participation in the study was completely confidential and that they were not being asked to provide any information that would allow other people to identify them as a participant or to contact them in the future for any reason. They were also provided with a copy of the informed consent form in Arabic. Names did not appear on the survey form and each interview was assigned a random number for coding procedures. Pseudonyms are used in place of real names.

C. Research Design

This research is a cross-sectional, mixed methods design with an additional ten individual case studies. Stratified random sampling was used to select 1 urban and 1 rural sites from among 8 government-established towns and 36 unrecognized villages (See Figure 1). A non-probability, snowball sampling strategy was employed to recruit informants from the urban and rural sites. Considering male Bedouins might express reluctance divulging information to a female because females are discouraged from making direct eye contact with males, only female informants were interviewed (Al-Krenawi, 1998).
Fieldwork was conducted by myself, a native Egyptian with Arabic as my first language. My collaborator, Rawan Nasassra, a native Bedouin living in the town of Rahat, introduced me to participants, local healers, doctors and nurses who assisted with the completion of the project. The majority of the interview data I collected was either an elicitation of opinions about the universal health insurance law, the medical treatment seeking process, or illness narratives.

D. Procedure

**Phase One:** The first phase consisted of a review and analysis of health policy among Negev Bedouins to identify transformations in health-seeking behaviors (Morad, Shvarts, Merrick & Borkan, 2006) and how these may correlate with changes in traditional medicine use across time.

**Phase Two:** The second phase consisted of participatory mapping to better understand the size and scope of the Negev region. Local inhabitants were asked to share their expert social and cultural knowledge of the local environment and landscape in order to gauge geographic distances between villages, encampments, traditional healers, government-operated clinics, doctors’ offices, hospitals and other urban infrastructures. Phase two was also conducted in order to learn about elements of the towns that the Bedouin communities perceive as important.

**Phase Three and Four:** The third and fourth phases consisted of quantitative and qualitative data collection through unstructured, semi structured and structured interviews with rural and urban informants, as well as case studies with each type of healer. Due to varying literacy rates throughout the Negev, data was collected via interviews. All interviews were voice recorded, provided informants consented to it. The initial unstructured interviews were conducted to build rapport with informants. Semi-structured interviews were used to obtain independent, sociodemographic variables such as gender (male or female), age (years), marital
status (single, engaged…married ), co-wives (number), children (number), education (Kindergarten to 8th grade …Professional degree), annual income (number, shekels), ethnic and religious group (Atheist/Agnostic, Arab Muslims…Syriac Christians), occupation (herder, farmer…teacher) place of birth (Israel, Egypt…Lebanon), and places lived (Israel, Egypt…Lebanon). Lastly, open-ended structured interviews measured the frequency with which traditional healers and biomedical doctors were used, whether people used home remedies before seeking care, the accessibility of the practitioner, treatment cost, the language used in clinical interactions, course of treatment and which healer is appropriate for each type of ailment. Informants were also asked about the availability of, accessibility of, and satisfaction with traditional and biomedical healers following enactment of the 1995 National Health Insurance Law. Informants also had the opportunity to provide feedback, ask questions, and offer insight regarding what would benefit the Bedouin community. Healers were also asked the same sociodemographic questions and direct participant observation was employed to learn about which ailments they most frequently see, the types of treatments offered, and how he or she heals. Rather than giving participants money, which I was told was insulting and an insinuation of poverty, I purchased cookies, cakes, and ice cream for participants as a token of appreciation for participating. Questions were created using ideas from previous research conducted on the Negev Bedouins (Al-Krenawi, 1998, Borkan, Morad & Shvarts, 2000, Said, Khalil, Fulder & Azaizeh, 2002) and research questions aimed at eliciting the patients explanatory model (Kleinman, 1981, See Appendix C for full interview schedule).

E. Data Analysis

Data was analyzed via univariate and bivariate statistical tests using SPSS v.23.0 data analysis software. These included measures of central tendency and dispersion which were
utilized to identify if the data was normally distributed. In addition, the frequency with which each type of healer is sought is reported by group. Correlations were conducted to test for associations among and between sociodemographic variables such as gender, age, marital status, number of co-wives, number of children, education, annual income, ethnic and religious group, occupation, place of birth, and places lived. Independent samples t-tests was conducted between the two sub-populations and all of the dependent variables to identify if there are any differences between the two groups. Chi-square tests were conducted between the two sub-populations and which type of healer used to identify differences in treatment choice. A level of p<.10 was used. Qualitative ethnographic data was analyzed for key sentences and central concepts that demonstrate similarities and differences in health seeking behaviors within and between the two groups. Minority view points were also presented and considered as alternative explanations for behavioral variability between and within both groups. Furthermore, qualitative ethnographic data from the ten healers was used to support data collected from the informants.
CHAPTER FIVE

RESULTS

A. Demographics

A total of 40 participants were interviewed. As shown in Table 1, 25 percent (n=10) of the participants were healers and 75 percent (n=30) were Bedouin women. Seventy percent (n=7) of the healers were male and 100 percent (n=30) of the participants were female. Among the female participants, 50 percent (n=15) were urban Bedouin women from the city of Rahat and 50 percent (n=15) were rural Bedouin women from the city of Al-Sare. As shown in Table 2, the mean age for all participants and healers was 45 (±17). The mean age for the biomedical doctors was 42 (±7). The mean age for the traditional healers was 54 (±23). The mean age for all healers was 49 (±19) which is slightly higher than the mean age for urban and rural women. The mean age for the urban Bedouin women was 45 (±19) The mean age for the rural Bedouin women was 41 (±13). The average age of the urban women who were interviewed was slightly higher than the average age of the rural women.

All study participants were born in Israel with the exception of two Palestinian-born traditional healers. Seventy five percent (n=3) of the biomedical doctors have lived in Israel and Palestine or have also lived abroad, compared to only 17 percent (n=1) of traditional healers. Among the urban and rural women, 87 percent (n=13) from each subpopulation has only lived in Israel. Eight percent (n=3) of the urban and rural women were nomadic/semi-nomadic. Overall, 85 percent (n=34) of the entire sample was married, 10 percent (n=4) was widowed, and 5 percent (n=2) was single. One hundred percent (n=4) of the biomedical doctors, 83 percent (n=5)
of the traditional healers, 80 percent (n=12) of the urban women, and 87 percent (n=13) of the rural women were married.

All of the participants and healers were Sunni Muslims. This meant that the male healers could have up to four wives and the female healers and participants could have up to three co-wives. The average number of wives for the male healers or co-wives for the female healers was 1 (±1). The average number of co-wives was 1 (±1) for urban Bedouin women and 1 (±0) for rural Bedouin women. The average number of children was 4 (±2) for biomedical doctors, 8 (±5) for traditional healers, 6 (±4) for urban Bedouin women, and 5 (±3) for rural Bedouin women. The biomedical doctors had the fewest number of children.

Thirty percent (n=12) of all participants reported having no formal education and 30 percent (n=12) of all participants also reported having a bachelor’s degree. Fifty percent (n=3) of the traditional healers, 33 percent (n=5) of the urban women, and 27 percent (n=4) of the rural women had no formal education. Seventeen percent (n=1) of the traditional healers had a high school diploma, with the remaining 33 percent (n=2) having a bachelor’s degree. Twenty five percent (n=1) of the biomedical doctors had a master’s degree, with the remaining 75 percent (n=3) having a professional degree. Twenty percent (n=6) of the women had a high school diploma, with the remaining 40 percent (n=12) having an associates, bachelors, or master’s degree. Little difference was found between the education levels of urban and rural women.
**Table 1: Demographic Characteristics of Healers and Urban and Rural Bedouin Women**

<table>
<thead>
<tr>
<th>Birthplace</th>
<th>Healers n (%)</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>8 (80)</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>38 (95)</td>
</tr>
<tr>
<td>Palestine</td>
<td>2 (5)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (5)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Healers n (%)</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3 (30)</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>33 (83)</td>
</tr>
<tr>
<td>Male</td>
<td>7 (70)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>7 (18)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Places Lived</th>
<th>Healers n (%)</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel Only</td>
<td>6 (60)</td>
<td>13 (86)</td>
<td>13 (87)</td>
<td>32 (80)</td>
</tr>
<tr>
<td>Israel and Palestine</td>
<td>4 (40)</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>5 (13)</td>
</tr>
<tr>
<td>or Abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nomadic/Semi-nomadic</td>
<td>0 (0)</td>
<td>2 (13)</td>
<td>1 (67)</td>
<td>3 (8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relationship Status</th>
<th>Healers n (%)</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
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<tbody>
<tr>
<td>Single</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>1 (7)</td>
<td>2 (5)</td>
</tr>
<tr>
<td>Married</td>
<td>9 (90)</td>
<td>12 (80)</td>
<td>13 (87)</td>
<td>34 (85)</td>
</tr>
<tr>
<td>Widowed</td>
<td>1 (10)</td>
<td>2 (13)</td>
<td>1 (7)</td>
<td>4 (10)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Grade Level Completed</th>
<th>Healers n (%)</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Formal Education</td>
<td>3 (30)</td>
<td>5 (33)</td>
<td>4 (27)</td>
<td>12 (30)</td>
</tr>
<tr>
<td>Kindergarten to 8th grade</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>9th, 10th, or 11th grade</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>1 (7)</td>
<td>2 (5)</td>
</tr>
<tr>
<td>High school graduate/diploma</td>
<td>1 (10)</td>
<td>3 (20)</td>
<td>3 (20)</td>
<td>7 (18)</td>
</tr>
<tr>
<td>or equiv.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate Degree</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>2 (20)</td>
<td>4 (27)</td>
<td>6 (40)</td>
<td>12 (3)</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>1 (10)</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>2 (5)</td>
</tr>
<tr>
<td>Professional Degree</td>
<td>3 (30)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>3 (8)</td>
</tr>
<tr>
<td>Total</td>
<td>10 (100)</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>40 (100)</td>
</tr>
</tbody>
</table>

**Table 2: Age, Number of Co-Wives, Number of Children, and Annual Individual Income of Healers and Urban and Rural Bedouin Women**

<table>
<thead>
<tr>
<th></th>
<th>Healers</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 (19)</td>
<td>45 (19)</td>
<td>41 (13)</td>
<td>45 (17)</td>
<td></td>
</tr>
<tr>
<td>27 – 87</td>
<td>23 – 86</td>
<td>22 – 69</td>
<td>22 – 86</td>
<td></td>
</tr>
<tr>
<td>Wives</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (1)</td>
<td>1 (1)</td>
<td>1 (0)</td>
<td>1 (0)</td>
<td></td>
</tr>
<tr>
<td>0 – 3</td>
<td>0 – 3</td>
<td>1 – 2</td>
<td>0 – 3</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
<td>x̅ (s)</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 (4)</td>
<td>5 (4)</td>
<td>5 (3)</td>
<td>6 (4)</td>
<td></td>
</tr>
<tr>
<td>0 – 15</td>
<td>0 – 12</td>
<td>0 – 11</td>
<td>0 – 15</td>
<td></td>
</tr>
<tr>
<td>Annual Individual Income, dollars</td>
<td>57797</td>
<td>9657</td>
<td>12927</td>
<td>22918</td>
</tr>
<tr>
<td>x̅ (s)</td>
<td>(86651)</td>
<td>(10950)</td>
<td>(12133)</td>
<td>(47398)</td>
</tr>
<tr>
<td>Range</td>
<td>0 – 240000</td>
<td>0 – 27428</td>
<td>0 – 34250</td>
<td>0 – 240000</td>
</tr>
</tbody>
</table>
Forty seven percent (n=7) of urban women were homemakers compared to 40 percent (n=6) of the rural women. Forty percent (n=6) of the rural women were teachers compared to only 27 percent (n=4) of the urban women. Overall, 77 percent (n=23) of the women were either homemakers or teachers. The remaining occupations, hair and makeup stylist, gardener, and baker, made up 23 percent (n=7) of the occupations. The mean annual income for biomedical doctors was $124,822 (±111174). The mean annual income for traditional healers was $13,114 (±10475). The mean annual income for urban Bedouin women was only $9,657 (±10950) compared to $12,927 (± 12133) for rural Bedouin women.

Overall, nearly half of the women (n=14) reported their health as excellent. One hundred percent (n=15) of the urban women reported their health status as good, very good, or excellent compared to only 67 percent (n=10) of the rural women. Sixty seven percent (n=10) of the urban women reported experiencing 4 or fewer illnesses in the past year compared to only 47 percent (n=7) of the rural women. An equal number of rural and urban women (n=10) reported experiencing 10 or more illnesses in the past year.
Table 3: Demographic Characteristics of Urban and Rural Bedouin Women

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homemaker</td>
<td>7 (47)</td>
<td>6 (40)</td>
<td>13 (43)</td>
</tr>
<tr>
<td>Teacher</td>
<td>4 (27)</td>
<td>6 (40)</td>
<td>10 (33)</td>
</tr>
<tr>
<td>Hair and Makeup Stylist</td>
<td>2 (13)</td>
<td>0 (0)</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Gardner/Farmer</td>
<td>1 (7)</td>
<td>3 (20)</td>
<td>4 (13)</td>
</tr>
<tr>
<td>Baker</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Fair</td>
<td>0 (0)</td>
<td>4 (27)</td>
<td>4 (13)</td>
</tr>
<tr>
<td>Good</td>
<td>4 (27)</td>
<td>3 (20)</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Very Good</td>
<td>4 (27)</td>
<td>0 (0)</td>
<td>4 (13)</td>
</tr>
<tr>
<td>Excellent</td>
<td>7 (47)</td>
<td>7 (47)</td>
<td>14 (47)</td>
</tr>
<tr>
<td><strong>Illnesses, Past Year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1 (7)</td>
<td>2 (13)</td>
<td>3 (10)</td>
</tr>
<tr>
<td>1 – 2</td>
<td>5 (33)</td>
<td>3 (20)</td>
<td>8 (27)</td>
</tr>
<tr>
<td>3 – 4</td>
<td>4 (27)</td>
<td>2 (13)</td>
<td>6 (20)</td>
</tr>
<tr>
<td>5 – 9</td>
<td>0 (0)</td>
<td>3 (20)</td>
<td>3 (10)</td>
</tr>
<tr>
<td>10 or more</td>
<td>5 (33)</td>
<td>5 (33)</td>
<td>10 (33)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>30 (100)</td>
</tr>
</tbody>
</table>

B. Traditional Healers and Biomedical Doctors Correlations

Ten total healers were interviewed. Four of the healers were biomedical doctors: a family doctor, a psychologist, a neurologist, and an internal medicine doctor. Six of the healers were traditional healers: two Tamreej healers, one Moalej Bel Koran, one Hogama, one Attar, and one individual who gave me insight about a Fataha healer. Seventy five percent (n=3) of the biomedical healers studied medicine. Twenty five percent (n=1) of the biomedical healers studied psychology. Thirty three percent (n=2) of the traditional healers studied religion and physical therapy. The remaining 40 percent (n=4) of the healers did not disclose their academic area of study.

Relationships between the healers’ demographics were tested for. Healers who were female were more likely to be older (p=.032, r=.676), have more children (p=.039, r=.657), and
have lower education levels ($p=.000, r=-.900$). Healers who were older were more likely to be married ($p=.021, r=.771$) and have lower education levels ($p=.059, r=-.614$). Male healers who had more wives and female healers who had more co-wives were more likely to have more children ($p=.027, r=.691$). Healers who had more children were less likely to have higher education levels ($p=.027, r=-.690$). Healers who had higher incomes were more likely to have lived in Israel and abroad ($p=.076, r=.584$).

Table 4: Correlation Coefficients among Healers’ Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Child</th>
<th>Grade</th>
<th>Places Lived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.676**</td>
<td>.657**</td>
<td>-.900***</td>
<td>-.089</td>
</tr>
<tr>
<td>Relationship status</td>
<td>.711**</td>
<td>.197</td>
<td>-.458</td>
<td>-.272</td>
</tr>
<tr>
<td>Age</td>
<td>.773***</td>
<td>-.614*</td>
<td>-.235</td>
<td></td>
</tr>
<tr>
<td>Wives/co-wives</td>
<td>.493</td>
<td>.691**</td>
<td>-.458</td>
<td>-.272</td>
</tr>
<tr>
<td>Child</td>
<td>.773***</td>
<td>-.690**</td>
<td>-.171</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-.174</td>
<td>-.329</td>
<td>.612*</td>
<td>.584*</td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01.

C. Urban and Rural Women’s Correlations

Women who were older were more likely to have poorer health ($p=.001, r=-.576$), lower education levels ($p=.000, r=-.586$), co-wives ($p=.023, r=.363$), visit a biomedical doctor ($p=.008, r=.478$), and to visit a Tamreej ($p=.033, r=.505$). Women who had more co-wives were more likely to have more children ($p=.009, r=.413$), poorer health ($p=.006, r=-.497$), and lower education levels ($p=.015, r=-.385$). Women who had better health were less likely to have many children ($p=.011, r=-.459$), more likely to have higher levels of education ($p=.000, r=.620$), less likely to report many severe illnesses ($p=.052, r=-.357$), and less likely to visit the doctor ($p=.003, r=-.525$). Women with higher levels of education were more likely to have fewer children ($p=.000, r=-.546$), less likely to visit the doctor ($p=.026, r=-.407$), and less likely to visit the doctor ($p=.011, r=.459$).
Table 5: Correlation Coefficients among Urban and Rural Women’s Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Health</th>
<th>Education</th>
<th>Co-wives</th>
<th>Severity of Illness</th>
<th>Biomedical Practitioner</th>
<th>Tamreej</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.728</td>
<td>-.576***</td>
<td>-.586***</td>
<td>.363**</td>
<td>-.002</td>
<td>.478***</td>
<td>.505**</td>
</tr>
<tr>
<td>Co-wives</td>
<td>.413***</td>
<td>-.497***</td>
<td>-.385**</td>
<td>.297</td>
<td>.128</td>
<td>-.243</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>-.459**</td>
<td>.620***</td>
<td>-.497***</td>
<td>-.357*</td>
<td>-.525***</td>
<td>-.098</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-.105</td>
<td>.076</td>
<td>.507***</td>
<td>-.087</td>
<td>-.005</td>
<td>-.234</td>
<td>-.358</td>
</tr>
<tr>
<td>Education</td>
<td>-.546***</td>
<td>.620***</td>
<td>-.385**</td>
<td>-.054</td>
<td>-.407**</td>
<td>-.248</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>-.459**</td>
<td>-.546***</td>
<td>.413***</td>
<td>.022</td>
<td>.459**</td>
<td>.070</td>
<td></td>
</tr>
<tr>
<td>Severity of Illness</td>
<td>.022</td>
<td>-.357*</td>
<td>-.054</td>
<td>.297</td>
<td>.225</td>
<td>-.077</td>
<td></td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01.

D. Urban Women’s Correlations

Relationships between the urban women’s demographics were tested for. Women who were older were more likely to report having poorer health (p=.001, r=-.745), lower education levels (p=.002, r=-.743), frequently visit a biomedical practitioner (p=.040, r=.535), and frequently visit a Tamreej (p=.011, r=.831). Women who had a greater number of co-wives were more likely to have more children (p=.061, r=.495) and report having poorer health (p=.100, r=-.440). Women who had more children were more likely to report having poorer health (p=.021, r=-.589). Women with higher levels of education were more likely to report having better health (p=.008, r=.658). Women who reported visiting an Attar more frequently were also more likely to report having better health (p=.019, r=.720). Women who had higher education levels were less likely to have more children (p=.001, r=-.772). Women who had more children were more likely to more frequently visit a biomedical practitioner (p=.066, r=.487). Women who reported visiting a Moalej Bel Koran more frequently were also more likely to report having more severe illnesses (p=.044, r=.767).
### Table 6: Correlation Coefficients among Urban Women’s Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Health</th>
<th>Education</th>
<th>Biomedical Practitioner</th>
<th>Attar</th>
<th>Tamreej Bel Koran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.841***</td>
<td>-.745***</td>
<td>-.743***</td>
<td>.535**</td>
<td>-.116</td>
<td>.831***</td>
</tr>
<tr>
<td>Co-wives</td>
<td>.495*</td>
<td>-.440*</td>
<td>-.256</td>
<td>-.012</td>
<td>-.414</td>
<td>-.205</td>
</tr>
<tr>
<td>Health</td>
<td>-.589**</td>
<td>.658***</td>
<td>-.312</td>
<td>.720**</td>
<td>-.537</td>
<td>.271</td>
</tr>
<tr>
<td>Income</td>
<td>-.392</td>
<td>.336</td>
<td>.664***</td>
<td>-.424</td>
<td>.159</td>
<td>-.443</td>
</tr>
<tr>
<td>Children</td>
<td>-.589**</td>
<td>-.772***</td>
<td>.487*</td>
<td>-.012</td>
<td>.377</td>
<td>-.647</td>
</tr>
<tr>
<td>Severity of Illness</td>
<td>-.171</td>
<td>-.079</td>
<td>.221</td>
<td>.113</td>
<td>-.171</td>
<td>.387</td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01.

E. Rural Women’s Correlations

Relationships between the rural women’s demographics were tested. Women who were older were more likely to report having poorer health ($p=.007$, $r=-.664$), lower education levels ($p=.002$, $r=-.584$), more co-wives ($p=.068$, $r=.501$), and more frequently visiting the doctor ($p=.102$, $r=.438$). Women who had more co-wives were more likely to report having poorer health ($p=.010$, $r=-.664$), and lower levels of education ($p=.016$, $r=-.627$). Women who reported having more co-wives were more likely to report having more severe illnesses ($p=.023$, $r=.600$), and less likely to report having good health ($p=.055$, $r=-.505$). Women who had higher education levels were more likely to report having better health ($p=.005$, $r=.681$), though they were less likely to visit a biomedical doctor ($p=.081$, $r=-.464$) or a Moalej Bel Koran ($p=.076$, $r=-.658$). Women who reported having better health were less likely to report visiting the doctor ($p=.001$, $r=-.761$).
Table 7: Correlation Coefficients between Rural Women’s Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Health</th>
<th>Education</th>
<th>Co-wives</th>
<th>Severity of Illness</th>
<th>Biomedical Doctor</th>
<th>Moalej Bel Koran</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.453*</td>
<td>-.664***</td>
<td>-.584***</td>
<td>.501*</td>
<td>.128</td>
<td>.438*</td>
<td>-.305</td>
</tr>
<tr>
<td>Co-wives</td>
<td>.260</td>
<td>-.664***</td>
<td>-.627**</td>
<td>.600**</td>
<td>.417</td>
<td>-.347</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>-.505*</td>
<td>.681***</td>
<td>-.664***</td>
<td>-.398</td>
<td>-.761***</td>
<td>.195</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>.201</td>
<td>.015</td>
<td>.487*</td>
<td>.065</td>
<td>.106</td>
<td>-.072</td>
<td>-.476</td>
</tr>
<tr>
<td>Education</td>
<td>-.336</td>
<td>.681***</td>
<td>-.627**</td>
<td>-.269</td>
<td>-.464*</td>
<td>-.658*</td>
<td></td>
</tr>
</tbody>
</table>

*p < .10, **p < .05, ***p < .01.

F. Qualitative Findings: Biomedical Practitioners

According to the literature on Negev healers, a Khatib, a Dervish, a Moalej Bel Koran, a Fataha, and an Attar are the most prevalent types of traditional healers. However, nearly all participants stated that Israel did not have Khatibs or Dervishes. The healers that were most commonly sought out, and therefore interviewed, were a biomedical practitioner, a Moalej Bel Koran, a Hogama, an Attar, a Fataha, and a Tamreej.

Family Doctor

Dr. Halim was a 47-year-old, male, family doctor who was married and had 4 children. He worked in Rahat at a pop-up clinic. This doctor reported that his patients were usually Bedouin men, women, and children. He stated that very few Jewish people came to his clinic. The most frequent ailments he saw were pain related, specifically, of back and neck. He stated that he often saw people who like to complain but don’t actually need medical attention, insinuating that many of his patients were not in true need of medical care. When asked about the types of treatments offered he stated that he provided conventional biomedical therapy such as prescribing analgesics, and providing patients with physiotherapeutic exercises. He also stated that, “Just talking also helps.” When asked if his biomedical treatments always worked, he stated that the results were variable. If the illness was organic, then the medication prescribed should
heal the individual. As the doctor put it, “For almost every somatic problem, there is a pharmacokinetic treatment.” However, he stated that if the problem was psychological, the medication was likely ineffective. Another explanation provided for the lack of successful healing was poor compliance. Additionally, the family doctor explained that Bedouins oftentimes have difficulty believing in and understanding chronic diseases. He stated that they frequently thought of their illnesses as only acute concerns. For example, when Bedouins are instructed to take medication for their diabetes and then stop taking it after a couple of days, this poses an immense threat to health maintenance. The family doctor concluded our interview by stating that many Bedouins use multiple alternative therapies such as herbal treatments.

**Psychologist**

Dr. Khaled was a 45-year-old male children’s psychologist who was married and had 6 children. His practice was located in Beersheba near the city center. This healer stated that he mainly worked with children ages 3 to 15. The most frequent cases he saw were children who were mentally challenged or those with attention deficient hyperactivity disorder (ADHD). He helped patients via performing diagnostic tests and personality assessments, analyzing the results of the tests, and creating a treatment plan or setting up a treatment program which oftentimes consisted of referring them to the most appropriate practitioner or someone who can prescribe appropriate medications for their condition. The psychologist stated that most of the time the treatments are successful but they require full and active participation from the entire family for a successful outcome.

**Pediatric Neurologist**

Dr. Hussain was a 44-year-old male neurologist who was married and had 5 children. This practitioner told me he worked mainly with children who had neurological diseases and
disorders such as cerebral palsy, migraines, brain tumors, neurological deformities, and autism. His method of treatment consists of identifying the cause of the disease or disorder, then deciding if the patient needs medication, physiotherapeutic exercises, or a referral to a neurosurgeon. His main task however, is prescribing medication. When asked if his treatment methods are efficacious, he stated that it depends on the pathophysiology of the disease for each person. He usually starts most patients out on the most common medication for their disease. If it does not prove to be successful, he changes the medication and continues changing it until he finds something that works for them.

**Internal Medicine Doctor**

Dr. Shafik was a 31-year-old male who was married with two children. This doctor emphasized that he worked entirely with Israeli patients. He explained that the majority of those who utilized the hospitals were Israeli individuals while the majority of those seeking care from the smaller health-care clinics were Bedouins. The most common conditions he was presented with were pneumonia, heart attacks, and heart failure. He stated that he used modern medicine to treat people. For example, if an individual had pneumonia he used antibiotics to treat him or her. If he or she had heart failure then he used diuretics. If an individual had a heart attack he would perform a catheterization and prescribe anticoagulants. He stated that each treatment was specific to the diagnosis and most of the time the treatments were successful. This doctor stressed that he was the wrong person to interview if I wanted information about Bedouin treatment choice since he only interacted with Israeli people in the hospital.

G. Quantitative Findings: Visits to a Biomedical Practitioner

When individuals were asked why they visited a biomedical doctor, 100 percent of participants (n=30) provided answers that alluded to naturalistic causations of their diseases.
Furthermore, the majority of visits were either for physical or physiological testing or pain related ailments. The women’s responses were as such: “I was having chest pains,” “I had a broken leg,” “I had the flu,” or “I had a urinary tract infection.” Several women also stated they visited the doctor, “to have an EKG done to check for irregular heartbeat,” “to do a cat scan for my recurring headaches,” “to check my blood sugar levels,” and “to get an x-ray on my back because of my severe back pain”.

When asked if they had used any other treatment before visiting a biomedical doctor, the majority of the women stated they had used natural remedies (n=22). Some of the responses were, “I sat in a bath of boiled chamomile and parsley water,” “I made a cup of tea with anise, sage, and thyme,” “I rubbed koranic oil, tamanu oil, and black seed oil on my back,” “I mixed white honey with water and used the mixture as eye drops,” “I rubbed olive oil and cleome on my hands,” or “I read the Koran.” Two, individuals stated that they visited a Moalej Bel Koran and a Tamreej, respectively, prior to visiting their family doctor. In general, visiting traditional healers prior to seeking biomedical care was clearly was clearly not the most common pattern of resort, especially with respect to physical and physiological health problems.

The majority of the diagnosis that the medical doctors provided for their patients were physical in nature. The women said, “I had a herniated disc which is what was causing my leg pain,” “I have “the sugar” (high blood sugar levels/diabetes), “I was having pain in my knees because he said I needed a knee replacement,” and “He said I strained my muscles. My body was overworked and fatigued.” When asked why she acquired this illness, a variety of reasons were stated. Some women claimed it was stress related: “I was mentally and physically stressed with work and the kids”. Others said they didn’t know why they had gotten that illness. One woman stated, “It was God given, no one knows why.” Another woman said, “I wasn’t taking good care
of myself for some time and I wasn’t making sure I was taking in adequate nutrition.” Several women explained the cause of their illness as being climate or weather related. “My bones hurt from the cold,” “I don’t know, maybe it was the change of weather that happened because of the change in seasons,” The sun caused the heat (inflammation),” “It was a virus from the weather,” and “It was the weather. Dust and dirt really.” The majority of the women were treated with prescription medications or asked to return for additional testing. Others were treated with surgery or physical therapy.

Table 8: Table of Biomedical Medical Treatment Choice Patterns

<table>
<thead>
<tr>
<th>Why Visited Biomedical Doctor</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold/flu</td>
<td>1 (7)</td>
<td>2 (13)</td>
<td>3 (10)</td>
</tr>
<tr>
<td>Pain</td>
<td>7 (47)</td>
<td>7 (47)</td>
<td>14 (47)</td>
</tr>
<tr>
<td>Lab test/bloodwork/x-ray</td>
<td>6 (40)</td>
<td>2 (13)</td>
<td>8 (27)</td>
</tr>
<tr>
<td>Injury</td>
<td>0 (0)</td>
<td>1 (7)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>0 (0)</td>
<td>3 (20)</td>
<td>3 (10)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment Before Biomedical Doctor</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13 (87)</td>
<td>9 (60)</td>
<td>22 (73)</td>
</tr>
<tr>
<td>No</td>
<td>2 (13)</td>
<td>6 (40)</td>
<td>8 (27)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Treatment Before Biomedical Doctor</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Koran</td>
<td>1 (8)</td>
<td>0 (0)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Alternative treatment</td>
<td>1 (8)</td>
<td>1 (11)</td>
<td>2 (9)</td>
</tr>
<tr>
<td>Water/herbs mixture</td>
<td>5 (39)</td>
<td>4 (44)</td>
<td>9 (41)</td>
</tr>
<tr>
<td>Over the counter medication</td>
<td>2 (15)</td>
<td>0 (0)</td>
<td>2 (9)</td>
</tr>
<tr>
<td>Rest</td>
<td>1 (8)</td>
<td>2 (22)</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Oils and massage</td>
<td>2 (15)</td>
<td>1 (11)</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Visited another healer</td>
<td>1 (8)</td>
<td>1 (11)</td>
<td>2 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How Would You Explain Symptoms?</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>2 (13)</td>
<td>0 (0)</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Pain</td>
<td>9 (60)</td>
<td>14 (93)</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Discomfort</td>
<td>4 (27)</td>
<td>1 (7)</td>
<td>5 (17)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Problem</td>
<td>2 (13)</td>
<td>1 (7)</td>
<td>3 (10)</td>
</tr>
<tr>
<td>Physical Health Problem</td>
<td>9 (60)</td>
<td>14 (93)</td>
<td>23 (77)</td>
</tr>
<tr>
<td>No Diagnosis</td>
<td>4 (27)</td>
<td>0 (0)</td>
<td>4 (13)</td>
</tr>
</tbody>
</table>
Why Did You Get this Illness?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
<th>Perhaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress/work injury</td>
<td>2 (14)</td>
<td>4 (27)</td>
<td>6 (20)</td>
</tr>
<tr>
<td>Sun/weather</td>
<td>2 (14)</td>
<td>3 (20)</td>
<td>5 (17)</td>
</tr>
<tr>
<td>God given</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Common illness/normal</td>
<td>2 (14)</td>
<td>0 (0)</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3 (21)</td>
<td>5 (33)</td>
<td>8 (27)</td>
</tr>
<tr>
<td>Old age</td>
<td>2 (14)</td>
<td>0 (0)</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Genetics</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Poor nutrition/self-care</td>
<td>1 (7)</td>
<td>3 (20)</td>
<td>4 (13)</td>
</tr>
</tbody>
</table>

**Treatment**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Yes</th>
<th>No</th>
<th>Perhaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication</td>
<td>7 (50)</td>
<td>12 (80)</td>
<td>19 (66)</td>
</tr>
<tr>
<td>Further testing/x-ray</td>
<td>4 (29)</td>
<td>1 (7)</td>
<td>5 (17)</td>
</tr>
<tr>
<td>No treatment</td>
<td>1 (7)</td>
<td>1 (7)</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Physical therapy/exercise</td>
<td>1 (7)</td>
<td>0 (0)</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Surgery/shot</td>
<td>1 (7)</td>
<td>1 (7)</td>
<td>2 (7)</td>
</tr>
</tbody>
</table>

Did You Get Better

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did You Get Better</td>
<td>10 (71)</td>
<td>4 (29)</td>
</tr>
<tr>
<td></td>
<td>12 (80)</td>
<td>3 (20)</td>
</tr>
<tr>
<td></td>
<td>22 (76)</td>
<td>7 (24)</td>
</tr>
</tbody>
</table>

**Why Did You Get Better?**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
<th>Perhaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication worked</td>
<td>9 (90)</td>
<td>7 (64)</td>
<td>16 (76)</td>
</tr>
<tr>
<td>Rest</td>
<td>0 (0)</td>
<td>1 (9)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Mindfulness/meditation</td>
<td>1 (10)</td>
<td>0 (0)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Water/herbs</td>
<td>0 (0)</td>
<td>3 (27)</td>
<td>3 (14)</td>
</tr>
</tbody>
</table>

H. Qualitative and Quantitative Findings: Moalej Bel Koran

Mr. Atef was a 53-year-old male, Moalej Bel Koran, or a religious healer who lifts evil spirits through the reading of the Koran, who was married and had 10 children. The most frequent patients of this healer were usually women and children, and occasionally men. The healer stated that more importantly, he worked with people who were given the “evil eye,” those who had sorcery performed on them, or those who encountered the “jinn,” or a spirit akin to the devil who is able to possess humans. He explained that the “evil eye,” or sorcery, manifested by a feeling of “tightness in the chest.” Oftentimes, individuals turned towards the Moalej Bel Koran when they were unable to receive biomedical diagnoses or be treated by biomedical doctors. Doctors were oftentimes sought out before seeking this type of healer. Those who were told that there was nothing wrong with them frequently resorted next to a Moalej Bel Koran.
This healer’s procedure for healing consisted of three parts. First, he asked the patient if she had visited a biomedical doctor or not. Second, he asks if she was given a biomedical diagnosis and if she followed through with the doctor’s prescriptions. If she did comply to no avail, he—“reads the Koran” on her. The third step consists of a combination of the following instructions after their visit: bathe with water that was prayed upon, rub Koranic oil on one’s body, drink honey mixed with black seed (or another herb that he prays upon) each morning prior to consuming anything else, and reading specific koranic verses on her own. The Moalej Bel Koran explained that the treatment outcome was variable and depended on the individual. However, he did emphasize that if one was compliant and abided by all instructions, they were healed. He also stated that he was a Koranic healer and his work was done from the heart and his job was to “read the words of God,” which had healing powers.

Visits to a Moalej Bel Koran

50% of the women had visited a Moalej Bel Koran, with their visits mainly because of psychological or psychiatric affliction. They mentioned insomnia, depression, headaches, pain, and the inability to speak as the reasons. One woman said, “My heart rate use to be really high and a few times I was hospitalized. But every time the doctor said that there was nothing wrong with me.” Another woman said, “I went to the Moalej because I felt upset and suffocated and I cried a lot.” Another said, “One day I just stopped talking. I was unable to speak.” Other’s stated, “I was depressed,” or “My father passed away and I was upset.”

When asked if they sought out treatments prior to going to the Moalej Bel Koran, the majority of the women said that they had. They said, “I tried to read the Koran by myself at home but it didn’t work,” “I tried to read the Koran, use my rosary, and listen to the Koran,” and “I tried to read the Koran by myself but I heard sometimes it works better if someone else reads
it to you.” Another woman said, “I went to a biomedical doctor and he told me nothing was wrong with me and he didn’t treat me.”

When the women were asked about the symptoms of their conditions, they restated their illnesses. One woman said, “I was depressed, I was having family problems, husband problems, headaches, and I had no desire to do anything.” Another woman said, “I was upset and I thought too much. I thought depressing thoughts.” Other responses were, “I was angry, upset, depressed, unsettled,” and “I couldn’t talk and got dizzy a lot and passed out”.

When asked about the Moalej’s diagnosis, many women stated that he diagnosed the illness as a product of the “evil eye” or sorcery. For example, one woman said, “He said I got the evil eye from people who were envious of me.” Another woman said, “He said that someone gave me something bad to drink.” Other responses included, “He said it was normal to feel this way because I was grieving my father’s death,” “He said nothing was wrong, no one performed any sorcery on me. He said I just needed to read the Koran and relax,” and “He said someone definitely performed an act of sorcery towards me.”

When asked about their own beliefs about why they fell ill with their conditions, responses varied. The women said, “I don’t know, God knows,” “I was given the evil eye during my daughters sebooe, (ceremony held 7 days after the birth of a child),” and “I have a husband, a house, and happy and healthy kids. When that happens, people give you the evil eye.”

Treatments provided by the Moalej consisted of mainly Koranic readings. One woman said, “He gave me headphones with Koranic readings. He also tried to give me this herbal mixture so I could make it into a drink. Also, this oil that was prayed on and he told me to rub it on my head but I didn’t do it.” Another woman said, “He read me the Koran, I listened to the Koran at home, I put oil that was prayed on, on my body, and I drink water that had Koranic
verses dissolved into it.” Two unusual responses to this question were, “He read the Koran on me. I vomited while he was reading. He also poked my finger tips and the tips of my toes with needles until they bled,” and “He wrote down Koranic verses and touched the pieces of paper on different parts of my body but I was not allowed to read them.”

All but two women (87%) stated that they were healed after visiting the Moalej. Faith in the Koran, or God and God’s word were attributed to their improved status. The women said, “I believe God heals,” “I got closer to the Koran and God,” and “I started reading the Koran more often, drinking Koranic water, and listening to the Koran, and I felt better.” One women provided an unusual experience during her treatment that helped explain why she felt like she got better. She said, “I felt suffocated when I first started listening to it [the Koran]. I felt like I stopped breathing and started breathing again. I felt a rush of oxygen enter my brain and I have felt fine since then.”
Table 9: Table of Moalej Bel Koran Medical Treatment Choice Patterns

<table>
<thead>
<tr>
<th>Why Visited a Moalej Bel Koran</th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insomnia</td>
<td>1 (14)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Upset/depressed</td>
<td>3 (43)</td>
<td>3 (38)</td>
<td>6 (40)</td>
</tr>
<tr>
<td>Headaches</td>
<td>2 (29)</td>
<td>2 (25)</td>
<td>4 (27)</td>
</tr>
<tr>
<td>Pain</td>
<td>1 (14)</td>
<td>2 (25)</td>
<td>3 (23)</td>
</tr>
<tr>
<td>Unable to speak</td>
<td>0 (0)</td>
<td>1 (13)</td>
<td>1 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment Before Moalej Bel Koran</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5 (71)</td>
<td>8 (100)</td>
<td>13 (87)</td>
</tr>
<tr>
<td>No</td>
<td>2 (29)</td>
<td>0 (0)</td>
<td>2 (13)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Treatment Before Moalej Bel Koran</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Koran</td>
<td>3 (60)</td>
<td>5 (63)</td>
<td>8 (62)</td>
</tr>
<tr>
<td>Drank water/tea</td>
<td>0 (0)</td>
<td>1 (13)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Visited biomedical doctor</td>
<td>2 (40)</td>
<td>2 (25)</td>
<td>4 (31)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>How Would You Explain Symptoms?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insomnia</td>
<td>1 (14)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Upset/depressed</td>
<td>3 (43)</td>
<td>3 (38)</td>
<td>6 (40)</td>
</tr>
<tr>
<td>Headaches</td>
<td>2 (29)</td>
<td>2 (25)</td>
<td>4 (27)</td>
</tr>
<tr>
<td>Pain</td>
<td>1 (14)</td>
<td>2 (25)</td>
<td>3 (20)</td>
</tr>
<tr>
<td>Unable to speak</td>
<td>0 (0)</td>
<td>1 (13)</td>
<td>1 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Evil eye</td>
<td>4 (57)</td>
<td>6 (75)</td>
<td>10 (67)</td>
</tr>
<tr>
<td>Sorcery</td>
<td>1 (14)</td>
<td>2 (25)</td>
<td>3 (20)</td>
</tr>
<tr>
<td>Natural illness</td>
<td>2 (29)</td>
<td>0 (0)</td>
<td>2 (13)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Why Did You Get this Illness?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Evil eye</td>
<td>2 (33)</td>
<td>5 (63)</td>
<td>7 (50)</td>
</tr>
<tr>
<td>Sorcery</td>
<td>1 (17)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Normal illness</td>
<td>1 (17)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Weather</td>
<td>1 (17)</td>
<td>1 (13)</td>
<td>2 (14)</td>
</tr>
<tr>
<td>Family problems</td>
<td>0 (0)</td>
<td>1 (13)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Lack of reading Koran</td>
<td>0 (0)</td>
<td>1 (13)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Don't know</td>
<td>1 (17)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>He read me Koran</td>
<td>1 (14)</td>
<td>2 (25)</td>
<td>3 (20)</td>
</tr>
<tr>
<td>He read me Koran and did home Koran treatment</td>
<td>5 (71)</td>
<td>6 (75)</td>
<td>11 (73)</td>
</tr>
<tr>
<td>Verses touched to body</td>
<td>1 (14)</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did You Get Better</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7 (100)</td>
<td>6 (75)</td>
<td>13 (87)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>2 (25)</td>
<td>2 (13)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why Did You Get Better?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep/rest</td>
<td>3 (43)</td>
<td>0 (0)</td>
<td>3 (23)</td>
</tr>
<tr>
<td>Koran/God</td>
<td>4 (57)</td>
<td>6 (100)</td>
<td>10 (77)</td>
</tr>
</tbody>
</table>
I. Qualitative and Quantitative Findings: Hogama

Mr. Waleed was a 27-year-old, male Hogama, or a healer who combines physical therapy, chiropractic work, and Traditional Chinese Medicine. This healer was married with no children. The Hogama worked at a private practice and stated that he treated mainly Arab patients. His most frequent patient was one who endured some type of sport or activity related illness, specifically those involving back and leg pain. The most common treatments he provided were massages, cupping, bloodletting, and physical therapy. He also oftentimes instructed his patients to perform specific physical exercises to strengthen certain areas of the body. The Hogama explained that when he needed to do a bloodletting procedure, he made tiny incisions with a needle, heated the inside of the glass cups with a match, and placed the cups on the patients back. This procedure created suction and helped remove “bad blood” from the body. The Hogama was confident that his treatments always worked. However, he stated that if the diagnosis was incorrect and the individual did not just have back pain or “bad blood,” then the treatment would not work.

Visits to a Hogama

Four women (13%) stated that they visited a Hogama. All because of pain. One said, “I had back pain, I was vomiting, and I had headaches.” Another woman said, “I went to her because my neck hurt.” When asked about whether or not they participated in any other treatments prior to their Hogama visit, three women said yes. One woman said, “I tried a bandana tightly around my head and put my hand on my head and read the Koran.” The other two said, “I tried using hot and cold patches” and “I visited a biomedical doctor.” When asked to explain their symptoms, all of the women mentioned having pain in one or more parts of their bodies. They said, “My neck hurt,” or “I was having back pain.” The diagnoses given by the...
Hogama ranged from no diagnosis to a physical diagnosis to the “evil eye.” The women said, “He didn’t say. He just told me I had to have bloodletting done,” “He said I have herniated discs,” and “He said I was given the evil eye.” The women’s beliefs about why they got their illnesses were either, “I don’t know,” or “The evil eye.” The treatment methods used for healing for all four women were strictly bloodletting. The women stated that the Hogama, “used glass cups to let out “bad blood.” The majority of women stated that they got better and those who were healed claimed that – “The pain went away” and “It relieved some pressure off of my back when he took out the bad blood.”
### Table 10: Table of Hogama Medical Treatment Choice Patterns

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Why Visited Hogama</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>1 (100)</td>
<td>3 (100)</td>
<td>4 (100)</td>
</tr>
<tr>
<td><strong>Treatment Before Hogama</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (100)</td>
<td>2 (67)</td>
<td>3 (75)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>1 (33)</td>
<td>1 (25)</td>
</tr>
<tr>
<td><strong>Type of Treatment Before Hogama</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home remedy</td>
<td>1 (100)</td>
<td>1 (50)</td>
<td>2 (67)</td>
</tr>
<tr>
<td>Biomedical doctor</td>
<td>0 (0)</td>
<td>1 (50)</td>
<td>1 (33)</td>
</tr>
<tr>
<td><strong>How Would You Explain Symptoms?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>1 (100)</td>
<td>3 (100)</td>
<td>4 (100)</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No diagnosis</td>
<td>1 (100)</td>
<td>1 (33)</td>
<td>2 (50)</td>
</tr>
<tr>
<td>Evil eye</td>
<td>0 (0)</td>
<td>1 (33)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>Herniated discs</td>
<td>0 (0)</td>
<td>1 (33)</td>
<td>1 (25)</td>
</tr>
<tr>
<td><strong>Why Did You Get this Illness?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t know</td>
<td>1 (100)</td>
<td>2 (67)</td>
<td>3 (75)</td>
</tr>
<tr>
<td>Evil eye</td>
<td>0 (0)</td>
<td>1 (33)</td>
<td>1 (25)</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cupping and bloodletting</td>
<td>1 (100)</td>
<td>3 (100)</td>
<td>4 (100)</td>
</tr>
<tr>
<td><strong>Did You Get Better</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (100)</td>
<td>2 (67)</td>
<td>3 (75)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>1 (33)</td>
<td>1 (25)</td>
</tr>
<tr>
<td><strong>Why Did You Get Better?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment worked</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (33)</td>
</tr>
<tr>
<td>Got rid of bad blood</td>
<td>0 (0)</td>
<td>1 (50)</td>
<td>1 (33)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0 (0)</td>
<td>1 (50)</td>
<td>1 (33)</td>
</tr>
</tbody>
</table>

J. Qualitative and Quantitative Findings: Attar

Mr. Khader was a 42-year-old Attar, or a traditional herbal healer who mixes native herbs to treat physical and mental illness. He was married and had 7 children. The Attar told me that his most frequent customers are women. The most frequent problems they sought treatment for were diabetes, stomach pains, and weight loss. The Attar stated that he provided different herbs and spices for each condition. For example, for those with high blood sugar levels he “prescribed” fenugreek, licorice, fennel and ginger. For stomach pain he recommended sage,
chamomile, and fenugreek. For weight loss he suggested oats, green tea, and sonamukhi. The Attar told me that some of the concoctions are efficacious while others are not. He explained that treatments are subject to individual reactions to the mixtures.

**Illustration 3:** The Attar’s Herb Shop Located in Rahat, Israel

Visits to Attar

The responses received with respect to this particular healer were variable. The questions I asked targeted their health behavior seeking process. The Attar however, was seen by many as an herbalist who simply dispensed herbal medications as opposed to treated people using these medications. Questions about this healer were confusing to the women because many viewed him as a supplier, akin to a pharmacist, and frequently didn’t ask for his advice regarding specific treatments but simply requested herbs. Furthermore, many of the women also went to the Attar to purchase herbs and spices used for both cooking and healing, rather than specifically when they fell ill and were seeking treatment. Therefore, although many of the women were
asked the same line of questions asked about the other healers, many of the questions asked about the Attar, such as, “How would you explain your symptoms?” “What was the Attar’s diagnosis?” and “Why did you get this illness?” were not applicable since the women saw the Attar as simply a store owner, rather than a knowledgeable herbalist. A few women explained this by saying, “I don’t go to him when I’m sick. He’s only really like a pharmacy,” “I don’t go to the Attar to buy stuff for treatment, I buy it for the house,” and “I don’t go [to the Attar] specifically for illness.” All but one of the women stated that they visited the Attar to buy herbs, oils, and spices. They provided responses such as, “I needed to buy herbs. I buy fennel a lot,” “I got spices for making mamool” (Arabic dessert), and “I needed to buy oils and herbs.” Some women stated that they visited the Attar because, “I wanted to lose weight” and “I wasn’t sick I just wanted to keep stuff at home.” When asked what the Attar’s diagnosis was for their illnesses, the women said, “I didn’t tell him what was wrong, I just went and asked for what I needed,” “He doesn’t know,” and “He only gives me medicine, he doesn’t diagnose.” Some of the products women stated they purchased from the Attar were anise, ginger, honey, mint, simak, sativa, cumin, chamomile, green tea, cinnamon, blessed oil, and lion’s foot.

**Table 11: Table of Attar Medical Treatment Choice Patterns**

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Why Visited an Attar</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To buy oils/herbs/spices</td>
<td>7 (88)</td>
<td>12 (100)</td>
<td>19 (95)</td>
</tr>
<tr>
<td>Pain</td>
<td>1 (13)</td>
<td>0 (0)</td>
<td>1 (5)</td>
</tr>
<tr>
<td><strong>How Would You Explain Symptoms?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>2 (50)</td>
<td>1 (20)</td>
<td>3 (33)</td>
</tr>
<tr>
<td>No symptoms</td>
<td>2 (50)</td>
<td>0 (0)</td>
<td>2 (22)</td>
</tr>
<tr>
<td>Weight Loss</td>
<td>0 (0)</td>
<td>1 (20)</td>
<td>1 (11)</td>
</tr>
<tr>
<td>Unable to speak</td>
<td>0 (0)</td>
<td>1 (20)</td>
<td>1 (11)</td>
</tr>
<tr>
<td>Upset/depressed</td>
<td>0 (0)</td>
<td>1 (20)</td>
<td>1 (11)</td>
</tr>
<tr>
<td>Preventative</td>
<td>0 (0)</td>
<td>1 (20)</td>
<td>1 (11)</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herbs/spices</td>
<td>4 (100)</td>
<td>5 (100)</td>
<td>9 (100)</td>
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</tbody>
</table>
K. Qualitative and Quantitative Findings: Fataha

I was unable to find a Fataha, or a fortune teller. Mention of a Fataha stirred disapproval and denial among all but two participants. A Fataha was seen as a sorcerer who was in opposition to God. However, I was able to gain in depth insight from my main informant Rawan about the works of a Fataha since she had previously known one. Rawan told me that since Fatahas are seen as individuals who are discordant with the Islamic faith, they oftentimes maintain their profession in secrecy and rarely do people know where they live. They treat mainly women and mainly those who believe sorcery was performed on them. On occasion, they treat women who are victim to the “evil eye,” or “hasad” (envy). Common reasons for seeking a Fataha are relational problems such as having sexual marital problems, the inability to get pregnant, or difficulty finding a husband. Rawan told me that the Fataha performs sorcery and claims to work with the “angels of God,” but truthfully works with the “jinn.” Rawan believes that people believe the works of a Fataha because they want to believe that her treatments work. Rawan herself does not believe in the works of a Fataha and claims that Fataha’s give themselves good reputations for doing sorcery and that’s why women seek their help and return to them for additional help. Rawan stated that Fatahas do, “weird” things during their treatments such as use string to predict the future, make weird noises, and whisper to themselves. Rawan told me she knew one Fataha who would stay up through the night and sleep during the day. When I asked how Fatahas treat their patients, Rawan said that she asks her patients to perform “weird” duties such as burying food such as bread or salt under a specific tree, leaving food out overnight under the stars and eating it the following morning, and obtaining a picture, sweat, clothing, or some body part such as nails or hair of an individual in order to do sorcery on them. Rawan said that
her treatments work because they make people feel better and because people want them to work.

Visits to a Fataha

Only two women out of the entire sample stated that they visited a Fataha. Both women said they went because their daughter had some type of problem. The first woman said, “My daughter started acting weird and people said she got “the eye”. She used to cry a lot. I also went for a personal problem.” When asked about the symptom of her problem, she decided to talk more about the personal problem and said, “My daughter wasn’t talking. I also lost money and someone called to tell me to go to this Fataha for answers.” When asked about the “diagnosis” she said, “The Fataha said that the one who took the money was a family member and he or she took enough to live off of for about two months.” When asked why this problem happened, she said, “Whoever stole the money was greedy and knew where the money was.” When asked what the “treatment” consisted of she said, “She used a rosary and a string. She spun the string in between her hands and pulled it apart slowly. Where the knots were in the string – she could “read” them and tell me what was wrong. She can read things that we can’t see.” When asked if the situation got better she said no because her money was not returned.

The second woman who admitted to visiting a Fataha said, “[I visited a Fataha because] My daughter’s weight wouldn’t budge. She wasn’t growing.” She also said that she took her daughter to a biomedical practitioner prior to seeking out a Fataha. When asked about her symptoms she said, “My daughter’s weight wasn’t increasing.” When asked about the diagnosis she said, “She said (the Fataha) that an “unclean” woman entered into my home and came near my daughter.” After probing further about what “unclean” meant and after she shooed her children away she said, “It means a woman who had marital relations with her husband and
didn’t shower afterwards came close to my daughter.” When asked about why she believed she got this illness, she said, “I don’t know, I actually thought she was a Tamreej but then I found out she was a Fataha when I went because she was talking to someone that wasn’t me. She was my friend but now I’m afraid of her. I was scared of her after that happened. I think a “jinn” was inside of her.” When asked about how they were treated she said, “She was talking to herself out loud and then whispering and responding to herself. She said that she needed to get the treatment at night and the treatment for my daughter was under the tree but the “jinn” wouldn’t let her get it at night. Then she did the sign of the cross. A Christian “jinn” was inside of her.” When asked if her daughter got better she said, “Yes, but not because of the Fataha. It was because of the doctor who gave her glucose.”
Table 12: Table of Fataha Medical Treatment Choice Patterns

<table>
<thead>
<tr>
<th></th>
<th>Urban  n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why Visited Fataha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daughter problems</td>
<td>1 (100)</td>
<td>1 (100)</td>
<td>2 (100)</td>
</tr>
<tr>
<td>Treatment Before Fataha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>No</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Type of Treatment Before Fataha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedical doctor</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (100)</td>
</tr>
<tr>
<td>How Would You Explain Symptoms?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost money</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Daughter problems</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family member stole money</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Visit by an unclean woman</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Why Did You Get this Illness?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greedy family member</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritual work</td>
<td>1 (100)</td>
<td>1 (100)</td>
<td>2 (100)</td>
</tr>
<tr>
<td>Did You Get Better</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>No</td>
<td>1 (100)</td>
<td>0 (0)</td>
<td>1 (50)</td>
</tr>
<tr>
<td>Why Did You Get Better?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedical doctor</td>
<td>0 (0)</td>
<td>1 (100)</td>
<td>1 (100)</td>
</tr>
</tbody>
</table>

L. Qualitative and Quantitative Findings: Tamreej

Next, I interviewed two Tamreej, or women who perform massages, some specifically to induce conception. Madeeha was an 86-year-old woman who was widowed and had 9 children. She stated that she mainly worked with married women who want to get pregnant. Her methods of treatment consisted of massaging and bloodletting one’s stomach and back. The Tamreej told me that most of her treatments work but it’s God’s decision if he wants a woman to become pregnant with a child. Samara was a 75-year-old woman who was married with a co-wife and 15 children. This Tamreej stated that she treated mainly women who want to get pregnant and those
who have “fear” (anxiety), or have been bitten by animals. Occasionally, she performs regular back and neck massages for pain. She performs her treatments for women seeking conception by massaging their backs and massaging their uterus back into place. She treats animal bites by rubbing a concoction of spit and oil directly on the bite. This healer stated that her spit neutralized animal bites.

**Visits to a Tamreej**

Sixty percent of the women who were interviewed stated that they previously visited a Tamreej. When asked about the reasons the women visited a Tamreej, more responses than not were pregnancy related. “A “jinn” didn’t want me to have kids,” one woman said. Another woman said, “I was married for 5 years and still didn’t get pregnant.” A non-pregnancy related response was, “I threw up a lot. I was told maybe my stomach was elevated and this was the cause of my sickness, so I went to the Tamreej for treatment.” Before visiting the Tamreej the women stated that they, “Went to the doctor but it didn’t work,” or “Drank thyme and sage tea,” or “I went to visit this woman who just gave birth while I was menstruating (this event is called a Kabsa) and so that caused me to not be able to get pregnant. I tried bathing in this water that had a birthing rock in it that is specific for reversing the Kabsa. I tried dipping it in my bath several times.” When asked about one’s symptoms, the women mainly expressed that they were unable to conceive. Others said, “I had anxiety and fear,” “My stomach was elevated,” and “My ribs hurt and they were stuck.” When asked about the Tamreej’s diagnosis of their conditions, the women said, “Part of my body was not in place. She manipulated it and put it back in place,” “She doesn’t know what’s wrong but she says that my uterus is in place,” “I had a sunken liver and kidney and a risen stomach,” and “My uterus was shifted from its place”. When asked about why they had this illness, the women stated, “A “fear” did this. I got startled once when I was
young,” “A car accident happened and I was anxious since then,” “I carried heavy stuff,” “God knows,” and “I lifted something heavy while I was menstruating.”

The common theme in the Tamreej’s treatment process is the presence of massaging an organ such as the uterus or the stomach back into place. Some women also stated that cupping, hot patches, and oil were involved. One woman said, “She massaged my stomach and told me to relax and not work.” Another woman said, “She massaged my uterus and set it back in place.” Others said, “She massaged my stomach and gave me water with a birthing rock in it so I could bathe with it,” and “She pulled up on my rib cage and massaged me with oil.” When asked whether or not the women were healed, the majority that stated they were healed thought that the treatment worked because they got pregnant. The majority of women who thought the treatment was not successful though so because they did not get pregnant.
Table 13: Table of Tamreej Medical Treatment Choice Patterns

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td><strong>Why Visited a Tamreej</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To get pregnant</td>
<td>5 (63)</td>
<td>7 (70)</td>
<td>12 (67)</td>
</tr>
<tr>
<td>Back pain</td>
<td>2 (25)</td>
<td>0 (0)</td>
<td>2 (11)</td>
</tr>
<tr>
<td>Shift insides</td>
<td>0 (0)</td>
<td>2 (20)</td>
<td>2 (11)</td>
</tr>
<tr>
<td>Body fatigue</td>
<td>0 (0)</td>
<td>1 (10)</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1 (13)</td>
<td>0 (0)</td>
<td>1 (6)</td>
</tr>
<tr>
<td><strong>Treatment Before Tamreej</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2 (25)</td>
<td>6 (60)</td>
<td>8 (44)</td>
</tr>
<tr>
<td>No</td>
<td>6 (75)</td>
<td>4 (40)</td>
<td>10 (56)</td>
</tr>
<tr>
<td><strong>Type of Treatment Before Tamreej</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-massage</td>
<td>1 (50)</td>
<td>0 (0)</td>
<td>1 (13)</td>
</tr>
<tr>
<td>Biomedical doctor</td>
<td>1 (50)</td>
<td>3 (50)</td>
<td>4 (50)</td>
</tr>
<tr>
<td>Birthing rock</td>
<td>0 (0)</td>
<td>1 (17)</td>
<td>1 (13)</td>
</tr>
<tr>
<td>Herbal teas</td>
<td>0 (0)</td>
<td>1 (17)</td>
<td>1 (13)</td>
</tr>
<tr>
<td>Physical exercise</td>
<td>0 (0)</td>
<td>1 (17)</td>
<td>1 (13)</td>
</tr>
<tr>
<td><strong>How Would You Explain Symptoms?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unable to get pregnant</td>
<td>4 (50)</td>
<td>7 (70)</td>
<td>11 (61)</td>
</tr>
<tr>
<td>Pain</td>
<td>3 (38)</td>
<td>2 (20)</td>
<td>5 (28)</td>
</tr>
<tr>
<td>Sick</td>
<td>1 (13)</td>
<td>1 (10)</td>
<td>2 (11)</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insides shifted</td>
<td>4 (50)</td>
<td>6 (60)</td>
<td>10 (56)</td>
</tr>
<tr>
<td>Back pain</td>
<td>2 (25)</td>
<td>0 (0)</td>
<td>2 (11)</td>
</tr>
<tr>
<td>Don’t remember</td>
<td>1 (13)</td>
<td>0 (0)</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Nothing is wrong</td>
<td>0 (0)</td>
<td>2 (20)</td>
<td>2 (11)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>1 (13)</td>
<td>2 (20)</td>
<td>3 (17)</td>
</tr>
<tr>
<td><strong>Why Did You Get this Illness?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy lifting/hard work</td>
<td>5 (63)</td>
<td>6 (60)</td>
<td>11 (61)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1 (13)</td>
<td>4 (40)</td>
<td>5 (28)</td>
</tr>
<tr>
<td>Car accident</td>
<td>1 (13)</td>
<td>0 (0)</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Getting frightened</td>
<td>1 (13)</td>
<td>0 (0)</td>
<td>1 (6)</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massage to back and/or stomach</td>
<td>6 (75)</td>
<td>10 (100)</td>
<td>16 (89)</td>
</tr>
<tr>
<td>Cupping</td>
<td>2 (25)</td>
<td>0 (0)</td>
<td>2 (11)</td>
</tr>
<tr>
<td><strong>Did You Get Better</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7 (88)</td>
<td>7 (70)</td>
<td>14 (78)</td>
</tr>
<tr>
<td>No</td>
<td>1 (13)</td>
<td>3 (30)</td>
<td>4 (22)</td>
</tr>
<tr>
<td><strong>Why Did You Get Better?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got pregnant</td>
<td>3 (50)</td>
<td>4 (80)</td>
<td>7 (64)</td>
</tr>
<tr>
<td>Pain went away</td>
<td>2 (33)</td>
<td>0 (0)</td>
<td>2 (18)</td>
</tr>
<tr>
<td>Got rid of my fears</td>
<td>1 (17)</td>
<td>0 (0)</td>
<td>1 (9)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0 (0)</td>
<td>1 (20)</td>
<td>1 (9)</td>
</tr>
</tbody>
</table>
M. Hypotheses

It was hypothesized that despite universal healthcare in Israel, due to (1) limited accessibility of health-care clinics, (2) the desire to maintain traditional healing practices and the (3) dismissal and lack of understanding of cross-cultural healing by biomedical practitioners (4) the rural Negev population would more frequently seek traditional healers over biomedical practitioners than would the urban Negev.

Hypothesis 1

It was hypothesized that the rural population would have limited accessibility to health-care clinics compared to the urban population. However, there was no significant difference found between the populations with respect to the distances traveled to visit biomedical practitioners. Thirty three percent (n=5) of urban women compared to 40 percent (n=6) of rural women reported that their biomedical doctor was far from where they were located, which was not a significant difference ($X^2 = .144; p=0.14$).

Table 14: Comparison of Distances to Biomedical Doctor

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far</td>
<td>5 (33)</td>
<td>6 (40)</td>
<td>11 (37)</td>
</tr>
<tr>
<td>Close</td>
<td>10 (67)</td>
<td>9 (60)</td>
<td>19 (63)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>30 (100)</td>
</tr>
</tbody>
</table>

($X^2 = .144; p=0.14$)

Hypothesis 2

It was hypothesized that rural women would seek traditional healers more often than urban women because of their desire to maintain their traditional healing practices. No evidence was found for this hypothesis. When urban women were asked about who they preferred to visit for physical health problems, 80 percent (n=12) of the urban women preferred seeking care from a biomedical practitioner over a traditional healer or a home remedy, compared to only 67
percent (n=10) of rural women, however, no significant differences was found between the two groups (Fisher’s Exact Test, p=.682). For mental health problems, 60 percent (n=9) of the urban women preferred a home remedy or self-help over a traditional healer or biomedical practitioner, compared to 67 percent (n=10) of rural women. Again, no significant difference was found between the two groups (Fisher’s Exact Test, p=.598).

Table 15: Participants Healer Preference for Any Traditional Healer vs. Biomedical Doctor

<table>
<thead>
<tr>
<th>Healer Preference</th>
<th>Physical Health</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Total n (%)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Traditional Healer</td>
<td>0 (0)</td>
<td>1 (7)</td>
</tr>
<tr>
<td></td>
<td>3 (20)</td>
<td>4 (27)</td>
</tr>
<tr>
<td></td>
<td>8 (13)</td>
<td></td>
</tr>
<tr>
<td>Biomedical Doctor</td>
<td>12 (80)</td>
<td>10 (67)</td>
</tr>
<tr>
<td></td>
<td>3 (20)</td>
<td>1 (7)</td>
</tr>
<tr>
<td></td>
<td>26 (43)</td>
<td></td>
</tr>
<tr>
<td>Self Help/Home Remedy</td>
<td>3 (20)</td>
<td>4 (27)</td>
</tr>
<tr>
<td></td>
<td>9 (60)</td>
<td>10 (67)</td>
</tr>
<tr>
<td></td>
<td>26 (43)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
</tr>
<tr>
<td></td>
<td>15 (100)</td>
<td>15 (100)</td>
</tr>
<tr>
<td></td>
<td>60 (100)</td>
<td></td>
</tr>
</tbody>
</table>

A chi-square test of group compared to traditional healer and self-help behaviors vs. biomedical doctor for mental health problems was conducted.

Table 16: Chi-Square of Healer Preference for Any Traditional or Self Help vs. Biomedical Doctor

<table>
<thead>
<tr>
<th>Healer Preference</th>
<th>Physical Health</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Urban n (%)</td>
<td>Rural n (%)</td>
</tr>
<tr>
<td></td>
<td>Total n (%)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Traditional Healer + Self Help</td>
<td>3 (20)</td>
<td>5 (33)</td>
</tr>
<tr>
<td></td>
<td>12 (80)</td>
<td>14 (93)</td>
</tr>
<tr>
<td>Biomedical Doctor</td>
<td>12 (80)</td>
<td>10 (67)</td>
</tr>
<tr>
<td></td>
<td>3 (20)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
</tr>
<tr>
<td></td>
<td>15 (100)</td>
<td>15 (100)</td>
</tr>
</tbody>
</table>

Physical Health (Fisher’s Exact Test, p=.682)
Mental Health (Fisher’s Exact Test, p=.598)

During the past year, 56 percent (n=19) of rural women visited some type of traditional healer, compared to only 52 percent (n=15) of urban women.
Table 17: Number of Participants Who Visited Any Traditional Healer vs. Biomedical Doctor in the Past Year

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Healer</td>
<td>15 (52)</td>
<td>19 (56)</td>
<td>34 (54)</td>
</tr>
<tr>
<td>Biomedical Doctor</td>
<td>14 (48)</td>
<td>15 (44)</td>
<td>29 (46)</td>
</tr>
<tr>
<td>Total</td>
<td>29 (100)</td>
<td>34 (100)</td>
<td>63 (100)</td>
</tr>
</tbody>
</table>

Hypothesis 3

It was hypothesized that the rural population would be dismissed or misunderstood by the biomedical practitioners. Evidence was found for this hypothesis. One hundred percent (n=15) of all urban women reported that their biomedical doctor spoke Arabic. Sixty percent (n=9) of all rural women reported that their biomedical doctor spoke Arabic. Urban women reported that their biomedical doctor spoke Arabic to them more frequently than rural women (Fisher’s Exact Test, p=.008).

Table 18: Group Compared to Language Spoken by Biomedical Doctor

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15 (100)</td>
<td>9 (60)</td>
<td>24 (80)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>6 (40)</td>
<td>6 (20)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>30 (100)</td>
</tr>
</tbody>
</table>

(Fisher’s Exact Test, p=.008)

Hypothesis 4

It was hypothesized that the rural population would more frequently seek traditional healers over biomedical practitioners than would the urban population. It appears that there is no evidence to support this hypothesis. One hundred percent (n=30) of the participants knew the health insurance law existed visited a biomedical doctor at some point in time during their lifetime. During the past year, 41 percent (n=96) of urban women’s visits to a practitioner were
to a traditional healer, compared to only 27 percent (n=58) of rural women’s visits. During the past year, rural women less frequently visited traditional healers compared to urban women. Furthermore, rural women more frequently sought out biomedical practitioners over traditional healers. Seventy three percent (n=157) of rural women’s visits were to biomedical doctors, compared to only 59 percent (n=140) of urban women. However, overall, during the past year, rural women (n=215) visited fewer practitioners than urban women (n=236).

Table 19: Total Number of Visits to Traditional Healer vs. Biomedical Doctor in the Past Year

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Healer</td>
<td>96 (41)</td>
<td>58 (27)</td>
<td>154 (34)</td>
</tr>
<tr>
<td>Biomedical Doctor</td>
<td>140 (59)</td>
<td>157 (73)</td>
<td>297 (66)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236 (100)</strong></td>
<td><strong>215 (100)</strong></td>
<td><strong>451 (100)</strong></td>
</tr>
</tbody>
</table>

Independent samples t-tests were conducted to determine whether the total number of visits to biomedical doctors and traditional healers differed between the two groups. There was no significant difference between the two groups with respect to the total number of visits to a biomedical doctor in the past year (t=-.499, p=.622). Additionally, there was no significant difference between the two groups with respect to the total number of visits to any traditional healer in the past year (t=1.261, p=.220).

N. Other Interesting Findings

Despite the urban women and the rural women visiting biomedical practitioners at approximately the same frequency, rural women are not as satisfied with the law as urban women. Urban women were significantly more satisfied with the law and more frequently believed that the law has made a difference in their lives compared to rural women. A chi-square test of group compared to satisfaction with the law was conducted. One hundred percent (n=15) of all urban women are satisfied with the law compared to only 53 percent (n=8) of rural women.
(Fisher’s Exact Test, p=.006). Additionally, 100 percent (n=15) of all urban women believe that the universal health insurance law has made a difference in her life compared to only 40 percent (n=6) of the rural women (Fisher’s Exact Test, p=.000).

Table 20: Chi-Square of Urban and Rural Women’s Satisfaction with the Health Insurance Law

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>15 (100)</td>
<td>8 (53)</td>
<td>23 (77)</td>
</tr>
<tr>
<td>Unsatisfied</td>
<td>0 (0)</td>
<td>7 (47)</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>30 (100)</td>
</tr>
</tbody>
</table>
(Fisher’s Exact Test, p=.006)

When asked about why the law has made a difference in one’s life, the urban and rural women’s answers differed. Urban women’s satisfaction with the law is exhibited in their responses to this question. One woman said “It’s the best law in Israel. Many benefit who are poor –of course way more than me and my husband, who is a plastic surgeon. Like in Egypt, people die because they can’t pay [for health-care]. In Egypt a woman died giving birth right outside of the hospital doors because she had no insurance and couldn’t pay.” Another urban woman said, “It helps the poor. The government pays for the poor.” Others replied with, “You’re covered no matter what. It helps everyone!” “We used to pay in installments monthly and now it’s free!” We didn’t use to go [to the doctor] because it was expensive,” “We aren’t very rich so it’s nice not having to pay,” “It’s good because everyone deserves healthcare. We only pay for medication,” and “It helps me because I don’t have any income.” Rural women’s dissatisfaction was expressed in the following ways: “I don’t even go to the doctors a lot but they still take our money,” “I still pay a lot for medications and they take a lot from my paycheck,” “It’s always been here. We need dental care. I get 6,000 shekels taken from my paycheck yearly but I still have to pay for a dentist,” “They just take a lot from my paycheck and it doesn’t help,” “They
take a lot of money but I only go once or twice a year!” and “We’ve always had it. Everyone has had it since birth. 200 to 300 shekels are withdrawn from your paycheck every month.”

Table 21: Chi-Square of Group Compared to Difference the Law Has Made in One’s Life

<table>
<thead>
<tr>
<th></th>
<th>Urban n (%)</th>
<th>Rural n (%)</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15 (100)</td>
<td>6 (40)</td>
<td>21 (70)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0)</td>
<td>9 (60)</td>
<td>9 (30)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (100)</td>
<td>15 (100)</td>
<td>30 (100)</td>
</tr>
</tbody>
</table>

(Fisher’s Exact Test, $p=.000$)
CHAPTER SIX

DISCUSSION

A. Biomedical and Traditional Healing

Interviews with each of the healers helped to further explain the beliefs that the patients held about illness and disease, which further explained the patterns of treatment that the participants exhibited. All of the women in the study who reported visiting a biomedical practitioner provided natural causation as the source of their illnesses. The biomedical doctor’s interview responses corroborated with the women’s reasoning for visiting a biomedical practitioner. When the doctor was asked if his treatments were successful, he explained that if the illness that the individual had was organic, or of natural causation, such as those named by Murdock (1980), they were likely to be healed. The doctor explained that modern medicine was effective for treating somatic problems via pharmacological intervention. Psychological problems, however, were unlikely to be treatable with biomedicine. The explanation provided by the doctor is an example of the idea that the mind and the body are able to be detached from each other (Descartes, 1984). Despite physical illnesses impacting psychological states and vice versa, the doctor explained how his treatments focused solely on treating illnesses that were somatically expressed. According to Al-Krenawi (1998), patients who were told by doctors that they had no physical problems were oftentimes extremely upset by the dismissal of their symptoms. Perhaps this is a reason why the women only sought out medical doctors for issues they were almost certain were physical in nature. The most frequent illnesses the doctor reported seeing and the most frequent illnesses that the patients reported having were physical pain. Besides his
pharmacological treatments, the doctor stated that simply talking to individuals that come to his clinic seems to improve their health. This sheds light on the impact of the professionalized health-care system on illnesses, despite actual biomedical intervention.

The majority of women stated that prior to visiting the biomedical doctor they participated in home remedy treatments in an attempt to treat their illnesses on their own. Two women said they visited traditional healers prior to visiting the biomedical practitioner. According to Young’s research in Mexico (1981), the most common pattern seeking behavior is the utilization of modern medicine first. If that treatment does not provide relief, people seek alternative treatments (1981). Not only were the disease classifications for those who visited a biomedical doctor natural in nature, the majority of the symptoms and diagnoses provided were also natural. Mechanistic problems that occur due to physical trauma, such as a broken leg, were explained by natural causation rather than supernatural.

One of the explanations of the supernatural causes of illness that Young (1981), provides are environmental. Illnesses may occur due pathological effects of environmental agents such as rain, the sun, and rain. For example, environmental features such as these may enter the body and result in an excess of cold or heat, which is dangerous to the body because it upset its normal balance and cause illness (Young, 1981). The humoral theory was developed by Hippocrates around 370BCE. The humoral theory is a widespread belief that each individual has a specific composition of four humors, or fluids and any imbalance in any of these humors resulted in disease. Despite its antiquity, medical traditions such as Ayurvedic medicine, Traditional Chinese medicine, Native American medicine, and many other cultures currently abide by this theory. (Adams, 1849). In Macphee’s (2012) study in Morocco, she explains that abrupt changes in temperature, particularly during the winter time, could trigger an imbalance of a bodily humor.
and cause illness. In accordance with these beliefs about illness causation in Mexico and Morocco, several women in the study cited that the weather or climate caused their illness. Excessively cold weather was attributed to causing bone pain, excessive heat from the sun caused inflammation, a weather “virus” caused a cold, and a change of seasons caused illness.

Natural illnesses may also be, “sent from God” as punishment. This serves to explain why one woman who visited a biomedical doctor stated that her naturally caused illness was “given by God.” Alternatively, oftentimes when the women asked about their health and they were in good health, they never simply stated they were disease free, but also expressed extreme gratitude and praise to God for their status as if lack of divine recognition for their well-being would bring about ill health. Young (1980), also reports seeing this behavior during his fieldwork in west-central Mexico. He explains that in order to keep illness away from the household, individuals never solely reported the absence of illness but also “gave thanks to God” several times.

Another component to the balancing of humors is through the circulation of blood. Young (1981) explains that circulating blood is the means through which balance is maintained throughout the body. Several women explained that they had stagnant or bad blood that needed to be removed in order for new blood to be generated. Participants who expressed these types of statements, visited Hogamas and were usually treated with massages, physical therapy, cupping, or bloodletting. Oths and Hinojosa (2004), found that patients in Chugurpampa, Peru who characterized their symptoms as blocked blood flow, retained blood, sharp pain resulting from pulled nerves, moved bones, and knotted joints sought out a bonesetter to heal their ailments. Hogamas, akin to Peruvian bonesetters, were also musculoskeletal manipulators who sought structural reintegration as well as the maintenance of bodily humor equilibrium. Furthermore, the
Tamreejs were also a type of healer who performed similar treatments to those found in the Andes. This type of healer worked with women who had dropped abdomens and elevated or dropped stomachs (Oths, 2004).

An attar sells herbs that are usually boiled in water and ingested or mixed with oil and applied externally. Besides their traditional folk remedies, Attar’s also sell several commercially produced remedies such as aspirins and other capsules. Data collection with respect to visiting an Attar was skewed because many of the medicinal plants that were sold by the Attar were grown in people’s homes or yard or found outdoors in surrounding regions. As Young (1981) explains, west-central Mexican herbalists were oftentimes considered vendors of remedies that were used in the home rather than healers or direct providers of treatment. Similarly, the women in my study did not necessarily consider the Attar a healer.

The koranic healer I spoke with told me that he lifted evil spirits through the reading of the Koran. He told me that the majority of his patients were women and children. Macphee (2012) explains that in Islam, men are believed to be stronger than their female counterparts and are better equip to handle the forces of evil that come their way. This could be a potential explanation for why more women sought out treatment from the Moalej more frequently than men. The Moalej also explained that he mainly treated women who had sought out help from a biomedical practitioner prior to visiting him. In fact, he explained that the first step to his healing process consisted of inquiring if the women had visited a biomedical practitioner before visiting him. After biomedical treatment, those who were not diagnosed, treated, or the treatment failed to heal them were treated by him. The women independently corroborated with this perspective through their statements about biomedical doctor’s inability to deal with mental illnesses.
Another major category that causes illnesses that is often cited in the literature is internal causation (Young, 1981). Young (1981), states that internal changes in the body state, usually emotional or dietary, may lead to illness. Intense emotional experiences such as anger, fright, and sadness may cause illness. Strong emotions are sometimes believed to impact the body’s functioning by disrupting its equilibrium. Emotion induced illness may manifest in the heart as a feeling of pain, tightness or uneasiness (Young, 1981). The Moalej explained that many women who sought out his care expressed feelings of suffocation or tightness in their chest. The women in the study also cited depression, sadness, mental pain, anger, fear as common reasons why one would visit a Moalej Bel Koran. Findings show that the women resorted to biomedical practitioners more often when their illness was physical and to a Moalej Bel Koran when their illness was mental.

Murdock’s second category of disease etiology is supernatural causation, or a disease that comes about through reasons that are beyond scientific explanations. Supernatural causation may be broken down into mystical, animistic, or magical (Murdock, 1980). The most commonly cited forms of supernatural causation were sorcery and witchcraft, which are categorized as illnesses caused by magic. Acts of sorcery are expert behaviors and actions that are intended to cause harm. Acts of witchcraft may be unintentional such as those caused by the evil eye (Murdock, 1981). An example of sorcery that one woman provided as an explanation for her severe bout of vomiting was that someone gave her something bad to drink. According to Macphee’s (2012) research in Morocco, sihr (magic) could cause severe digestive illness. One woman expressed that her healthy and happy life with her husband and children caused envy in a woman which caused her ill health. Macphee (2012) explains that around the Mediterranean, expressions of envy or admiration regarding beauty, health skill, or success may cause harm by triggering the
opposite (Macphee, 2012). Another woman claimed she got “the eye” during the ceremony held seven days after her daughter’s birth. Macphee (2012), also explains that childbirth in Morocco is the most dangerous time in a woman’s life due to her increased susceptibility to humoral imbalance, “the eye,” spirit attacks, magical curses, and microbes. The women’s explanations about why they acquired these illnesses revolved around acts of sorcery and witchcraft, those of which the Moalej is viewed equipped to treat.

Although a Moalej Bel Koran is akin to a healer who cures illnesses brought about by witchcraft, a Fataha is considered a bad sorcerer since she specializes in both, causing illness and misfortune and curing illnesses brought about by sorcery or witchcraft. Biomedical practitioners who use modern medical treatments are unable to cure these illnesses. After the most frequently sought out treatments are performed and deemed unsuccessful, witchcraft becomes a plausible explanation (Young, 1981). Frazer (1978), delineates between two types of magic, sympathetic and contagious magic. Contagious magic is the idea that there is a permanent relationship between an individual and any body part or item that was previously in contact with that individual (Frazer, 1978). Consequently, items that had once been attached to or a part of the body, such as nails, hair, clothing, and blood, could be used in magic ritual to affect the individual they came from (Anderson, 1996). As explained by one of my informants, the Fataha can perform the “works of the devil” by asking her “patient” to bring remains of someone to her in order for her to cause them harm from a distance. Fataha’s can manipulate objects to harness their power and channel that power to either harm or heal.

I was unable to find a Fataha because of how disapproving people were of this type of healer. My main informant said she knew someone and I met a couple of other women who said they knew someone from a distance, but due to their negative association and discordance with
Islam, none of the women who claimed to know them led me to one. According to MacPhee (2012), she had a similar experience in Morocco with seeking this type of healer or speaking of magic with her participants. In her study, very few women were willing to speak about magic. Muslims shunned these practices and anyone associated with their use had a negative reputation (MacPhee, 2012). When asked why women didn’t visit a Fataha, 12 women specifically said nearly the exact same phrase, “I don’t believe in their work” and 9 women specifically used the term “haram,” or against the teachings of Islam to explain their reasoning for not going. Most women immediately stated they had never been to a Fataha and would never visit one because this would be an indication of ignorance, lack of faith in Allah, entering into contract with the jinn, or having the jinn inside oneself.

When I explained to the women that I knew they would never go to one and inquired about why anyone would, most women still would not divulge anything they knew about them. Three women told me, “Women go if they have problems at home or with their husband,” “Others go if they want to get married and someone has performed sorcery on them and is preventing them from getting married. Oh, and if your husband wants to marry a second wife you can visit a Fataha to prevent him from doing so.” One woman said, “It’s sorcery, if people have problems they go. My mother in law did it once and I watched. A Moroccan traveler knocked on our door once and asked for 6 shekels. She put salt on a plate and spun a shekel on top of the salt. The shekel wouldn’t quit spinning. It’s magic and I don’t believe in it. It’s a lie.” According to Young (1989), the individual he interviewed in Mexico was an expert in solving marriage problems and locating lost possessions. Similarly, one of the two women who admitted to visiting a Fataha stated that she went because of losing money. Since I was a guest, women were polite but appalled that I even brought up the name. Many even said, “Astaghfirullah,” or
“Bismillah,” meaning “I seek forgiveness from Allah” and “In the name of Allah” immediately after hearing the mention of a Fataha in order to ward off the perceived evil that is associated with her work. Despite claiming they didn’t believe in this healer’s works, they participated in behaviors that led me to believe that they feared this healer and did believe in her works because they needed to ward off evil.

B. Hypothesis

According to the data, there was no difference in accessibility to health-care clinics compared to the urban population. During the data collection phase, although I had not analyzed the data yet, I noticed the trend and was puzzled at why this was the case. Furthermore, after interviewing a Bedouin biomedical practitioner, I was convinced that previous literature on disproportionate health-care accessibility for Bedouins living in unrecognized towns was no longer applicable. It was only until I interviewed an internal medicine doctor that I understood why there was a discrepancy between urban and rural Bedouin health statistics. Dr. Halim, who worked at a health clinic, explained that the majority of his patients were Bedouins. Dr. Shafik explained that he worked entirely with Israeli patients and that the majority of those who utilized the hospitals were Israeli. Although the rate at which urban and rural Bedouins visited biomedical practitioners was comparable, the difference between the two lies in the quality of care. Bedouins living in unrecognized villages have the poorest, understaffed, ill equip, overcrowded “pop-up” clinics. Oftentimes, these clinics are where medical students in training are placed to gain practice. Urban Bedouins visited clinics that were in slightly better shape but still incomparable to the Israeli hospitals in the urban Israeli cities. Internal medical doctor explained to me that both rural and urban Bedouins only visited these clinics because only clinics were built in the government established Bedouin towns. No hospitals were nearby for Bedouins
to visit. Also, initially, when I asked the participants who they would visit for specific illnesses and they replied with the word, “specialist,” I understood it as doctors who were experts in a certain branch of medicine. The internal medical doctor explained to me that the term “specialist” simply meant a more knowledgeable doctor such as one who works at a private practice and is more skilled than those who work in the government staffed clinics. Young (1981), also found that government run health centers in Mexico were chronically underfunded and the quality of treatments at these health centers was much lower than those found at private practices. He explains that because doctor’s salaries were paid by the government, they seemed less interested in the outcomes of their patient’s treatments (Young, 1981). Differences in the quality of care between rural and urban Bedouins and Bedouins and Israelis could explain the disparities found in health and wellbeing between the two populations.

There was no difference found between rural and urban Bedouin women regarding the second hypothesis. There was no difference between the two groups regarding their desire to maintain their traditional healing practices. This difference was not apparent because there was an overwhelming preference by both urban and rural women to either participate in home remedies or seek a traditional healer over a biomedical practitioner. Furthermore, although there was no significant difference between the two groups regarding their annual visits to traditional healers and biomedical practitioners, there was more evidence that both rural and urban women visited traditional healers more than biomedical practitioners during the past year. Again, no significance was found between the two groups with respect to who they preferred to visit for physical and mental health, but both rural and urban women consistently reported seeking biomedical doctors for physical health problems and self-help methods or a traditional healer for mental health problems.
With respect to the third hypothesis, the rural population was in fact less understood by the biomedical practitioners. There was a significant difference between the rural women’s doctor’s Arabic speaking abilities and the urban women’s doctor’s Arabic speaking abilities. More rural women’s doctors did not speak to them in Arabic. Another source of misunderstanding may stem from biomedical practitioners focus on natural causation of disease. This may lead to the dismissal of Bedouin opinions about their illness or disease. According to Al-Krenawi’s (1999) findings from his Negev Bedouin study, practitioners who work with traditional ethnic groups must be more culturally sensitive to their clients in order for there to be better treatment outcomes. Ignoring traditional beliefs about illness causation and traditional healing practice may also be a source of misunderstanding that leads to poor patient-practitioner relationships and poor health outcomes (Littlewood, 2016). Supernatural causes are not considered as modern medical etiological explanations of disease. Therefore, when faced with these explanations, biomedical practitioners may have a hard time understanding their patient’s perspective and patients may have a hard time understanding the doctor’s diagnosis and abiding by his treatment (Al-Krenawi, 1998).

Considering Bedouins use traditional healing methods in conjunction with biomedicine, biomedical doctors would be most effective if they had cross-cultural awareness. According to Al-Krenawi (1998), biomedical practices used with Bedouin patients who were unfamiliar with them created barriers to understanding and successfully treating patient’s illnesses. Cultural sensitivity is important in designing, planning, and beginning treatment interventions (Burgest, 1982). The gap between modern practitioners and traditional clients must be resolved in order for proper treatment to take place. Doctors oftentimes “scientifically” analyze their patients and ignore their cultural belief systems and understandings of their diseases (Abdul-Menaim, 1991).
Most doctors who have treated Bedouins tend to show little regard to gender sensitive issues and would ignore non-biomedically recognized symptoms that their patients expressed (Walker, 1995). Al-Krenawi (1998), stated that he once witnessed a colleague mocking a Bedouin-Arab woman because she was pointing to her stomach while complaining about her heart. The doctor did not understand that Bedouin modesty was likely why the woman did not point at her breasts (Al-Krenawi, 1998).

With respect to the fourth hypothesis, both urban and rural women more frequently visited biomedical practitioners. Contrary to what was expected, rural women visited biomedical doctors more frequently than urban women and urban women visited traditional healers more frequently than rural women. There are several potential reasons for this finding. One potential explanation may involve Bedouins’ lower levels of health compared to other cultural and ethnic groups living in Israel. Considering Bedouins have historically had worse health than any other cultural or ethnic group in Israel, there has been a recent attempt to enhance their health and wellbeing. This attempt may have manifested through the promotion of and encouragement to visit biomedical practitioners more than traditional healers. Therefore, these results may reflect the impact of the attempt to enhance Bedouin health and wellbeing. Furthermore, since rural Bedouin health is even worse than urban individuals’, increased promotion and encouragement towards visiting biomedical practitioners is more likely to be more prevalent towards rural individuals, which is reflected in their increased biomedical practitioner visits.

Despite rural women visiting biomedical practitioners more frequently, they are not as satisfied with the law as urban women. Upon entering Israel, I thought that the universal health insurance law meant that healthcare was completely government funded. Through interviews, I learned that each month, every individual living in Israel had a portion of their paycheck or
retirement withdrawn depending on their income level. I believe that rural women were not as satisfied with the law because they live in the unrecognized towns where their health-care facilities are not up to standard as their urban counterpart’s facilities, let alone the Israeli facilities. Considering health insurance is payed for collectively, rural women whose paychecks are lowered because of the universal health insurance law are significantly much less satisfied than the urban women because of the quality of their health-care facilities and the quality of their health-care. Despite the rural women having the same amount of money withdrawn from their paychecks as the urban women, the allocation of funding and resources to the rural clinics is disproportionately lower, thus, rural women are not as satisfied with the universal health insurance law.

C. Limitations

There are several limitations to this study that must be addressed. The first is that I only interviewed women in two towns. Opinions elsewhere, in other Bedouin rural and urban towns may differ. Furthermore, I only interviewed women, which provides only a glimpse into healthcare patters of Bedouin women. I also only interviewed women who I was led to by women I had already interviewed. Considering women who are friends may share similar belief systems, I may not have gotten the widest range of responses since snowball sampling was used.

Another limitation to the study is the sample size of both the participants and the healers. A participant sample size of thirty is small and may not be representative of the entire Bedouin population. Also, a sample of ten healers may not be representative of all biomedical and traditional healers in the Negev. Furthermore, none of the healers I spoke with were Israeli, which could be an important perspective to obtain for a study such as this one. The perspectives
provided were only representative of those specific healers rather than all biomedical practitioners in Israel and all types of traditional healers in Israel.

Other limitations to this study are some points of confusion regarding some of the questions from the interview schedule. For example, the question about the cost of treatment may have caused the women to associate the word cost with solely monetary giving. Only did I later realize that many of the participants gave traditional healers gifts rather than money. With respect to annual income, many women told me that they had no income since they did not work while others, who did not work and were on disability insurance or some type of government assistance program understood the question differently and provided me with retirement or government funded incomes. One woman told me how much she obtained from government assistance and then withdrew the amount in fear that I worked with the government and was trying to withhold her income.

I also believe it was difficult for many women to recall how many illnesses they had in the past year or the number of times they visited each healer. A better question would have been about the number of times they had or did either in the past month. I also believe that I should have gotten exact numbers rather than a range of approximations regarding the number of illnesses they had, the number of severe illnesses they had, and the number of visits they had. Another area of improvement is the distance they traveled to each practitioner. It would have been better to have either used google maps to approximate kilometer distances to each healer or asked participants to provide me with an exact kilometer distance.

The question, “Does [type of healer] speak your language?” could have also been misunderstood since “your language” could have been interpreted as Arabic for some and Hebrew for those who were bilingual. Others may have simply understood the question as “Was
your doctor able to communicate with you?” regardless of language. A better question could have been, “In what language did your doctor communicate with you in?” Lastly, instead of asking how this research could be used to help their community, I would directly ask what they wanted to see change in their health-care system that would make Bedouins healthier.
CHAPTER SEVEN

CONCLUSIONS

It is apparent that the majority of individuals, both rural and urban, utilize both traditional healers and biomedical practitioners. A common misconception is that once biomedicine becomes known in a culture that has previously relied on traditional medicine, traditional medicine is abandoned and modern medicine is adopted. According to the Health Belief Model (Yoder, 1997), once individuals learn epidemiological facts about the etiologies of illness and disease, they would adhere to these newly learned scientific recommendations about how to prevent and treat illnesses. Findings from multiple studies show that the relationship between knowledge and behavior is complex and new behaviors are not always incorporated as the result of new information (Catania, Kegeles, & Coates, 1990; Dressler & Bindon, 2000; Nichter, 2003). Evidence shows that both traditional healing and biomedical intervention are used in conjunction (Leslie, 1980; Marsland, 2007; Pelto & Pelto, 1997; Xu & Chen, 2011). As one woman put it, “You should use both modern medicine and traditional medicine together. Using both is more effective than just using one or the other.” Traditional medicine contributes to rather than competes with the larger healthcare system of the region (Kroeger, 1983). Traditional medicine in the Negev is accessible, affordable, efficacious in some instances, and culturally consonant with traditional and Islamic beliefs. Evidence from my study shows that regardless of location and proximity to medical services, people are open to whichever medical treatment works best (Oths, 1994). Rather than completely transplanting traditional medicine and strictly abiding by biomedical standards, individual’s patterns of medical treatment choice are variable.
depending on the nature of the illness or disease. Similarly, rather than completely resisting modern medicine and clinging only to traditional belief systems, individuals are flexible and combine different but complimentary items from both medical systems to form a coherent, coordinated treatment plan. One participant captured this idea exactly by saying, “For some illnesses you need to visit a Moalej, for other illnesses you need a doctor. It depends on what you have. No one healer knows all.” This shows that her help-seeking behavior is contingent upon the illness she has. Some participants clearly delineated when each type of healer was sought out. For example, one woman said, “If you have a physical disease, you go to a doctor. If you have a mental illness, you go to a Moalej Bel Koran.” This statement truly encapsulates that each illness has a specific healer, and clearly illustrates the pattern of treatment choice that I found in this study.

Future studies should examine biomedical practitioner’s knowledge of cultural Bedouin beliefs in order to assess how doctors deal with Bedouins explanations of the etiologies of their symptoms. Research in this area may help improve Bedouin health outcomes because biomedical practitioners may understand Bedouin beliefs and potentially integrate traditional healing explanations or approaches into their own work. Conducting ethnographic research on the traditional and biomedical health seeking practices of urban and rural males is also an important area for a more comprehensive understanding of regional practices. Another fruitful area of research could be a longitudinal study monitoring the changes in medical treatment patterns over time. Observing changes in healthcare patterns may be indicative of underlying cultural shifts in belief, real world constraints on treatment choices, or another unknown change inducing agent. Apart from individual health-care seeking behaviors, in the context of an underserved population in the middle east such as Bedouin in the Negev, it would be beneficial to further examine the
greater socioeconomic and political forces that come into play when choosing where to seek care and who to seek out for care. A better understanding of these powers would likely lead us to the sources of inequality that maintain the status quo and clue us into the ways in which we can improve health-care.
REFERENCES


APPENDIX A: INSTITUTIONAL REVIEW BOARD

Kathryn S. Oths, Ph.D.
Professor
Department of Anthropology
College of Arts & Sciences
The University of Alabama
Box 870210

Re: IRB # EX-17-CM-039 “Differences in Traditional Health Seeking Practices between Rural and Urban Negev Bedouin Populations in Israel”

Dear Dr. Oths:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your protocol has been given exempt approval according to 45 CFR part 46.101(b)(2) as outlined below:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your application will expire on June 1, 2018. If your research will continue beyond this date, complete the relevant portions of Continuing Review and Closure Form. If you wish to modify the application, complete the Modification of an Approved Protocol Form. When the study closes, complete the appropriate portions of FORM: Continuing Review and Closure.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number.

Good luck with your research.
APPENDIX B: COPY OF INFORMED CONSENT

UNIVERSITY OF ALABAMA
HUMAN RESEARCH PROTECTION PROGRAM
Informed Verbal Consent for a Non-Medical Study

Study Title: Differences in Traditional Health Seeking Practices Between Rural and Urban Negev Bedouin Populations in Israel

Investigator’s Name: Dr. Kathryn Oths, Professor

Secondary Investigator’s Name: Monika Wanis, Graduate Student
You are being asked to take part in a research study.

This study is called Differences in Traditional Health Seeking Practices Between Rural and Urban Negev Bedouin Populations in Israel

I, Monika Wanis, a graduate student at the University of Alabama am conducting this study. I am under the supervision of Dr. Kathryn Oths who is a professor of Anthropology at The University of Alabama.

The study is designed to examine health seeking behaviors and use of medical treatments, products and practices.

Why have I been asked to be in this study?
You have been asked to be in this study because you are an adult female.

How many people will be in this study?
About (36) people in all will be in this study.

What will I be asked to do in this study?
If you agree to be in this study, you will be asked to complete an interview where you will be asked about your knowledge, preferences and attitudes towards traditional and biomedical treatments. You will be asked questions about your use of traditional and biomedical services, the frequency with which you visit either practitioner, how the treatment process unfolds, and what types of treatments are used for different illnesses. You will also be asked about your attitude toward, and availability and accessibility of traditional and biomedical treatments.

How much time will I spend being this study?
It should take no more than 1 hour to complete the study.

Will being in this study cost me anything?
The only cost to you in this study is your time.

Will I be compensated for being in this study?
As a token of appreciation, you will receive 15 New Israeli Shekels

What are the risks (dangers or harms) to me if I am in this study?

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED 2-2017
EXPIRATION DATE 6-17-17

84
There are no risks to you beyond the activities of daily living.

**What are the benefits (good things) that may happen if I am in this study?**
Your participation will help increase what we know about Bedouin health related behaviors and treatment choice. This may help researchers understand the impact of the National Health Insurance Law as well as improve health policy and services for Negev Bedouins.

**How will my privacy be protected?**
Your name will not appear on the survey form. Each interview will be assigned a random number for coding procedures.

**How will my confidentiality be protected?**
Your participation in this study is completely confidential. You are not being asked to provide any information that will allow other people to identify you as a participant or to contact you in the future for any reason.

**What are the alternatives to being in this study? Do I have other choices?**
The alternative to being in this study is not to participate.

**What are my rights as a participant in this study?**
Taking part in this study is voluntary. It is your free choice. You can refuse to be in it at all. If you start the study, you can stop at any time.

The University of Alabama Institutional Review Board ("the IRB") is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

**Who do I call if I have questions or problems?**
If you have questions, concerns, or complaints about the study right now, please ask them. If you have questions, concerns, or complaints about the study later on, please call my professor, the principal investigator, Dr. Kathryn Oths at +1 (205) 348-5947 or me, the secondary investigator, Monika Wanis at +1 (614) 596-4389.
If you have questions about your rights as a person in a research study, call Ms. Tanta Myles, the Research Compliance Officer of the University, at +1 (205) 348-8461 or toll-free at +1-877-820-3066.
You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach website at [http://osp.ua.edu/site/PRCO_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html) or email the Research Compliance office at participantoutreach@bama.ua.edu.
After you participate, you are encouraged to complete the survey for research participants that is online at the outreach website or you may ask the investigator for a copy of it and mail it to the University Office for Research Compliance, Box 870127, 358 Rose Administration Building, Tuscaloosa, AL 35487-0127.

Do you have any questions? Do you agree to take part in this study? You will receive a copy of this consent form for your records.

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED:
EXPIRATION DATE: 6-17-17

85
جامعة ألاباما
برنامج حماية البحوث الإنسانية

الموافقة الشفهية الطوعية على المشاركة في دراسة غير طبية

عنوان الدورة: الاختلافات في ممارسات السمع وراء الطب التقليدي بين سكان البدو في المناطق الشرقية والمناطق الحضرية في إسرائيل

اسم الباحث: الأستاذة الجامعية الدكتورة كاثرين أونش

اسم الباحث الثاني: طالبة الدراسات العليا مونيكا واتن

لقد طلبت منك المشاركة في هذه الدراسة البحثية.

عنوان هذا البحث "الاختلافات في ممارسات السمع وراء الطب التقليدي بين السكان البدو في المناطق الشرقية والمناطق الحضرية في إسرائيل"

انا الطالبة مونيكا واتن طالبة الدراسات العليا في جامعة ألاباما حيث اقوم بإجراء هذا البحث تحت إشراف الأستاذة الجامعية الدكتورة كاثرين أونش استاذة مادة الأنتروپولوجيا (علم الإنسان) في جامعة ألاباما.

لقد صممت هذا البحث لدراسة سلوكيات السمع لأجل حياة صحية بالإضافة إلى الممارسات الطبية واستخدام العلاجات.

لماذا طلبت مني أن أشارك في هذا الدورة؟

لقد طلبت منك أن تشارك في هذه الدراسة لأجل أشياء بالغة الأهمية.

كم هو عدد الأشخاص الذين سأشارك في هذا الدورة؟

هناك حوالي (36) شخصاً حسب تخطيطك جميعهم في هذه الدورة.

ما إذا طلبت مني القيام به في هذه الدورة؟

إذا واجتمعت على المشاركة في هذه الدورة، سيطلب منك حضور مقابلة حيث يتم التحدث عن خبراتك وتجاربك ومواصفات تجارب العلاجات التقليدية بالإضافة إلى العلاجات الطبية الحيوية كما سيتم طرح بعض الأسئلة على كل مشارك في الطريقة المناسبة للتغذية والتغذية والعلاجات الطبية الحيوية.

لكن إذا كنت متعاطياً للعلاجات التقليدية ويعود رأيك للاختيار بعلاجات متنوعة أو علاجات متنوعة، فقد يكون من الأفضل لمجتمعك أن يشارك في هذه الدورة.

كم من الوقت سوف أقضي في هذا الدورة؟

لن تستغرق أكثر من ساعة واحدة لاستكمال هذه الدورة.
هل ستكلفني هذه الدراسة أي شيء؟
تكلفك الوحيد لهذه الدراسة هي وقتك.

هل سيتم تعويضي مالياً لمشاركتي في هذه الدراسة؟
ستحصلين على 15 شيكل إسرائيلي جديد وذلك تعريضاً عن تقديركا لجهودك.

ما هي المخاطر (المجازفات أو الأذى) التي ساواجهها إذا شاركت في هذه الدراسة؟
ليس هناك أي مخاطر خارج أنشطة حياتك اليومية.

ما هي القيود (الأشياء الجديدة) التي قد يتم الحصول عليها إذا شاركت في هذه الدراسة؟
إن مشاركتك سوف توسعينا على زيادة معرفتنا عن السلوكيات الصحية البديلة ذات العلاقة وعن خيارات العلاج مما قد يساعد الباحثين على فهم تأثير قانون التأمين الصحي الوطني، فضلًا عن تحصين السياسات والخدمات الصحية بالنسبة إلى بدو النفس.

كيف سيتم حماية خصوصيتي؟
لن يظهر اسمك في استمارة الاستبيان وسيتم تعيين رقم عشوائي لكل مشارك لتغري إجراءات الترميز.

كيف سيتم حماية سرية شخصيتي؟
تعتبر مشاركتك في هذه الدراسة سرية تماما حيث لن يطلب منك تقديم أي معلومات تسرب للأشخاص الآخرين إكتشاف شخصيتك.
كمشاركة أو الاتصال بك في المستقبل لأي سبب من الأسباب.

ما هي البدائل لمشاركتي في هذه الدراسة؟ هل لدى خيارات أخرى؟
البدائل عن مشاركتك في هذه الدراسة هو عدم المشاركة.

ما هي حقوقي كمشاركتي في هذه الدراسة؟
المشاركة في هذه الدراسة هو أمر طوعي ومحض إرادة حيث يمكنك رفض المشاركة كلياً بهذه الدراسة وإذا اشتركت فيها يمكنك التوقف عن ذلك في أي وقت تشاء.

إن مجلس مراجعة المؤسسات التابع لجامعة ألاباما ("الإيرب") هو اللجنة التي تحمي حقوق الناس في الدراسات البحثية وهم يقوم هذا المجلس بمراجعة مسجلات الدراسة من وقت لآخر للتتأكد من أن الأشخاص المشاركين في الدراسات البحثية يعاملون بإنصاف وأن الدراسة تجري على النحو المخطط له.
من الذي أقوم بالتواصل معه إذا كان لدي أسئلة أو مشاكل؟

إذا كان لديك أي أسئلة أو مخاوف أو شكاوى، في الوقت الحالي، في هذه الدراسة، يرجى ملء النموذج الإلكتروني لماذا إذا كنت لدي أي أسئلة أو مخاوف أو شكاوى بالنسبة إلى هذه الدراسة، يرجى ملء النموذج الإلكتروني. البريد الإلكتروني للمشرف: 4583-8461 (025) أو مع الاتصال بالناحية المناسبة، إذا كنت لدي أي أسئلة بالنسبة إلى حرفنا، يرجى الاستفسار عن أي مخاوف أو شكاوى أو التعبير عن أي مخاوف وذلك عن طريق موقع الإنترنت الإلكتروني للأبحاث على الوجه التالي: http://osp.ua.edu/site/PRCO_Welcome.html أو عن طريق بريد بريد الإلكتروني إلى participantoutreach@bama.ua.edu

مكتب الاتصال بالبحث وذلك على العنوان التالي:

University Office for Research Compliance, Box 870127, 358 Rose Administration Building,
Tuscaloosa, AL 35487-0127.

هل لديك أي أسئلة؟ هل توافق على المشاركة في هذه الدراسة؟ سوف نستلم تشكيل من نموذج الموافقة هذا للحفاظ عليه في سجلات.
APPENDIX C: INTERVIEW SCHEDULES

Interview Schedule for 6 Healers
Data Collection Form

Date: _______________

Thank you for taking the time to complete this interview. This interview is designed to examine knowledge and use of alternative medical treatments, products and practices. There are no right or wrong answers I just want to know your opinion. If you have additional questions, comments, concerns or suggestions please interrupt me at any time.

Case ID: ____________

Sociodemographic Information

1. Gender
   ☐ Male
   ☐ Female

2. What is your age?
   ____________

3. What is your relationship status?
   ☐ Single
   ☐ Engaged
   ☐ Married
   ☐ Widowed

4. How many wives do you have? OR How many wives does your husband have?
   ____________

5. How many children do you have? How many total children does your husband have?
   ____________

6. What is the highest grade level you have completed?
   ☐ Kindergarten to 8th grade
   ☐ 9th, 10th or 11th grade
   ☐ 12th grade, no diploma
   ☐ High school graduate - high school diploma or the equivalent
   ☐ Some college credit, but less than 1 year
   ☐ 1 or more years of college, no degree
   ☐ Associate degree (for example: AA, AS)
☐ Bachelor's degree (for example: BA, AB, BS)
☐ Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
☐ Doctorate degree (for example: PhD, EdD)
☐ Professional degree (for example: MD, DDS, DVM, LLB, JD)
☐ Other: ________________

7. What is your ethnic and/or religious group?
☐ Jewish
☐ Atheist
☐ Agnostic
☐ Arab Muslim
  ☐ Sunni
  ☐ Shi’ite
  ☐ Sufi
  ☐ Ahmadiyya
  ☐ Bahi’is
☐ Druze
☐ Alevis
☐ ‘Alawis
☐ Arab Christian
  ☐ Copt
  ☐ Syriac Aramean
  ☐ Syriac Assyrian
☐ Samaritan
☐ Armenian
☐ Circassian
☐ African
☐ Other: ________________

8. What is your occupation?

___________________________________________

9. Where were you born?
_______________

10. Where have you lived?
______________________________________________________________________________

11. What is your annual income?
_______________

12. Who do you usually treat?
___________________________________________
___________________________________________

90
13. What type of illnesses do you most frequently see?
___________________________________________________________

14. What types of treatments do you offer?
____________________________________________
__________________________________

15. How do you do you heal someone using (insert answer from previous question)?
______________________________________________________________________________

16. Do your treatments always work? Why or why not?
________________________________________________________________________
Interview Schedule for 30 Informants
Data Collection Form

Date: _______________

Thank you for taking the time to complete this interview. This interview is designed to examine knowledge and use of alternative medical treatments, products and practices. There are no right or wrong answers I just want to know your opinion. If you have additional questions, comments, concerns or suggestions please interrupt me at any time.

Case ID: ____________

Sociodemographic Information

1. Gender
   □ Male
   □ Female

2. What is your age?  _______________

3. What is your relationship status?
   □ Single
   □ Engaged
   □ Married
   □ Widowed

4. How many wives do you have? OR How many wives does your husband have?  _______________

5. How many children do you have? How many total children does your husband have?  _______________

6. What is the highest grade level you have completed?
   □ Kindergarten to 8th grade
   □ 9th, 10th or 11th grade
   □ 12th grade, no diploma
   □ High school graduate - high school diploma or the equivalent
   □ Some college credit, but less than 1 year
   □ 1 or more years of college, no degree
   □ Associate degree (for example: AA, AS)
   □ Bachelor's degree (for example: BA, AB, BS)
   □ Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
   □ Doctorate degree (for example: PhD, EdD)
   □ Professional degree (for example: MD, DDS, DVM, LLB, JD)
☐ Other: _______________

7. What is your ethnic and/or religious group?
   ☐ Jewish
   ☐ Atheist
   ☐ Agnostic
   ☐ Arab Muslim
     ☐ Sunni
     ☐ Shi’ite
     ☐ Sufi
     ☐ Ahmadiyya
     ☐ Bahi’is
   ☐ Druze
   ☐ Alevis
   ☐ ‘Alawis
   ☐ Arab Christian
     ☐ Copt
     ☐ Syriac Aramean
     ☐ Syriac Assyrian
   ☐ Samaritan
   ☐ Armenian
   ☐ Circassian
   ☐ African
   ☐ Other: _______________

8. What is your occupation?
   _______________

9. Where were you born?
   _______________

10. Where have you lived?
    ______________________________________________________________________________

11. What is your annual income?
    _______________

12. Approximately how many illnesses have you had over the past year?
    ☐ None
    ☐ 1 – 2
    ☐ 3 – 4
    ☐ 5 – 9
    ☐ 10 or more
13. Approximately how many of those illness episodes would you categorize as severe?
☐ None
☐ 1 – 2
☐ 3 – 5
☐ 5 – 9
☐ 10 or more

14. In general, would you say your health is:
☐ Poor
☐ Fair
☐ Good
☐ Very Good
☐ Excellent

Questions about visiting a Khatib or Hajjab

15. Have you ever visited a Khatib or Hajjab?
☐ Yes
☐ No (Skip to question 30)
Why? ________________________________________________________________

16. If yes, when was your last visit?
☐ Over 1 year ago
☐ About 1 year ago
☐ More than 6 months ago but less than 1 year ago
☐ About 6 months ago
☐ More than 1 month ago but less than 6 months ago
☐ Less than 1 month ago

17. How many times do you think you have gone this past year?
☐ None
☐ Once
☐ Twice
☐ 3-5 times
☐ 5-10 times
☐ More than 10 times

18. Did you receive any other treatments or use any home remedies before seeking him or her?
☐ Yes
☐ No
If yes, what did you do? ______________________________________________________

19. How far does he or she live from you?
☐ Very far
☐ Far
☐ Moderate
20. How did you get there?
- Walk
- Car/Bus/Taxi
- Animal (ie. donkey or horse)
- Other: _______________

21. How much does it cost?
______________________________________________________________________________

22. Does he or she speak your language?
- Yes
- No

23. What is your relationship like?
__________________________________________________________________________

24. How would you explain your symptoms?
______________________________________________________________________________

25. What did he or she say was wrong with you?
______________________________________________________________________________

26. Why did you get this illness?
______________________________________________________________________________

27. How were you treated?
______________________________________________________________________________

28. Did you get better?
- Yes
- No

29. Why do you think you got better?
______________________________________________________________________________

30. Why would one go to a Khatib or Hajjab?
Questions about visiting a Dervish

31. Have you ever visited a Dervish?
   □ Yes
   □ No (Skip to question 46)
   Why? _________________________________________________________________

32. If yes, when was your last visit?
   □ Over 1 year ago
   □ About 1 year ago
   □ More than 6 months ago but less than 1 year ago
   □ About 6 months ago
   □ More than 1 month ago but less than 6 months ago
   □ Less than 1 month ago

33. How many times do you think you have gone this past year?
   □ None
   □ Once
   □ Twice
   □ 3-5 times
   □ 5-10 times
   □ More than 10 times

34. Did you receive any other treatments or use any home remedies before seeking him or her?
   □ Yes
   □ No
   If yes, what did you do? ____________________________________________________

35. How far does he or she live from you?
   □ Very far
   □ Far
   □ Moderate
   □ Close
   □ Very close

36. How did you get there?
   □ Walk
   □ Car/Bus/Taxi
   □ Animal (ie. donkey or horse)
   □ Other: _______________

37. How much does it cost?
   _______________________________________________________________________

38. Does he or she speak your language?
   □ Yes
☐ No

39. What is your relationship like?
______________________________________________________________________________

40. How would you explain your symptoms?
______________________________________________________________________________

41. What did he or she say was wrong with you?
______________________________________________________________________________

42. Why did you get this illness?
______________________________________________________________________________

43. How were you treated?
______________________________________________________________________________

44. Did you get better?
☐ Yes
☐ No

45. Why do you think you got better?
______________________________________________________________________________

46. Why would one go to a Dervish?
______________________________________________________________________________

Questions about visiting a Moalj Bel Koran

47. Have you ever visited a Moalj Bel Koran?
☐ Yes
☐ No (Skip to question 62)
Why? __________________________________________________

48. If yes, was your last visit?
☐ Over 1 year ago
☐ About 1 year ago
☐ More than 6 months ago but less than 1 year ago
☐ About 6 months ago
☐ More than 1 month ago but less than 6 months ago
☐ Less than 1 month ago
49. How many times do you think you have gone this past year?
☐ None
☐ Once
☐ Twice
☐ 3-5 times
☐ 5-10 times
☐ More than 10 times

50. Did you receive any other treatments or use any home remedies before seeking him or her?
☐ Yes
☐ No
If yes, what did you do? __________________________________________________________

51. How far does he or she live from you?
☐ Very far
☐ Far
☐ Moderate
☐ Close
☐ Very close

52. How did you get there?
☐ Walk
☐ Car/Bus/Taxi
☐ Animal (ie. donkey or horse)
☐ Other: _______________

53. How much does it cost?
____________________________________________________________________________

54. Does he or she speak your language?
☐ Yes
☐ No

55. What is your relationship like?
____________________________________________________________________________

56. How would you explain your symptoms?
____________________________________________________________________________

57. What did he or she say was wrong with you?
____________________________________________________________________________

58. Why did you get this illness?
____________________________________________________________________________
59. How were you treated?
__________________________________________________________

60. Did you get better?
☐ Yes
☐ No

61. Why do you think you got better?
__________________________________________________________

62. Why would one go to a Moalj Bel Koran?
__________________________________________________________

Questions about visiting a Fataha

63. Have you ever visited a Fataha?
☐ Yes
☐ No (Skip to question 78)

Why?
__________________________________________________________

64. If yes, when was your last visit?
☐ Over 1 year ago
☐ About 1 year ago
☐ More than 6 months ago but less than 1 year ago
☐ About 6 months ago
☐ More than 1 month ago but less than 6 months ago
☐ Less than 1 month ago

65. How many times do you think you have gone this past year?
☐ None
☐ Once
☐ Twice
☐ 3-5 times
☐ 5-10 times
☐ More than 10 times

66. Did you receive any other treatments or use any home remedies before seeking him or her?
☐ Yes
☐ No

If yes, what did you do? ______________________________________

67. How far does he or she live from you?
☐ Very far
☐ Far
☐ Moderate
☐ Close

99
68. How did you get there?
☐ Walk
☐ Car/Bus/Taxi
☐ Animal (ie. donkey or horse)
☐ Other: _______________

69. How much does it cost?
______________________________________________________________________________

70. Does he or she speak your language?
☐ Yes
☐ No

71. What is your relationship like?
______________________________________________________________________________

72. How would you explain your symptoms?
______________________________________________________________________________

73. What did he or she say was wrong with you?
______________________________________________________________________________

74. Why did you get this illness?
______________________________________________________________________________

75. How were you treated?
______________________________________________________________________________

76. Did you get better?
☐ Yes
☐ No

77. Why do you think you got better?
______________________________________________________________________________

78. Why would one go to a Fataha?
______________________________________________________________________________

Questions about visiting an Attar

79. Have you ever visited an Attar?
☐ Yes
☐ No (Skip to question 94)
Why? __________________________________________________________________________

100
80. If yes, when was your last visit?
- Over 1 year ago
- About 1 year ago
- More than 6 months ago but less than 1 year ago
- About 6 months ago
- More than 1 month ago but less than 6 months ago
- Less than 1 month ago

81. How many times do you think you have gone this past year?
- None
- Once
- Twice
- 3-5 times
- 5-10 times
- More than 10 times

82. Did you receive any other treatments or use any home remedies before seeking him or her?
- Yes
- No
If yes, what did you do? __________________________________________________________

83. How far does he or she live from you?
- Very far
- Far
- Moderate
- Close
- Very close

84. How did you get there?
- Walk
- Car/Bus/Taxi
- Animal (ie. donkey or horse)
- Other: ______________

85. How much does it cost?

______________________________________________________________________________

86. Does he or she speak your language?
- Yes
- No

87. What is your relationship like?

______________________________________________________________________________

88. How would you explain your symptoms?
89. What did he or she say was wrong with you?

______________________________________________________________________________

90. Why did you get this illness?

______________________________________________________________________________

91. How were you treated?

________________________________________

92. Did you get better?
☐ Yes
☐ No

93. Why do you think you got better?

______________________________________________________________________________

94. Why would one go to an Attar?

______________________________________________________________________________

Questions about visiting a Biomedical Doctor

95. Have you ever visited a Biomedical Doctor?
☐ Yes
☐ No (Skip to question 110)

Why?

______________________________________________________________________________

96. If yes, when was your last visit?
☐ Over 1 year ago
☐ About 1 year ago
☐ More than 6 months ago but less than 1 year ago
☐ About 6 months ago
☐ More than 1 month ago but less than 6 months ago
☐ Less than 1 month ago

97. How many times do you think you have gone this past year?
☐ None
☐ Once ☐
☐ Twice
☐ 3-5 times
☐ 5-10 times
☐ More than 10 times

98. Did you receive any other treatments or use any home remedies before seeking him or her?
☐ Yes
☐ No
If yes, what did you do? ____________________________________________________

99. How far does he or she live from you?
☐ Very far
☐ Far
☐ Moderate
☐ Close
☐ Very close

100. How did you get there?
☐ Walk
☐ Car/Bus/Taxi
☐ Animal (ie. donkey or horse)
☐ Other: ______________

101. How much does it cost?
____________________________________________________________________________

102. Does he or she speak your language?
☐ Yes
☐ No

103. What is your relationship like?
____________________________________________________________________________

104. How would you explain your symptoms?
____________________________________________________________________________

105. What did he or she say was wrong with you?
____________________________________________________________________________

106. Why did you get this illness?
____________________________________________________________________________

107. How were you treated?
____________________________________________________________________________

108. Did you get better?
☐ Yes
☐ No

109. Why do you think you got better?
____________________________________________________________________________
110. Why would one go to a biomedical doctor?

General questions about practitioners

111. If you were having physical health problems who would you seek for care? Why?

112. If you were having mental health problems who would you seek for care? Why?

Questions about the National Health Insurance Law of 1995

113. Did you know that a national health insurance law exists?
   □ Yes
   □ No

114. Are you covered by the health insurance law?
   □ Yes
   □ No

If no, why not? ________________________________________________________________

115. How frequently have you used the services that the law offers?
   □ Less than once a year
   □ Once a year
   □ Twice a year
   □ More than twice a year but less than once a month
   □ Once a month
   □ Twice a month
   □ Three times a month
   □ Weekly
   □ Daily

116. Are you satisfied with the law?
   □ Very satisfied
   □ Satisfied
   □ Moderately satisfied
   □ Unsatisfied
   □ Very unsatisfied

117. Since the law has been passed has it made a difference in your life?
   □ Yes
   □ No

Why? ________________________________________________________________
Comments, Questions, Concerns, Suggestions, Ideas

118. What would be the ideal health-care system for the Bedouin population in your area and why?

119. Do you have any comments or suggestions on what we could do to get the opinions of the community?

120. Do you have any questions for me?

121. How could this research be used to help your community?