Regional executive body of
Sughd Province of the RT

Columbia University
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July 2013

United Nations Children's Fund
37/1, Bohktar st., Dushanbe
Tajikistan, 734025

This Research has been commissioned by UNICEF Tajikistan to Columbia University upon the request of the Sughd Oblast Authorities. The research was carried out by the Child Psychiatric Epidemiology Group (CPEG) of Columbia University in partnership with the Tajik National University, the Khujand State University, and with support from the local working group established under the Child Rights Unit of Sughd Region.

For more information, please contact dushanbe@unicef.org.

FOREWORD

Dear Readers,

Like me, you have probably read many news reports on suicide amongst young people in Tajikistan. And like me, you have probably felt a mixture of disbelief and despair at the sad reality of young people choosing to end their lives at such an early age. After reading such disturbing reports, one is haunted by questions. How come these young people ended up feeling as if there were no alternatives for them anymore? Why were we collectively unable to provide them with the support that might have given them renewed hope? What warning signs did they show that could have indicated that something was badly wrong and why did these signs go unnoticed? What can we learn from these young people's stories and how can we use these lessons to help reduce the number juvenile suicides in Tajikistan in future?

In 2010, the Governor of Sughd Region approached UNICEF with a request to commission a study on the prevalence and dynamics of suicide amongst young people in that region. They were driven by similar concerns and questions as the ones I have set out above. UNICEF commissioned Columbia University, who worked in partnership with the Tajik National University to investigate the issue. Throughout the research project, they were supported by a local working group established under the Child Rights Unit of Sughd Region. In addition, Khujand State University and a network of NGOs were mobilized to provide free and voluntary psychosocial support to each of the respondents of the study. Demand for this service was high, underlining the unmet need for psychosocial support in Tajikistan.

The report you are reading is the outcome of a collaborative effort among all the partners mentioned above. We present it to you in the hope that it will shed some light on the circumstances that lead to suicide amongst young people. The study shows that suicide is usually the culmination of a complex set of interrelated factors, with each case bearing its peculiarities, embedded in family relations, societal structures and cultural values. But the study also brings out similarities and patterns that run across the cases of attempted and completed suicides it investigates. It is in these emerging patterns that we must look for interventions that may help to reduce the prevalence of suicide amongst young people in Tajikistan.

I trust that the report and its recommendations will lead to active debate amongst all stakeholders and will provide inspiration for practical changes that will have an impact on youth who are at risk of attempting suicide. In our view at UNICEF, the measures that are needed include better identification and referral of youth at risk, psychosocial support, suicide prevention measures, mental health services for young people and more effective child protection mechanisms in general.

May our joint efforts reduce the number of young people in Tajikistan who take that final, irreversible decision, allowing them to find renewed hope to claim their rights and realize their full potential.

Laylee Moshiri

UNICEF Representative
Tajikistan

REVIEW

OF THE FINAL REPORT SUBMITTED BY THE CHILD PSYCHIATRIC EPIDEMIOLOGY GROUP (CPEG), COLUMBIA UNIVERSITY (dated 28 July 2013)

"STUDY OF PREVALENCE AND DYNAMICS OF SUICIDE AMONG CHILDREN AND YOUNG PEOPLE (12-24 YEARS OF AGE) IN SUGHD REGION, TAJIKISTAN"

The research subject is highly relevant due to the growing number of suicides in Sughd region which prompted the Chairman of Sughd Region to make an appeal regarding the need to study the situation in this area.

The study under review was the first and rather comprehensive research (in terms of its scale and profundity) into problems of suicides carried out in Central Asian countries.

The study was carried out through joint efforts of: Child Psychiatric Epidemiology Group (CPEG) at Columbia University under the direction of Dr. Christina W. Hoven, Professor and Director, CPEG, Psychology Department, Tajik National University (headed by N.M. Yunusova), Psychology Department, Khujand State University of Sughd Region (headed by A. Mansurova), and the Working Group established by the project under the leadership of the Secretary of Commission on Child Rights (A. Kholmirzoev)/ Child Rights Department under the Government of Sughd region which comprised representatives of all key services charged with child welfare protection in Sughd region.

The report based on careful analysis of obtained findings was developed by CPEG of Columbia University. It contains 115 print pages (Russian translation of the report).

Despite the fact that the report represents estimations only it is nevertheless of great academic interest. Based on obtained findings the authors provide practical recommendations regarding suicide prevention among children and youth which is critically important in terms of prevention and reduction of suicides among children and youth not only in Sughd region but in other areas of Tajikistan as well.

N.M. Yunusova

National Team Study Manager
Cand. Sc. (Psychology), Associate professor, Psychology Department, TNU

ACKNOWLEDGEMENTS BY AUTHORS

We would like to thank UNICEF-Tajikistan for providing the opportunity to conduct this important Study and for its ongoing support, supervision, and guidance throughout the course of the project. The leadership of UNICEF-Tajikistan, Hongwei Gao (former Representative) and Arthur van Diesen, have been most gracious and supportive. We would especially like to thank Siyma Barkin Kuzmin, Chief of Child Protection. This Study could have never been successfully conducted without her devotion and dynamic leadership. Furkat Lutfulloev, a wonderful advocate for all the children of Tajikistan, thoughtfully facilitated all research aspects of the project. Salohiddin Shamsiddinov effectively carried out all phases of project management with charm and wit. Farida Karimova continuously went out of her way to ensure that everything required for the project was available.

Azamjon Kholmirzoev, Secretary of the Commission on Child Rights/Child Rights Department of Sughd Region, provided outstanding leadership for the project. We are particularly grateful for his willingness to serve as Chairperson of the Suicide Study's Working Group, composed of Sughd Regional leaders joined together to inform this project and to ultimately make this Study successful. The Working Group members, who were called upon to contribute to the development and design of the Study, as well as for advice throughout its duration, were always most generous in helping the researchers to understand important local issues.

We owe a great debt to our academic colleagues and collaborators, particularly Nafisa Yunusova, Tajik State National University, who had overall responsibility for the project. Most especially, we want to thank Gulnora Gulmirzoeva, Tajik State National University, who truly made the Study possible by her willingness to temporarily live away from her own family in Dushanbe and for her unfailing commitment and leadership in overseeing field recruitment of all Study participants, as well as personally conducting many Key Informant interviews. Aziza Mansurova, Khujand State University, who was unfortunately unable to continue working on the project due to illness, initially inspired everyone, especially the interviewers, to conduct their work with honor and respect. Muharram Rahimova, Khujand State University, delivered outstanding clinical leadership supervising interviewers, following up with every family and facilitating treatment services from local NGOs.

Florence Seaman and Spencer Harbo, from the Child Psychiatric Epidemiology Group (CPEG), Columbia University, lived in Khujand, Tajikistan, eagerly accepting their assignment to be away from family, friends and university for seven and five months respectively, to help manage this important Study. Together they managed all interview coordination and information processing for the Study, including data entry and liaison with CPEG. For their invaluable contribution and input to all aspects of the Study, CPEG is most appreciative.

Finally, we want to express our deepest gratitude to the families and other informants for their willingness to participate in this Study, despite the sensitive nature of the issues discussed. It is our fervent wish that the vital information provided by these families and the Key Informants will significantly contribute to improving services in Tajikistan, especially for Young People, and help foster relief from suffering and to ultimately save lives.

COLLABORATING ORGANIZATIONS

UNICEF, with a mandate from the United Nations General Assembly, works internationally to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. Guided by the United Nations Convention on the Rights of the Child, UNICEF promotes child survival, education, protection and participation.

The UNICEF office in Tajikistan responded to a compelling need that was raised by the Soughd Governor, by commissioning this Study and skillfully providing supervision and guidance throughout its duration.

The Child Psychiatric Epidemiology Group (CPEG), Columbia University, under the direction of Dr. Christina W. Hoven, Professor and Director, Child Psychiatric Epidemiology Group (CPEG), this unit focuses its research activities on understanding the psychological experiences and needs of children and Young People. The team's expertise includes epidemiology, statistics, clinical psychology, psychiatry and medical geography, which have been useful in conducting studies globally (e.g., Azerbaijan, Brazil, China, Egypt, India, Israel, Sri Lanka and Uganda). CPEG was responsible for the design, data analysis, and interpretation of findings of this Sughd Region Suicide Study, as well as the on-site coordination of interviewers and data processing.

The Tajik State National University, Department of Psychology, Dushanbe, Tajikistan, under the leadership of Professor, Dr. Nafisa Yunusova, Head of the Psychology Department, provided research oversight of the Study by making clinical psychologists easily accessible. Their backgrounds and understanding of Tajik culture were critical to the translations and implementation of Study procedures being carried out in a culturally-sensitive and appropriate manner.

Khujand State University, Department of Psychology, Khujand, Sughd Region, under the guidance of Dr. Muharram Rakhimova, provided local leadership and oversight of the clinical aspects of the Study, including making clinical psychologists available to the Study, overseeing the clinical support for all Study participants in need of mental health services, as well as providing coordination with Regional NGOs offering mental health services in each District.

Project Working Group, under the direction of Mr. Azamjon Kholmirzoev, Secretary of the Commission on Child Rights/Child Rights Department of Sughd Regional representative of all major child-services systems of care in Sughd Region, contributed to the development and design of the Study and provided insight to help the researchers understand critical local issues.

(See Appendix I for a full list of team members)

The Initial Final Report, was respectfully submitted for review and comment on February 10, 2012, by the CPEG Team: Dr. Christina W. Hoven, George J. Musa, Florence Seaman, Spencer Harbo, Dr. Ping Wu, Dr. Sa Shen, Dr. Danuta Wasserman, Dr. Larry Amsel, Judith Wicks, Thao Doan, Bensheng Ouyang, Bereketab Lakew, Meghan Smith, and Peter Lam. Dr. Donald J. Mandell (deceased) significantly contributed to the design and implementation of this investigation.

Final Report submitted by CPEG to UNICEF-Tajikistan on July 28, 2013.

EXECUTIVE SUMMARY

Suicide is a world-wide phenomenon and the World Health Organization (WHO) has recently declared that depression (highly associated with suicide) is the number one disease burden in the world. Close to one million people commit suicide each year, with ten to twenty times as many attempts. By the year 2020, it is estimated that 1.53 million suicides will occur annually worldwide. That is equivalent to one death every twenty seconds, or one attempt every 1-2 seconds. Historically, suicide among Young People was less frequent than among the elderly. More recently, in most countries, a shift has taken place whereby the rate of suicide among the younger population has surpassed the rate among the elderly. For example, prior to 1950, 56% of suicides globally were 45 years of age or older, while 44% were between the ages of 5 - 44. By 1995, however, the 45 and older age group accounted for only 47% and those 5 - 44 years of age accounted for 53% of suicides worldwide. Globally, the highest rate of all suicides occurs among those under 25 years of age.

In 2004, suicides in Europe were 80% male and 20% female – the same 4:1 ratio generally reported in developed western countries. Recently, increases ranging from 3% to 8% in adolescent female suicides have been noted in 18 out of 30 countries in the European Region, including Norway, Ireland, Ukraine, Belarus, Lithuania, Kazakhstan, Estonia, Russian Federation, Netherlands, Latvia, Spain, Uzbekistan, Sweden, Armenia, France and Italy, by descending rate. Two of these countries, Kazakhstan and Uzbekistan, are in Central Asia.

According to UNICEF's TransMonEE data (2012), the national suicide rate in Tajikistan among Young Persons (ages 15-19) increased 63% from 2.8 to 4.5 (per 100,000) between 2008 and 2010. During this period, female suicide rates increased 176%, from 1.9 to 5.2 (per 100,000), while males experienced only a 6% increase, from 3.6 to 3.9 (per 100,000). From 2008 to 2010, according to these TransMonEE data, a shift in the male-to-female ratio also occurred, with more females than males committing suicide. The reported male-to-female ratio was 1.9:1 in 2008, 1:1.2 in 2009 and 1:1.3 in 2010.

In Tajikistan, the smallest country in Central Asia, the previously reported ratio of male to female suicide was 1.3:1 (WHO, 2001). According to those WHO data, the rate of suicide in Tajikistan is 2.6 per 100,000 inhabitants for all age groups. However, the rate among Young Persons ages 15-24 was reported as being 3.3 per 100,000. Furthermore, the Tajikistan Global School-based Student Health Survey (GSHS) country report (2007) stated that 20.0% of children and adolescents suffer from a disabling mental illness including anxiety disorders, depression and other mood, behavior and cognitive disorders. According to these data, in the year prior to the GSHS survey, 12.6 % of students seriously considered attempting suicide and 12.0 % had made a plan about how they would do it, although there was no significant difference according to gender (UNICEF, 2007). The GSHS survey was not designed to identify suicide rates.

Based on a perception that the rate of suicide in Young People was increasing, especially among girls, the Sughd Governor asked for assistance from UNICEF. Consequently,

UNICEF-Tajikistan commissioned a Study: Prevalence and Dynamics of Suicide among Children and Young People, designed and conducted by the Child Psychiatric Epidemiology Group (CPEG) at Columbia University. The Study's findings, presented here, are expected to inform psychosocial and mental health, child-protection, gender and youth-related policies in Sughd, appropriate for developing effective suicide prevention and intervention programs, while enhancing information about psychosocial support programs in general. Using district population counts from Tajikistan's 2010 Census (State Agency on Statistics, 2010), an average yearly rate for Sughd Region (2009-2010) of 11.2 suicides per 100,000 Young Persons ages 12 – 24 was calculated. Based on these data, among Young People (ages 12-24), the female suicide rate is 11.7 (per 100,000) and the rate among males is 10.6 (per 100,000). Within Sughd, Asht District was found to have the highest suicide rate of 19.2 Young Persons ages 12-24 (per 100,000). In Asht, the rate for this age group was almost twice as high for females (24.8 per 100,000) than for males (13.7 per 100,000).

The conceptual framework and methodology of the Study were chosen after extensive consultation with Tajikistan leaders, both nationally and locally, UNICEF, WHO and the Study's Working Group of Sughd Region, as well as an extensive literature review.

Study Framework and Methodology

The data presented herein are based on an epidemiological investigation carried out with as many research safeguards as possible, given the logistical and methodological challenges. Because this Study included child Controls matched by gender, age, ethnicity, and geography, these data provide a particularly meaningful portrait of the topics explored. The overall sample size was necessarily small, representing one Region of Tajikistan only, and thus precludes some important statistical analyses and potential generalizability of findings for national implications.

Fieldwork for this project was conducted between March and August 2011 by members of the Research Team from Tajik State National and Khujand State Universities and coordinated on-site by staff from Columbia University's CPEG. An effort was made to contact the family of each individual (ages 12-24) from every District in Sughd Region which had an officially recorded suicide or suicide attempt between January 2009 and March 2011; families were approached by the Study team and invited to participate. This method resulted in data collection from participants in 16 of the 18 Districts within Sughd Region. Two Districts, Shahriston and Kuhistoni-Mastchoh did not report either an attempt or a completed suicide.

The specific aims of the Study were to: 1) identify major factors associated with suicide among youth; 2) provide fact-based recommendations for improved identification and referral of at-risk youth; 3) identify practical recommendations of possible interventions to minimize suicide among youth in Sughd; and 4) generate new information to support targeted advocacy for child protection and youth rights. To accomplish these goals, a holistic approach was taken. The Study methodology therefore reflects the concept that suicide is a complex phenomenon embedded within social and familial structures.

The Study involved four main methods of investigation: 1) Individual Interviews; 2) Geographic Analysis; 3) Review of Official Records; and 4) Key Informant Interviews. Together, the methods comprise a "psychosocial autopsy," a sophisticated and well-documented method of suicide investigation, and aims to help understand suicide and attempted-suicide and the families in which these events occurred.

Overview of Selected Findings

Based on this Study's data, girls and young women in Sughd appear to have a disproportionate level of suicidal risk. Unlike the 4:1 male to female ratio found for completed suicides in developed Western countries, and the 3.1:1 ratio found in the Central Asian Republics (WHO, 2011b), the gender ratio for suicide in Sughd was found to be 1:1.2 male to female. As in other countries, these data indicate that in Sughd, parents' low educational level, parental punishment practices, family trauma, interpersonal violence, loss of a loved one through migration, death or separation, loss of a job, and other forms of economic hardship are all potentially damaging to a Young Person's mental health, with special difficulties associated with being female.

These data indicate that girls who attempt or complete suicide are lower in educational achievement than female Controls. The data also indicate that forced marriage is not unusual in Sughd. More importantly, this practice is perceived by a substantial proportion of all Study participants as an important factor in suicidal risk, especially among girls. These data also identified other specific risk factors for suicidal behaviors in females. For example, females from families that believe a woman should be beaten if she talks to a man who is not a relative were twice as likely to be suicidal than those from other families.

Seventy-six percent of Key Informants perceived a rise in religiosity among Young Persons in Sughd in the last two years. According to these Key Informants, "societal influences" are a main reason for this increase, as opposed to familial influences and personal beliefs. Approximately 30% of all Young Persons who were interviewed indicated a desire to become more religious, while 60% wanted to maintain their current level of religiosity. As discussed in this report, religiosity is identified by the Young Persons report of their frequency and extent of adherence to religious practices.

There is some evidence in these data that the level of religiosity in those under 18 years of age may be associated with suicidal risk, particularly in girls. For example, according to the data, more females who had attempted suicide hope to perform Hajj before age 30 compared to attempter boys, whereas the opposite is true among the non-suicidal youth (Controls). While causality cannot be determined, the frequency of religious practices among those under 18 was found to be marginally, yet significantly, associated with suicidal behaviors. However, as in most assessments of the role of religion, religiosity among those over 18 years of age seemed to provide a protective effect for mental health.

In Sughd Region there is a profound difference in the number of reported cases of suicide attempt versus completed suicide (three suicides to every one attempt), compared to what is found throughout much of the world (one suicide to every 10 - 20 attempts). These disparities possibly result from Sughd families' reluctance to seek help after an initial attempt, at which time intervention would be most likely to succeed. It may be that families do not seek help because of fears of social stigma or punitive consequences, especially being blamed for the event. Indeed, both service providers and family members indicated high levels of shame and an expectation of punishment associated with suicidal behavior.

Perhaps one of the most important findings of this Study is that the focus of concern about suicide at the government, community and family level is cloaked in shame and punishment, according to interview data from all of these sources. In addition to discouraging families from reporting a suicide or suicide attempt, the current prosecutorial approach to investigating suicidal behavior appears to significantly discourage both preventive intervention and early help-seeking. Families with a child who has exhibited suicidal behaviors are generally disinclined to seek appropriate help or to accurately describe the actual suicidal event to service providers due to fear of becoming involved in and easily triggering a Prosecutor's investigation. This investigative approach to a health-related problem is in stark contrast to the need for individualized supportive intervention early in the cycle of service need.

Policy Implications

Issues related to gender identified in these data have major policy implications for protecting vulnerable populations in Sughd, particularly girls. It is possible that suicide was accepted as a viable alternative to what was perceived by some girls and young women as a life of abuse and restricted freedom to make important life decisions, such as marriage partner, education and friendships. These data indicate that suicidal youth with no dependable support system, sexually or physically abused women and girls, and those who are forced to marry, etc., could benefit from community-based protective services such as shelters for battered women, run-away shelters for youth and legal protection. Based on these data, such services should be a high priority for policy makers. To successfully reduce suicidal behavior, there must also be a thorough examination of the government's current response to such events. Clearly, a more supportive, psychosocial response, embedded in the health, social service and educational systems, rather than a prosecutorial approach should be seriously considered.

There is a pressing need for preventive and evidence-based psychosocial intervention services in Sughd, especially for youth and women. It is imperative that the most cost-effective activities are employed in such a resource-restricted environment. Prevention is generally the most effective approach to disease reduction, especially for the long-term. These data identify numerous foci for cost-effective prevention campaigns for radio, television, schools, billboards, etc. WHO Centers for Suicide Prevention, UNICEF and other international organizations have suicide prevention materials that could easily be translated and adapted for Tajikistan. A twelve-country European school-based Mental Health Awareness program, Saving and Empowering Young Lives in Europe (SEYLE), has recently demonstrated success

in reducing suicidality in adolescents over time and could readily be adopted.. More costly but effective interventions are suicide screening efforts, such as the school-based U.S. TeenScreen (Brown & Goldstein Grumet, 2009; Husky et al., 2011) or the German ProfScreen.

Most important, these data indicate the need for increased service availability. Recent evidence supports the use of telephone hotlines that provide immediate support and referral, as needed. Such programs are cost-effective and can serve a national or Regional population, 24 hours a day, both urban and rural. There are obvious advantages to this approach in rural, often difficult to reach settings with transportation difficulties.

Clinical back-up, ethically required when conducting a study such as this, was required for this Study. At the request of CPEG, UNICEF and Khujand State University developed a Network of clinical collaborators among NGOs throughout Sughd. Their success with providing psychosocial services to families during the Study indicates a strong commitment and interest among NGOs in offering such services. However, the level of expertise for providing psychosocial services, especially for Young Persons, is currently limited (at least in some Districts) with many NGO's requiring Khujand State University to provide further clinical back-up for their staff. The clinical Network of service providers developed for this Study has great potential for providing ongoing psychosocial support throughout Sughd Region. In this Study, Khujand State University demonstrated leadership in coordinating and supporting the Study's needed clinical Network. Potentially, therefore, with additional training and consultation, Khujand University, Department of Psychology, could be supported to continue working with this nascent clinical Network and potentially become the Psychosocial Training Center for Sughd Region, or even the country.

Young People everywhere are particularly vulnerable as they transition into adulthood and parenthood. Due to today's rapidly changing and highly interconnected world, Sughd's youth, alongside Young People in other countries, differ significantly from their parents and grandparents in outlook and opportunity. Addressing complex psychosocial issues in Sughd, including changes in outlook and gender inequality, requires a concerted effort by Tajikistan's leaders at the highest level to understand the perceptions and needs of their country's youth. The Sughd Suicide Study Working Group has demonstrated a committed role and interest in addressing vulnerable youth, including those with suicidal behavior, and their suggestions should be sought. Additionally, a Task Force on Young People, reporting directly to the Governor of Sughd, participating as majority members and determining the Task Force's agenda, would be an important way to empower Young People, while addressing reasons to consider suicide in this population.

Currently, obtaining reliable, analyzable data about suicidal behavior in Sughd, sorted by Region and District, is problematic. This limitation complicates the task of knowing whether the Regional rate of suicide is actually decreasing, remaining constant, or increasing over time. The ability to draw accurate Regional, District and cross-national comparisons of suicide trends should be a priority now that the National Census data is available. Establishing a National Suicide Reporting System for Tajikistan should also be pursued.

A statistic that frequently defines a country's health and mental health status is its suicide rate per 100,000 people. Determining accurate rates of suicide in Tajikistan among sub-populations, especially Young People, should be a priority. This would require a national study of suicide, utilizing data from the recently completed National Census. Determining an accurate suicide rate for Tajikistan would facilitate international reporting, possibly assist with obtaining badly needed resources, as well as help to develop and target nationwide suicide prevention and intervention policies and activities. Suicide is, after all, an interesting topic for most people and rallying the nation to combat it would provide a meaningful way to focus the population, government agencies and youth around one important issue that collective action can realistically change for the better, e.g., reduction in the rate.

Finally, despite the good intentions of the current post-suicidal event investigative system carried out by the Prosecutor's office to determine the circumstances leading to a suicide or attempt, a more open, supportive, holistic approach would undoubtedly produce more positive outcomes to families and society at large. The current Prosecutorial approach is unnecessarily threatening to the family, counter to creating an atmosphere of preventive intervention and counter to help-seeking. Post-suicide services should be life enhancing, not punitive. By taking a less accusatory approach, health professionals assuming this post-event responsibility could provide psychosocial support to the family in distress. Of course, it would be important for the Prosecutor's office to train health professionals in identifying and reporting any evidence or suspicions of criminal behavior.

Study Limitations

This Study was based on officially reported suicides and suicide attempts. There are strong indicators that these official data probably represent an undercount of both suicide and suicide attempts, thus possibly causing the estimates reported here to also be an underestimate. Because this Study was conducted in Sughd Region only, these data cannot be considered a reflection of the status of suicidal behavior in other regions of Tajikistan, nor as this country's national rates. Finally, because this was a cross-sectional Study of a specific cohort (all suicide cases in a given time-frame), it cannot provide information about causation, only associations. Only a longitudinal investigation would adequately address issues of causation. In a limited number of analyses, gender and age differences could not be analyzed due to small sample size.

Confidentiality and Institutional Review Board Approval

Prior to initiation of this investigation, all aspects of the Study were reviewed and approved by the Tajikistan Ministry of Health and the Columbia University-New York State Psychiatric Institute's Institutional Review Board.

ABBREVIATIONS

CPEG	Child Psychiatric Epidemiology Group
CU	Columbia University
GoT	Government of the Republic of Tajikistan
MoH	Ministry of Health
NGO	Non-Governmental Organization
TNU	Tajik National University
TORs	Terms of Reference
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UNICEF	United Nations Children's Fund
YP	Young Person
WHO	World Health Organization

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1. BACKGROUND

1.1 Introduction and Background

The information provided in this Report is a summary of the findings from the Study on Prevalence and Dynamics of Suicide among Children and Young People, conducted in Sughd Region of Tajikistan between October 2010 and September 2011. The project was commissioned by UNICEF-Tajikistan in response to a specific request from the Governor of Sughd, in 2010, following a perceived increase in the rates of suicide and suicide attempts especially among Young People in the Sughd Region. According to aggregated data received by UNICEF from Sughd authorities, from January 2009 through September 2010, 167 Young People ages 12-24 either attempted or completed suicide in Sughd Region of Tajikistan. Of these cases, 42 suicide attempters survived and 125 died (138 total suicides within the full years, 2009 and 2010). Each of these cases attempter and completer cases were eligible for the Study.

The overarching goal of this Study was to produce sound scientific data for the purpose of developing effective suicide prevention and intervention strategies. Specifically, the project aimed to, 1) identify factors leading to suicide among Sughd youth; 2) provide fact-based recommendations for improved identification and referral of at-risk youth; 3) identify practical recommendations for possible interventions to minimize suicide among youth in Tajikistan; and 4) generate new information to support more targeted advocacy for youth rights.

1.1.1 World Context

In order to fully address suicide in Tajikistan it is necessary to understand the phenomenon in a global context. Suicide is a problem faced by every nation throughout the world. According to the World Health Organization (WHO), close to one million people worldwide commit suicide each year, a global rate of 16 suicides per 100,000 persons. Globally, in addition to the number of suicides, there are up to 20 times as many attempts (World Health Organization, 2011a).

Suicides are sometimes hidden and not officially recorded, thus the true rate of suicides and suicide attempts may, in fact, be higher (Bertolote& Fleischmann, 2002). While suicide is already a significant cause of death worldwide, its occurrence is on the rise. Suicide rates have increased by 60% worldwide over the past 45 years (World Health Organization, 2011a). In the year 2020, it is projected that 1.53 million people will die from suicide (Bertolote& Fleischmann, 2002).

In 1950, 60% of suicides were committed by persons 45 years of age and older. Traditionally, suicide rates have been highest among elderly males. However, suicide rates among Young People have been increasing, making this group most at risk in a third of both developed and developing countries (World Health Organization, 2011a). By the year 2000 the majority (55%) of suicides were committed by persons between 5 and 44 years of age (World Health Organization, 2002). Today, suicide is one of the three leading causes of death among people ages 15-24 in all countries (World Health Organization).

In general, current rates of suicide are higher among males than females. In 2004, suicides recorded in Europe were 80% male and 20% female – this 4:1 ratio is routinely reported for the developed Western world. However, suicide among females is changing, with increases from 3% to 8% in adolescent female suicides in 18 out of 30 countries in the WHO European Region, including Norway, Ireland, Ukraine, Belarus, Lithuania, Kazakhstan, Estonia, Russian Federation, Netherlands, Latvia, Spain, Uzbekistan, Sweden, Armenia, France and Italy.

Wide variations in suicide rates are found of different nations, even countries within the same Region. This holds true for republics of the former USSR. For example, an assessment of suicide in the former Soviet Union between 1984 and 1990 found suicide rates ranging from 3.5 per 100,000 in the Caucases Region, to 28.0 in the Baltic Region (Wasserman, Varnik, &Dankowicz, 1998). During this time period, only 9% of suicides in the former USSR occurred in the Central Asian Republics, at a rate of 11.8 per 100,000 inhabitants (Wasserman &Varnik, 1998). Tajikistan had the lowest rates of suicide in the Central Asian Republics throughout this period, at 6.3 and 3.6 per 100,000 for men and women, respectively (Wasserman, Varnik, &Dankowicz, 1998). The rates of male suicide were consistently higher in all of the former USSR republics, similar to the European trend. However, the ratio of male to female suicide rates was lower in the Central Asian republics (3.1:1) than in the Slavic and Baltic republics (4.6:1 and 4.1:1, respectively) (Wasserman &Varnik, 1998). While most countries still report higher male to female suicide ratios, China, a nation contiguous to Tajikistan, reports rates of female suicide that are 25% higher than those among the male population (Phillips, Li, & Zhang, 2002).

Studies have shown that Muslim countries report the lowest national rates of suicide, fewer than 6.5 per 100,000 (Bertolote& Fleischmann, 2002a; Mann et al., 2005). Bertolote& Fleischmann (2002) found that in Muslim countries were committing suicide is forbidden the suicide rate is significantly lower than that in countries that are predominantly Hindu, Christian, Buddhist and Atheist (.01 per 100,000 population compared to 9.6, 11.2, 17.9 and 25.6 per 100,000, respectively). However, because suicide is forbidden by Islam, and Muslim countries may prosecute suicides and suicide attempts, suicide may be widely underreported in Muslim countries (Khan, 1998; Lester, 2006). An affiliation with Islam has been shown to be associated with low suicide acceptability, which may affect the likelihood of suicides and suicide attempts to be accurately reported (Stack &Kposowa, 2011).

The most recently reported rate of suicide in Tajikistan, according to the World Health Organization (2001), is 2.6 per 100,000 inhabitants for all age groups (compared to 25.6 in Kazakhstan, 8.8 in Kyrgyzstan, 8.6 in Turkmenistan, and 4.7 in Uzbekistan (WHO, 2011; reports of other Central Asian countries can be found in http://www.who.int/mental_health/prevention/suicide_rates/en/index.html). The rate in Tajikistan was reported to be higher among Young Persons ages 15-24, at 3.3 per 100,000. Rates of suicide in this age group are reportedly higher in all other Central Asian Republics (29.5 in Kazakhstan, 10.5 in Kyrgyzstan, 14.1 in Turkmenistan, and 5.2 in Uzbekistan). The previously reported ratio of male to female suicides, for all age groups, is 1.3:1 in Tajikistan (compared to 4.6:1 in Kazakhstan, 3.9:1 in Kyrgyzstan, 3.9:1 in Turkmenistan, and 3:1 in Uzbekistan). However, the UNICEF TransMonEE database reported a shift in the male-to-female ratio of completed suicide between 2008 and 2010, from 1.9:1 to 1:1.3. This data shows that, during the same period, the suicide rate (per 100,000) among young persons (ages 15-19) increased 63% from 2.8 to 4.5 (per 100,000). During this period, female suicide rates

increased 176%, from 1.9 to 5.2 (per 100,000), while males experienced only a 6% increase, from 3.6 to 3.9 (per 100,000) (TransMonEE, 2012). The UNICEF School-based Student Health Survey of 12 to 16 year-old students showed that 12.6% reported seriously considering attempting suicide and 12% had made a plan. Males outnumbered girls in both considering and planning, with 13.9% males and 10.3% females considered and 12.6% of males and 10.4% of females planned. Currently, very little is known about youth suicide in neighboring Afghanistan (Khan, 2002). Kazakhstan, like Tajikistan a Central Asian country, has one of the highest suicide rates in the world.

While the reported suicide rate in Tajikistan is low, relative to its contiguous republics, there has recently been a perceived increase. Based on correspondence between the Tajikistan Ministry of Internal Affairs and the Ministry of Health, the World Health Organization (2005) reported that the suicide rate in Tajikistan recently rose to 19.9 per 100,000. Possible reasons for this include the increase in unemployment, abandonment and domestic violence, as well as violence associated with civil war. Due to a significant discrepancy between the reported rate of suicide in Tajikistan and the perceived rate, determining the true rate of suicide in Tajikistan is of great importance and warrants examination.

1.1.2 Estimates of Suicide Rates in Sughd (2009-2010)

Knowing the rates of health indicators facilitates comparison across Regions and cross-nationally. Still, establishing the true rate of any health indicator requires both credible population data (Census) and an accurate assessment of the health indicator(s) of interest.

District population data used here were obtained from the 2010 Tajikistan Census(State Agency on Statistics, 2010). Because of the low populations of Chkalov and Taboshar, which are both under 10,000 persons, the suicides reported between 2009 and 2010 result in misleading suicide-rate estimates for these cities. Therefore, suicides and population counts for these two cities are included in the B. Gafurov administrative District. Information on suicides for Sughd Region, by District, for 2009-2010, was obtained from Sughd Provincial authorities in February 2011 and was purported to represent all reported suicides for this period. These data (regardless of Study participation) were used to determine the suicide rate per 100,000 Young Persons in Sughd Region. Selected statistics are reported below. For more detailed information, please see Appendix II.

- In 2010, an estimated 616,637 Young Persons ages 12 to 24 resided in Sughd.
- From 2009-2010, 138 suicides among persons ages 12 to 24 were officially documented (a yearly average of 69 for the two-year period).
- Available data yields a rate of 11.2 suicides (years 2009-2010) per 100,000 Young Persons for Sughd Region.
- Available data indicate, among Young People ages 12 – 24, a female suicide rate of 11.7 and a rate of 10.6 among males. These rates represent a reversal in gender distribution from what was previously reported in Tajikistan or what currently occurs in other Central Asian countries.
- Within Sughd, Asht District had the highest rate of completed suicide, with an overall rate of 19.2 Young Persons (per 100,000), and 24.8for females (highest of all districts) and 13.7for males.

- Konibodom District had the second highest suicide rate among Young Persons,18.2 per 100,000, with a rate among young males of 20.0 and 15.9 among young females.
- Khujand, Sughd Region's capital, had the fourth highest suicide rate among Young Persons (16.0 per 100,000), with a higher rate among females (20.7 compared to 11.9 per 100,000).

1.1.3 Status of Mental Health Care in Tajikistan

Before passing its own legislation in 2002, Tajikistan's mental health care was regulated by the Soviet Law on Psychiatric Care. Latypov (2010) characterizes the current state of mental health care in Tajikistan as remaining in a "dormant" phase, in which mental health research is neglected and traditional healers remain the primary mental health care providers. For a full overview of the current state of mental health care in Tajikistan, see Appendix III.

Only 4.6% of the gross domestic product is spent on health care in Tajikistan and only 1% of the health budget is spent on mental health care. There is no specific mental health policy, nor is there an official agency or governing body to oversee mental health care; a sole senior specialist at the Ministry of Health covers all non-communicable diseases, including mental illness. Both facilities and professionals in mental health are lacking. There are only 53 outpatient mental health facilities in Tajikistan, treating only 629 persons per 100,000 general population (as compared to Uzbekistan, which serves 1,474 people per 100,000 population; and 1,142 per 100,000 people in Kyrgyzstan (World Health Organization, 2010).

Stigma surrounding mental health issues in Tajikistan, as in much of the world, poses an additional challenge. Disclosure of mental illness is often met with discrimination, impeding treatment, education and employment. Consequently, individuals with emotional problems are inclined to seek help from traditional providers and mullahs, who, they believe, are generally more likely to assure confidentiality than a doctor (Latypov, 2010).

1.1.4 Social Factors in Suicide Risk

Psychological problems, such as depression, feeling hopeless, or meaninglessness and emptiness are often cited as major predictors of suicidal ideation (Eskin, 1999b). Hoven et al. (2010) consider suicide to also be, in part, a "social phenomenon" with risk factors including: "economic hardship and property loss," "breakdown of important personal relationships and loss," "other disruptions and losses through internal displacement, voluntary or forced migration, war and other cataclysmic events." While mental disorders play an important role in suicide, mental health status is not always the most important factor in suicide risk. To better understand and devise methods to combat and contain suicide, relevant social factors must be assessed (Bertolote & Fleischmann, 2005; Hoven et al., 2010; Hoven, Wasserman, Wasserman, & Mandell, 2009).

Global Mental Health research has shown that household violence and other forms of mistreatment often contributes to suicidal behavior (Haarr, 2010; Haarr, 2007; Dervic, Brent, & Oquendo, 2008; Gould, Greenberg, Velting, & Shaffer, 2003). The Multiple Indicator Cluster Survey (MICS) in Tajikistan reported that three out of every four women, and 85% of 15-29 year old married women, believe that their partners are justified in hitting them

(UNICEF, 2007). Among school-aged girls, 21% reported that they had been physically attacked one or more times in the past 12 months (UNICEF, 2006). Many of these women may feel subjected to unbearable hardships by their partners or in-laws. By custom, these hardships may not be challenged, but are instead viewed as socially-acceptable occurrences.

Social stigma is another factor in suicide risk. Mehmet Eskin (1995b) proposed a "stigma hypothesis" whereby in societies where attitudes toward suicide are particularly stigmatizing, people showing suicidal thoughts or behaviors are more likely to be rejected and isolated. However, negative attitudes toward suicide do not necessarily coincide with social stigma. Eskin (1995b; 1999a; 2003a) distinguished between attitudes toward suicide as a general concept and attitudes toward individual suicidal peers. In a cross-cultural study, the authors found that Swedish adolescents were more accepting of the concept of suicide than Turkish adolescents, while Turkish adolescents were more accepting of a classmate who attempted suicide. Eskin (1995b) suggests that where stigma is high, people with suicidal ideation feel more pressure to succeed in killing themselves, rather than to continue living in shame. Indeed, in Sweden, where students reported less accepting attitudes toward suicidal people, more suicides were actually completed (Eskin, 2003b).

Finally, it seems that there are social, cultural, and religious differences in contemplating suicide. Eskin (1999b; 1995a) found that among Muslim students in Turkey, school-related reasons (familial expectations to do well in school), opposite-sex issues (reflecting the conservative values regarding opposite-sex relations), financial problems in the family, and problems with parents and parents' separation were important. On the other hand, among Christian Swedish students, sexual identity, issues with physical appearance, and existential issues, like what happens when one dies, were more important (Eskin 1999b; 1995a).

1.1.5 Conceptual Framework of the Sughd Suicide Study

The methodology chosen for this Study, the "psychosocial autopsy," reflects the idea that suicide is embedded within social, cultural and familial structures, and frequently involves other factors besides mental health. Psychosocial autopsies involve gathering information from a variety of sources in order to create a posthumous profile of the deceased, to reconstruct an account of events leading up to the suicide (Cavanagh, Carson, Sharpe, & Lawrie, 2003; Isometsa, 2001; Shneidman, 2004) and to determine which of the possible risk factors may have been major contributors. Sources of information usually include interviews with family, friends, and other individuals who had a close relationship with the deceased, as well as coroner's records, medical notes, and psychiatric notes (Houston, Hawton, & Shepperd, 2001; Kolves, Varnik, Tooding, & Wasserman, 2006; Zhang, Conwell, Zhou, & Jiang, 2004).

Unlike psychosocial autopsies that focus only on the psychological status of the deceased, this Study targets both individual traits and the influences of the social environment as important risks. Information was obtained through interviews with informants, intended to evaluate psychological status and explore the Young Person's family history and background, early childhood and recent life events, interpersonal relationships, social support, housing, employment, health history, religious commitments, contact with clinical services, and mental health awareness, and other relevant domains (Hawton et al., 1998; Hoven et al., 2008; Wu et al., 2001; Shneidman, 2004).

1.1.6 Cultural Considerations

Suicide research has almost exclusively been conducted in economically developed countries. The design of the semi-structured interviews utilized here drew upon the framework developed in previous studies in Western countries. It was understood, however, that specific nuances of Tajik culture could potentially affect implementation of such an approach. Fortunately, the success of semi-structured interviews with suicide victims' next-of-kin in Chen et al. (2006) and Zhang et al. (2004) in China suggested the viability of this method in non-Western countries. Thus, the interviews were developed in a way that allowed ample scope for these cultural nuances, while maintaining established methods used in Western studies.

2. METHODOLOGY

2.1 Participant Selection

Study participants were assigned to one of three Study samples; completed suicide, attempted suicide or Control. In addition, Key Informant interviews were conducted but were focused on knowledge and awareness, not individuals (See Appendix IV for sample definitions). Face-to-face interviews were conducted with selected informants from each sample.

The completed suicide and attempted suicide samples consisted of all the identified cases of suicide or attempts that occurred between January 2009 and March 2011. Informants for the completed suicide sample included up to two Primary Informants who knew the deceased Young Person well, ideally from either the time the Young Person was born or a very young age. The attempted suicide sample consisted of the Young Persons themselves and one other Primary Informant, or two Primary Informants if the Young Person attempter was unable or unwilling to participate.

Additionally, Secondary Informants were interviewed for approximately 50% of the suicide and attempter cases. The Secondary Informants, individuals who knew the Young Person well since childhood, were recommended by the Primary Informants at the time of their interview. Secondary Informants included biological parents, a spouse, in-laws, sibling, another family member, a friend, teacher, or someone else who knew the Young Person well. The relationships of the informants to the Young Person in each case depended on the unique situation of the Young Person.

In order to understand which factors in a Young Person's life potentially contributed to the suicidal behavior, the Young People in the attempted and completed suicide groups were compared to a Control group that was similar but the Young Person Control had not previously attempted suicide. Each case in the attempted and completed suicide group was matched to a Control according to the Young Person's gender, age, ethnicity (Tajik, Uzbek, Russian, etc.) and geographic proximity to the household of the Young Person from the suicide sample (Gould, Fisher, Parides, Flory, & Shaffer, 1996; Shaffer et al., 1996). For the Control group, up to two informants were interviewed, including the Young Person, if she or he was able and willing to participate.

Interviews were also conducted with Key Informants. This sample was composed of officials from various agencies and organizations in the Region, who are familiar with suicide and other issues that affect the wellbeing of Young People. The Key Informant interviews were not focused on any specific Young Person, but rather the entire community.

Key Informants were selected from agencies and organizations located in BobojonGafurov, Khujand, Isfara, Istaravshan (Imam only), and Panjakent, Districts with the highest number of suicides. Konibodom had the second highest suicide rate; however, to include a wider geographic region (as it is adjacent to BobojonGafurov) it was replaced by Isfara. This sample included the Prosecutor's Office, Police Department, Women's Committee, Office of Youth, Sports, and Tourism, Child Rights Units/Commissions on Child

Rights, hospitals, a burn unit, schools, as well as local, Regional, and national media. Interviews were administered to the Director of each of these organizations, who named up-to-two additional providers/employees to be interviewed. Imams were also interviewed in five Districts (BobojonGafurov, Khujand, Isfara, Istaravshan, and Panjakent). Imams were chosen not only because of their contact with large numbers of individuals, but also because they could possibly provide insightful perspectives of factors contributing to suicide within their communities.

In total, 102 families (92% participation rate) with a completed suicide and 35 families (92% participation rate [of eligible cases]) with an attempted suicide were included in this Study. All cases from the Completed and Attempted Suicide samples were matched with a Control, for a total of 137 Control families. Additionally, 56 Secondary Informants were interviewed for the Completed Suicide sample, and 32 for the Attempted Suicide sample. For the entire suicide sample, including Controls, 679 informants were interviewed. In addition, 84 individual Key Informants were interviewed, bringing the total Study sample to 763 participants.

2.2 Methods of Investigation

In order to fully understand the phenomenon of suicide among Young People in Sughd, including major factors that contribute to its occurrence, several different approaches were taken to gather information. There were four main methods of investigation:

1) Individual Interviews
2) Geographic Analysis
3) Review of Official Records
4) Key Informant Interviews

2.2.1 Individual Interviews

This component of the Study involved private, confidential interviews with Study participants from the Suicide, Attempter, and Control groups. Interviews of the suicide and attempter samples were designed to reconstruct suicidal deaths and attempts through systematic data collection from survivors. This method involves gathering information from a variety of sources in order to create an individual profile and to reconstruct an account of events leading up to the suicide or attempt. Information sources included interviews with attempters, family members, friends, and other individuals who had a close relationship with the deceased or the attempter. True to the holistic approach described above, these "psychosocial autopsies" were designed to capture information about both individual and social factors, including (but not limited to) psychological status, family history and background, early childhood, recent life events, interpersonal relationships, social support, housing, employment, health history, religiosity, and mental health awareness. In this Study, the psychosocial autopsy involved semi-structured interviews that were conducted individually and privately with Study participants from the suicide, attempter and Control groups.

Research suggests that awareness of other suicides that have been committed may result in "copycat" suicides (Brent & Melhem, 2008); hence, questions were included to determine a respondent's media exposure to other suicides, or other information channels that

might influence the notion of suicide as a viable option. Protective factors, which might discourage suicidal ideation or action, were sought in questions related to resilience, coping, and one's future orientation (Hirsch et al., 2006). Additionally, the interview gathered information about the Young Person's academic standing, media use, history of sexual and physical abuse, romantic relationships, and other culturally-relevant indicators identified in collaborative discussions with UNICEF-Tajikistan staff and the Working Group.

A semi-structured interview was designed specifically for this Study, but built on prior investigations. It comprised both quantitative and qualitative domains. The following topics were covered in the interview:

Table 1. Psychosocial Autopsy Domains

1. Demographics
2. Mental Health Awareness
3. Mental Health Service Awareness
4. Personal Relationships
5. Previous Suicidality
6. Religiosity
7. School Attendance
8. Bullying
9. Domestic Violence
10. Happiness
11. Health
12. Life Events
13. Psychological Status
14. Temperament
15. Exposure to Suicide
16. Media Exposure
17. Parental Abandonment
18. Resilience
19. Coping
20. Future Orientation
21. Detailed Suicide Narrative (Qualitative)

The primary means of conducting the psychosocial autopsy was a face-to-face interview, using a questionnaire (quantitative instrument), focused on the domains indicated above. The interviews were designed to obtain information required to understand the life of the Young Person and the factors that might have led to a suicide attempt.

A qualitative questionnaire, administered to all Primary and Secondary Informants in the suicide and attempter samples was also employed. The qualitative section was used as a means to record information about the Young Person's life and circumstances surrounding the suicide or suicide attempt, in the words of the respondent. Open-ended questions and prompts were read to the respondent by the interviewer, who either recorded the answers (audio-recording) or took notes. The qualitative section examined the respondent's understanding of the suicide or suicide attempt, its consequences, and various aspects of the Young Person's

life such as relationships with family, spouses, and members of the opposite sex, abuse, and the role of religion.

2.3 Participating Districts

The face-to-face interviews were conducted in 16 Districts within Sughd Region. Each District was selected as having officially reported at least one suicide or suicide attempt between January 2009 and March 2011:

Table 2: Participating Districts*

1) Khujand
2) Kairakkum
3) Chkalov
4) Taboshar
5) Bobojon Gafurov
6) Isfara
7) Konibodom
8) Mastchoh
9) Asht
10) Spitamen
11) Jabbor Rasulov
12) Istaravshan
13) Ghonchi
14) Zafarabad
15) Panjakent
16) Aini

* Shahriston and KuhistoniMastcho did not report either a suicide or suicide attempt between January 2009 and March 2011 and thus were not included.

2.4 Recruitment and Data Collection

Interviews were conducted between April and August 2011. Respondents were recruited at their homes by members of the national team. At the time of recruitment, participants were told the purpose of the Study and were given the opportunity to agree to or refuse participation, or to think about participating in the Study at a later date. Participants were told that all interviews were completely voluntary and confidential (confidentiality and other ethical considerations are explained in detail in APPDENDIX VII below). Trained interviewers conducted all interviews. The trainings were held in Khujand by Columbia University on three different visits between October 2010 and March 2011.

At the time of recruitment, if the participants agreed to take part in the Study an interview was scheduled for a date and time of their choice and their consent to participate was documented by the recruiter. Interviewers then visited the family at an agreed upon date

and time and conducted the interviews, after verifying the participants' consent. Because it is not customary for people in Tajikistan to sign a consent form, in part due to the history of its political system, verbal consent to participate was documented by the recruiter prior to the start of the interview. The interview was designed to last up to two hours for primary respondents, up to one and a half hours for secondary respondents and up to one and a half hours for Key Informants.

2.4.1 Geographic Analysis

Upon completion of the suicide and Control group interviews, the interviewers used Global Positioning System (GPS) receivers to obtain the GPS coordinates (latitude, longitude and elevation) of the participants' home locations. However, if the suicide or suicide attempt occurred at a different location, the GPS coordinates were also obtained from that location. This information was intended to be used to identify any potential geographic clustering. To aid in this analysis, a geographic profile was created for each of the 16 visited Districts of the Sughd Region. These geographic profiles detail the number of attempted and completed suicides and other socio-environmental factors to identify geographic differences among Districts as potential contributors to differing rates of suicide.

2.4.2 Review of Official Records

It was originally proposed that the Study include a review of official records of the Young People in the suicide sample. Records were requested from the Prosecutors' offices, hospitals, including burn units, and schools that had been in contact with the Young Person. Unfortunately, records from hospitals and schools could not be obtained and only a summary of the Prosecutors' reports were made available to the research team. Records were attempted to be collected for the Young People who completed or attempted suicide in the same five Districts (Khujand, BobojonGafurov, Isfara, Istaravshan, and Panjakent) in which Key Informant Interviews were conducted

2.4.3 Key Informant Interviews

Key Informant interviews did not gather information about a particular Young Person, but rather focused on issues faced by Young People in the community at-large. Specifically, the interviews focused on topics that included mental health-related services, nontraditional mental health practices (e.g., Tabibs), policy, and perceptions of reasons a Young Person might commit suicide. As different types of agencies and organizations were included in the Key Informant sample, participants necessarily received interviews specifically targeted to their reference group, e.g., Prosecutors, Teachers, etc.. However, every Key Informant received the same "core" interview, which included questions on issues faced by Young People at the District and Regional level, laws and policies in place to protect Young People, and suggestions for future policy. Similar to the individual interviews, the Key Informant interviews contained qualitative questions, which elicited the Informants' opinions about various topics, such as social and cultural changes that might affect suicidal behavior, as well as suggestions for policy changes that could improve the lives of Young People in Sughd.

2.5 Translations

The international research team from Columbia University developed separate interviews in English for each participant group in order to obtain the most accurate account of events enveloping each completed and attempted suicide. All interview materials were translated by native speakers in Tajikistan from English into Tajik, Uzbek and Russian, so that the interviews could be conducted in the language preferred by the participant. Considerable efforts were made to complete back translations into English of all documents, for comparison purposes, although this was not always possible.

2.6 Ethical Considerations

The Institutional Review Boards at Columbia University, New York State Psychiatric Institute and the Tajikistan Ministry of Health reviewed and approved all aspects of this Study. For details about the ethical procedures, please see Appendix V.

2.7 Data Analysis – For analytic plan, see Appendix VI and for hypotheses, please see Appendix VII

2.8 Considerations for Future Research in Tajikistan – See Appendix VIII

3. RESULTS

The findings presented in this section reflect the results of both quantitative and qualitative assessments, as well as Key Informant opinions. Findings are presented thematically, with information drawn primarily from the quantitative portion of the interview, and are selectively highlighted by case examples from the qualitative information. Key Informant opinions are generally included to further elaborate or inform on a topic.

3.1 Study Geography, Sample and Demographics

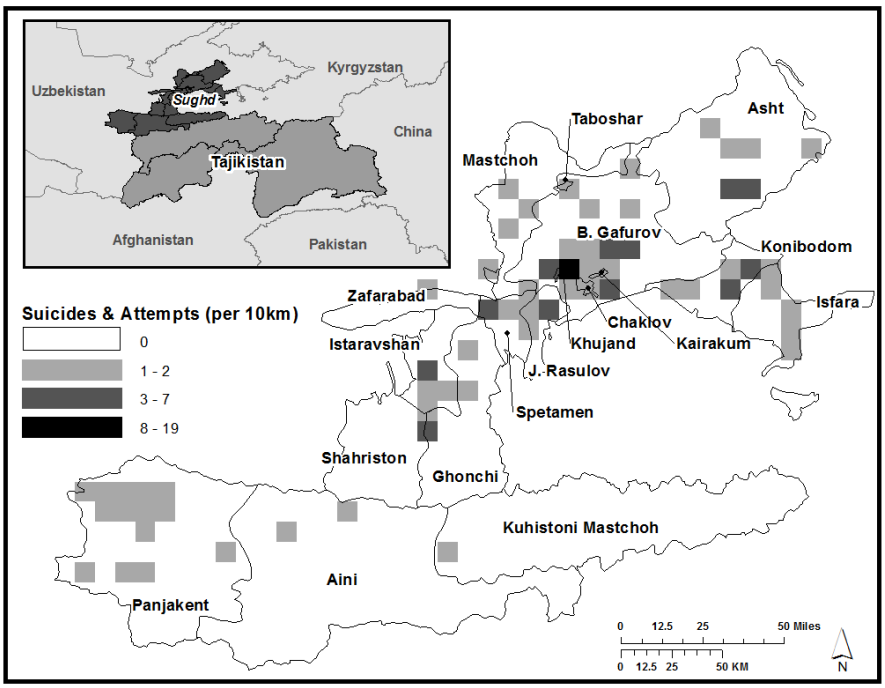
3.1.1 Geography of Suicides and Attempts

Global Positioning System (GPS) receivers were used at the time of interview to collect geographic coordinates of both the home location and the location of the suicide/attempt, if not carried out in the home. The GPS coordinates of the Controls' homes were also collected. GPS coordinates for 256 (93.4%) of all families interviewed were obtained (96.1% of all suicide families and 94.3% of all attempter families) (see Table 3). In order to protect the identification of the participants, completed suicides and attempts were aggregated to a 10 kilometer grid (see Figure 1). Due to Khujand's population density, the highest concentration of suicide and attempter cases is within the Khujand city limits.

Table 3. Sample with GPS Coordinates

Sample	Total	With GPS	%
Suicide	102	98	96.1%
Attempter	35	33	94.3%
Suicide-Control	102	92	90.2%
Attempter-Control	35	33	94.3%
Total	**274**	**256**	**93.4%**

Figure 1. 10 Kilometer Grid of Suicide and Attempter Families Interviewed in Sughd, Tajikistan



3.1.2 Districts

As shown in Table 4 below, each of the 16 Districts in Sughd Region with a completed suicide or an attempt was represented in our sample, with Panjakent and Khujand having the highest representation (42 and 38 families respectively) and Chkalov and Zafarabad containing the lowest representation (2 families each.)

Table 4. Family Interview Sughd Region Representation

District	Suicide	Suicide-Control	Attempter	Attempter-Control	Total
Aini	2	2	1	1	**6**
Asht	10	10	0	0	**20**
B. Gafurov	15	15	1	1	**32**
Chkalov	1	1	0	0	**2**
Ghonchi	6	6	3	3	**18**
Isfara	5	5	2	2	**14**
Istaravshan	9	9	0	0	**18**
J. Rasulov	5	5	2	2	**14**
Kairakkum	2	2	3	3	**10**
Khujand	6	6	13	13	**38**
Konibodom	14	14	2	2	**32**

Mastchoh	2	2	1	1	**6**
Panjakent	15	15	6	6	**42**
Spitamen	8	8	0	0	**16**
Taboshar	1	1	1	1	**4**
Zafarabad	1	1	0	0	**2**

3.1.3 Family Informants

Families with either a Young Person who committed suicide (92% participation rate*) or attempted suicide (92% participation rate**)were matched evenly with families without suicide (Control families). In the majority of families, two family members (including the Young Person if an attempter) participated (see Table 5). The Young Person themselves was interviewed in 20 of the 35 attempter cases. For a variety of reasons, only 57% (20) of the Attempter Young Persons were interviewed. In some instances a young female attempter was currently living with her husband and in-laws who did not know about the attempt. To maintain confidentiality, it was decided not to approach the Young Person. In several of the male attempter cases, the attempter was not reachable because he had migrated for work outside of Tajikistan. When possible, the biological mother of the participating Young Person was interviewed; otherwise, the biological father, spouse, or parent-in-law was interviewed. Secondary family interviews were conducted for families with suicide, as well as for an attempter.

* One hundred eleven families were eligible to participate: 102 completed the interview and 9 refused participation. Sixteen families were ineligible due to having moved out of Sughd, failing to meet the age requirements of Study criteria, etc.

** Fifty-one families were considered for recruitment into the Study: Thirteen of these families were found to be ineligible due to having moved out of Sughd, failure to meet age criteria, etc. Of the remaining 38 families, 35 completed the interview and 3 refused participation.

Table 5. Family Interviews

Sample	Suicide	Suicide-Control	Attempter	Attempter-Control
Primary Families	102	102	35	35
Primary Interviews	200	194	62	67
2 Primary Interviews	96%	89%	77%	91%
Attempter/Control Young Person Interviewed		93%	57%	97%
Biological Mother Interviewed	62%	58%	60%	46%
Biological Father Interviewed	44%	16%	14%	9%
Spouse Interviewed	2%	3%	3%	14%
Mother-in-Law Interviewed	6%	9%	3%	9%
Father-in-Law Interviewed	2%	1%	0%	0%
Secondary Families	56		32	
Secondary Interviews	100		56	
2 Secondary Interviews	79%		75%	

3.1.4 Young Person Demographics

Among Young People who committed suicide, we found an equal proportion of males and females. However, among Young Persons who survived their suicide attempt, a greater proportion were female (71%). Average age at the time of the event (suicide/suicide attempt) and age at the time of the interview was between 18 and 21, with a one year difference among the attempters and those who completed suicide (see Table 6). Because Controls were matched to the index sample by age and gender, Young Person Controls showed a similar gender and age distribution.

Most Young People were either Tajik or Uzbek, with a surprisingly high proportion of Uzbek families. Since ethnicity Census information is not yet available at the District level, it was not possible to determine if there is a disproportionally high number of Uzbek Young Persons attempting/committing suicide. Just under a third of the Young People were married at the time of the attempt/suicide (29% - 31%), and nearly all of those marriages were arranged. Differences in the proportion of arranged marriages among attempters, suicides and their matched Controls were insignificant; however, a higher proportion of arranged marriages was reported among suicides (97%) than among attempters (83%). For all Young Persons, the average age of marriage was between 20 - 21 years, and the average age of their spouse being slightly higher (between 21 - 22 years).

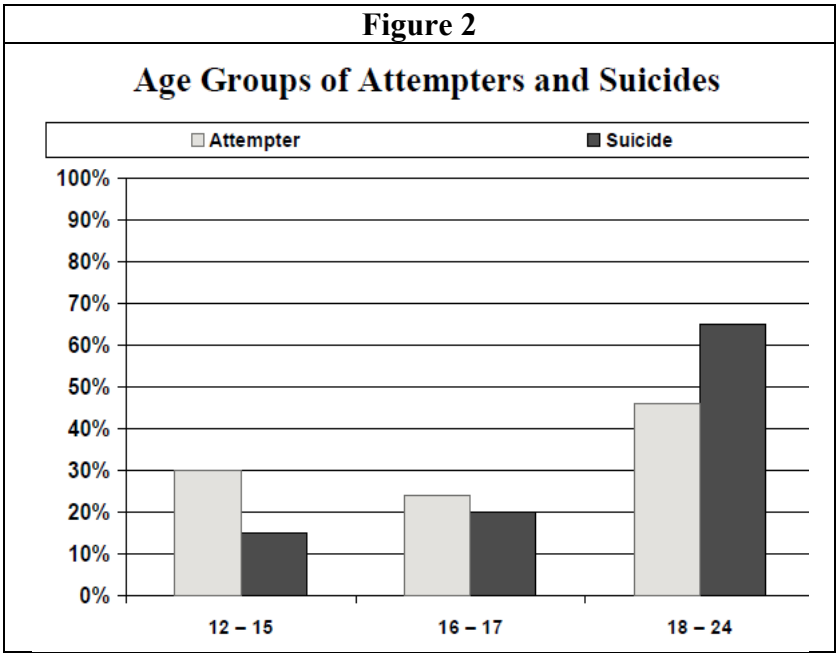
Table 6. Young Person Demographics

Demographics	Suicide	Suicide-Control	Attempter	Attempter-Control
Gender and Age				
Female	51%	54%	71%	71%
Average Age at Event	19	19	18	19
Average Age at Interview	21	21	20	21
Ethnicity				
Tajik	52%	61%	74%	85%
Uzbek	47%	39%	26%	15%
Other	1%	0%	0%	0%
Marital Status				
Married	31%	31%	29%	29%
Marriage was Arranged	97%	94%	83%	82%
Average Age of (first) marriage	21	21	20	20
Average Age of (first) spouse	21	22	22	22

3.1.5 Age Groups of Attempters/Suicides

The age distribution of Attempter and Suicide Young Persons in this Study is in agreement with that reported by the Key Informants, with the largest proportion being in the 18-24 year group (see Figure 2). Overall, Attempters are younger than the Suicide cases in this Study - also in accordance with the Key Informants, consistent with other countries.

Figure 2



3.1.6 Young Persons' Attendance at School/University

More male Young Persons than female Young Persons were attending school/university at any time during the 12 months before the suicidal event. Fewer female Suicide/Attempter Young Persons were in school/university than their matched Controls (31% versus 44% of Suicide and Controls and 32% versus 38% of the Attempters and Controls). Only 13% of the female suicides were in the University compared to 29% of female Suicide Controls (see Table 7).

Table 7. School Grade Level of Young Persons attending School/University in the 12 months before the event

	Suicide		Suicide-Control		Attempter		Attempter-Control	
	Female	Male	Female	Male	Female	Male	Female	Male
Grade 9-11	87%	71%	81%	68%	75%	71%	78%	57%
University	13%	19%	29%	32%	25%	29%	22%	43%

3.1.7 Housing and Neighborhoods

In addition to GPS coordinates, interviewers recorded descriptive information about the housing and neighborhoods of all Study participants (see Table 8).

- 80% of all suicide and suicide attempts were committed at the home.
- 50.4% of suicides and attempters lived in a farm house, while 35.7% lived in a one-, two-or three-family house.
- Approximately 80% of all subjects, including Controls, lived in a house that required some repair.
- Interviewers were asked to rate, on a scale of 0 to 10, the housing density and neighborhood living conditions of the participant's immediate neighborhood. The average neighborhood density of the completed suicides, attempters and Controls did not differ; nor did their living conditions.

Table 8. Housing and Neighborhood Characteristics

	Suicide & Attempters		Controls		Total	
Housing & Neighborhood Characteristic	**N**	**%**	**N**	**%**	**N**	**%**
Housing Type						
Farm House	65	50.4%	60	49.2%	125	49.8%
1, 2 or 3 family house	46	35.7%	47	38.5%	93	37.1%
Apartment building	18	14.0%	15	12.3%	33	13.1%
Housing Condition						
In need of repair	102	79.7%	97	78.9%	199	79.3%
Old house, no repair needed	16	12.5%	15	12.2%	31	12.4%
New house	10	7.8%	11	8.9%	21	8.4%
Neighborhood						
Average Housing Density	5.55		5.24		5.39	
Average Living Conditions	4.83		4.50		4.86	

3.1.8 Key Informants

Key Informant interviews were grouped into seven system categories, including: Law (Prosecutors and Police Officials); Child Protection & Mahalla; Women & Youth Committees; Health (District Director of Health, Hospitals, Mental Health/Crisis Centers and Burn Unit); Education (School Principals and Teachers); Imams; and Media (Local, Regional/National TV; Regional/National Newspaper and Regional/National Radio). The 84 Key Informant interviews were conducted throughout the five Districts of Sughd (25 in Khujand, 20 in Panjakent, 19 in B. Gafurov, 19 in Isfara and 1 of the 5 Imams in Istaravshan) with the highest number of suicides.

Female representation across the seven Key Informant systems varied (excluding Imams), with the lowest being the Law and Health systems (17% of those interviewed were female), while the Women & Youth Committee and Education systems each had the highest with 67% female (see Table 9). Apart from speaking Tajik and Russian, a large proportion of the Key Informants also spoke Uzbek. Education levels across the systems also varied, with Law containing the highest proportion of College and Advanced Degree graduates.

Table 9. Key Informant Demographics

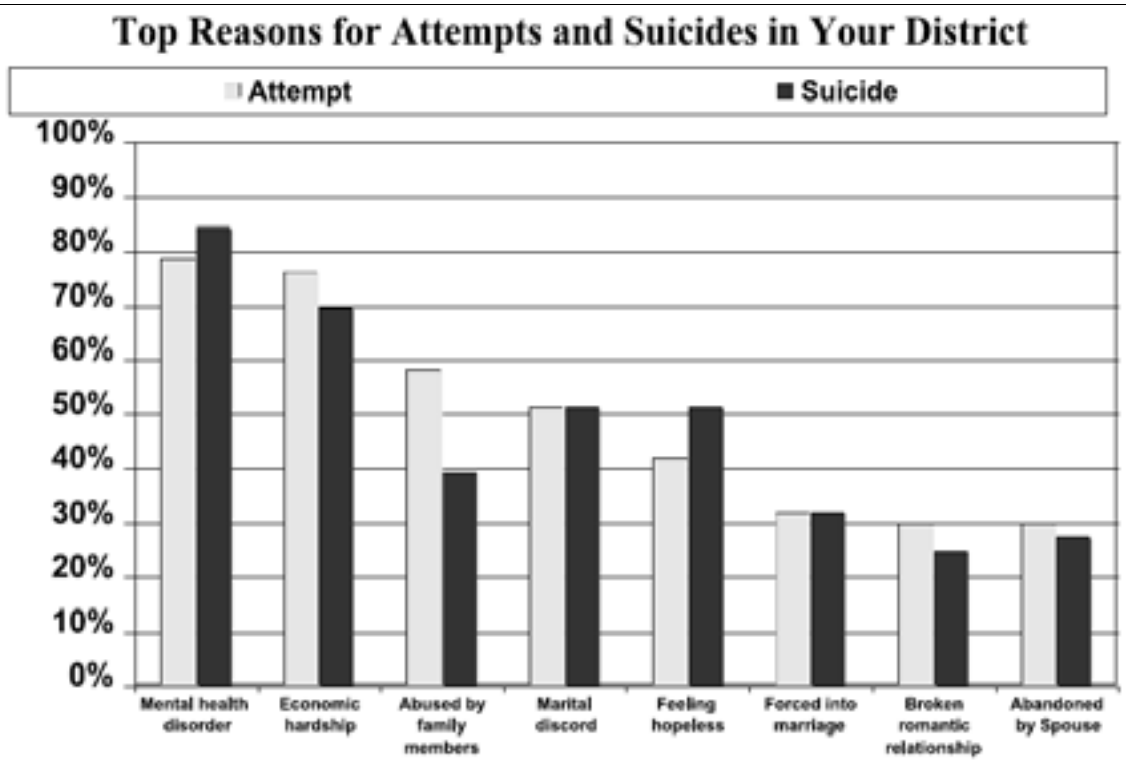
	Law	Child Prot. & Mahalla	Women & Youth Comm.	Health	Educ.	Imam	Media
Average Age	**34**	**48**	**37**	**51**	**44**	**54**	**46**
Female	17%	50%	67%	17%	67%	0%	29%
Nationality							
Tajik	100%	83%	100%	83%	100%	100%	100%
Uzbek	0%	17%	0%	8%	0%	0%	0%
Kyrgyz	0%	0%	0%	8%	0%	0%	0%
Languages Spoken							
Tajik	100%	100%	100%	100%	100%	100%	100%
Russian	92%	100%	100%	100%	83%	80%	100%
Uzbek	50%	92%	46%	67%	58%	100%	86%
Kyrgyz	0%	17%	4%	8%	0%	20%	0%
Other	0%	17%	4%	0%	17%	60%	29%
Highest Level of Education Completed							
Some College or Less	8%	24%	17%	0%	8%	100%	0%
Completed College or Advanced Degree	92%	76%	83%	100%	82%	0%	100%

3.2 Main Reasons for Suicides and Attempts/Methods Used

3.2.1 Top Reasons for Suicides or Attempts (Key Informants):

Key Informants were asked to estimate the average age of attempters and suicides in their Districts. The age group 18-24 year olds was identified as the highest for both attempters and completers (51% and 59% respectively) followed by the 25-49 and 16-17 age groups (see Appendix IX). Key Informants reported that the top reason for attempts and suicides is a mental health disorder (79% and 85% respectively) closely followed by economic hardships (76% and 70% respectively) (see Figure 3). Relationships and marriage issues (marital discord, forced into marriage, broken romantic relationship) and abandonment by spouse, were also frequently reported as reasons for suicide by the Key Informants.

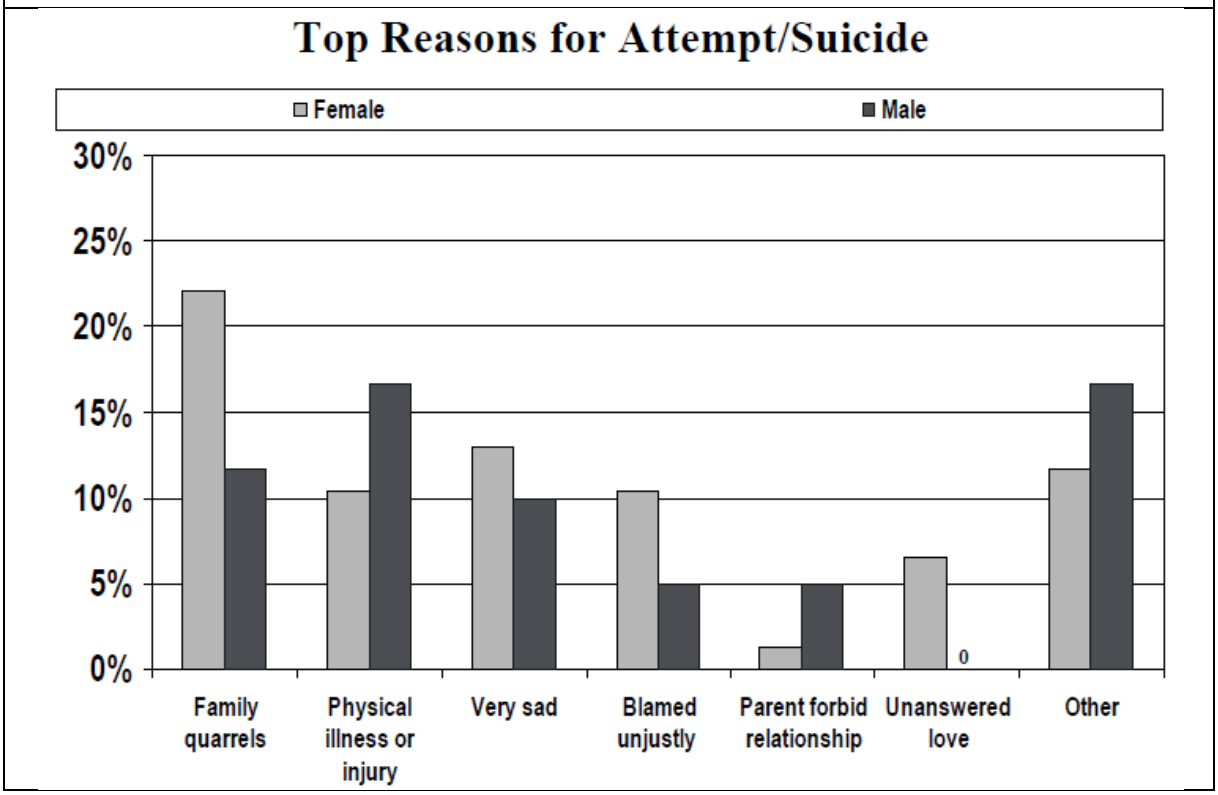
Figure 3. Key Informant's Opinion:



3.2.2 Top Reasons for Suicides or Attempts (Family Informants):

Family Informants were given a list of reasons why a Young Person would attempt/commit suicide, and were asked to choose all that apply. The top reasons for the attempt/suicide differed among female and male attempters and completers (see Figure 4). While family quarrels were the reason for the suicide or attempt among 22% of females, it was only reported for 12% of males. More females reported having been blamed unjustly as the reason for the suicide/attempt compared to males (10% and 5%, respectively). In contrast, more males reported physical illness or injury as the reason for attempt/suicide than females (17% and 10%, respectively). Love and relationship problems also varied by gender, with more females reporting unanswered love and more males reporting relationship forbidden by parent as the reasons for their attempt/suicide.(see Figure 4).

Figure 4. Family Informant's Opinion:



3.2.3 Reasons for Suicide among Females and Males under Age 25

All Young Persons, as well as Primary and Secondary Informants, were asked several general questions to assess their opinion regarding suicide and cultural issues faced in Sughd and Tajikistan. When asked for the reasons why females and males under the age of 25 would commit suicide, family quarrels, physical illness or injury, being forced to marry, and unanswered love were the top four answers (see Figure 5). Responses among Informants varied greatly. For females under the age of 25, only 8% of all Control Young Persons reported that physical illness or injury would be a reason, but 35% of the same group reported that being forced to marry would be a reason. For males, however, being forced to marry was the lowest (with approximately 10% of Informants, with the exception of Secondary Informants, reporting likewise). In contrast, 10% or less of all Informants (again with Secondary Informants being the exception) reported that debts would be a reason for a female to commit suicide, while approximately 30% of the same Informants reported that debts would be a reason for males (see Figure 6).

Figure 5

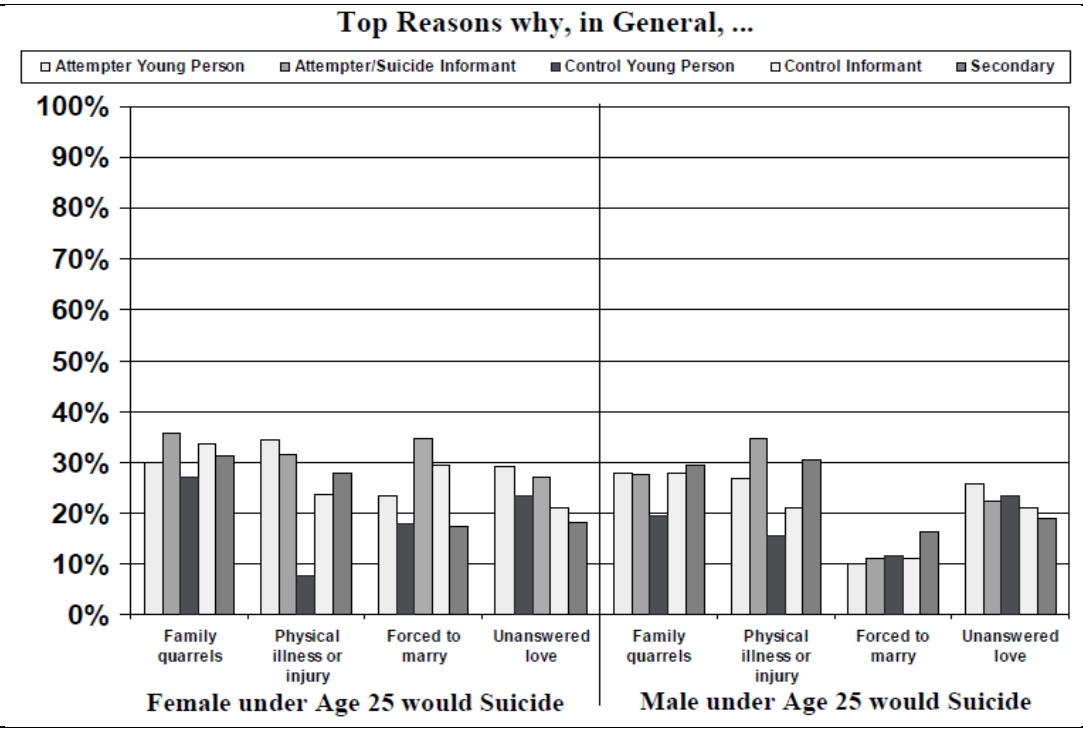
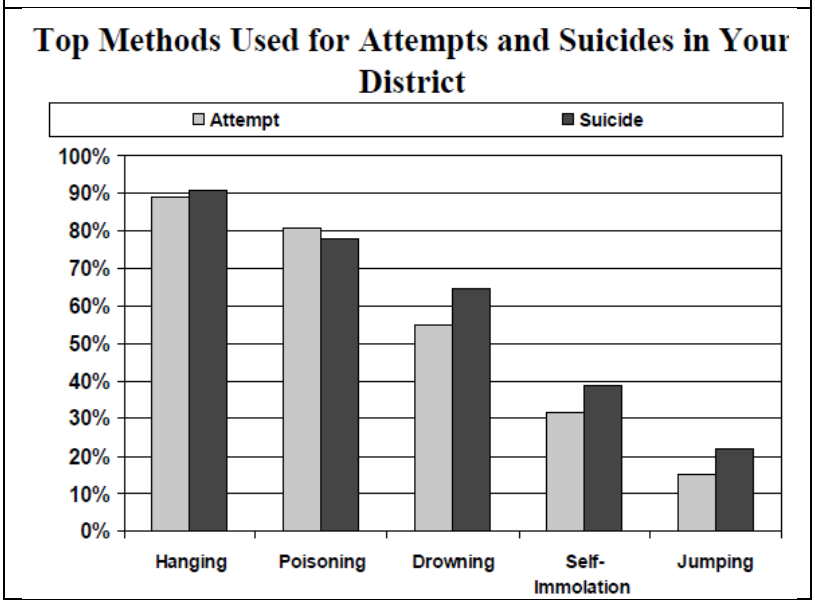


Figure 6

3.2.4 Methods of Choice for Suicides/Attempts

Figure 7. Key Informant's Opinion:



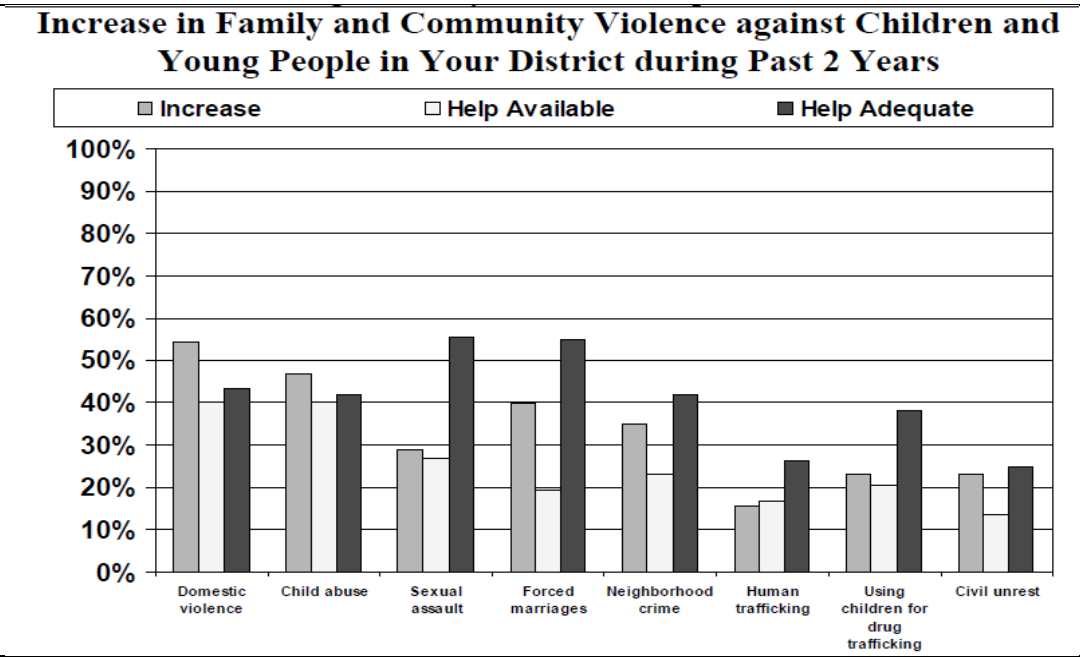
Approximately 90% of Key Informants reported hanging as the method of choice for either attempters or completers, while 80% reported poisoning, 65% reported drowning, with very low rates of other methods of suicide(see Figure 7). Seventy-one percent of females attempted/committed suicide by hanging and 21% by poison. More than 30% of attempter females and males chose their method because it was the most convenient, while only 5% chose it because it was the only method they knew. These numbers could potentially be directly related to the bias in reported cases, with hangings and poisonings less easily disguised as accidents. Gender difference was also evident in the location of suicide, where 86% of female Young Persons attempted/committed suicide in their home, and 10% somewhere else. Sixty eight percent of males attempted/committed suicide at home and 27% of them somewhere else (see Appendix X).

3.3 Risk Factors

3.3.1 Violence

3.3.1a Family and Community Violence: Key Informants reported a perceived increase in family and community violence against children and Young People in their Districts during the past two years. More than 54% reported an increase in domestic violence, 47% reported an increase in child abuse, 40% reported an increase in forced marriages and 28% reported an increase in sexual assault (see Figure 8). Human trafficking had the lowest perceived increase by only 16% of the Key Informants. If they reported an increase, Key Informants were also asked if help for the particular problem was available in their District. The most frequent type of help reported was for domestic violence and child abuse (40%). As a follow-up question, they were asked if the available help is adequate. Help to deal with sexual assault and forced marriages was reported as being adequate by more than 50% of those who stated that this form of help existed in their District.

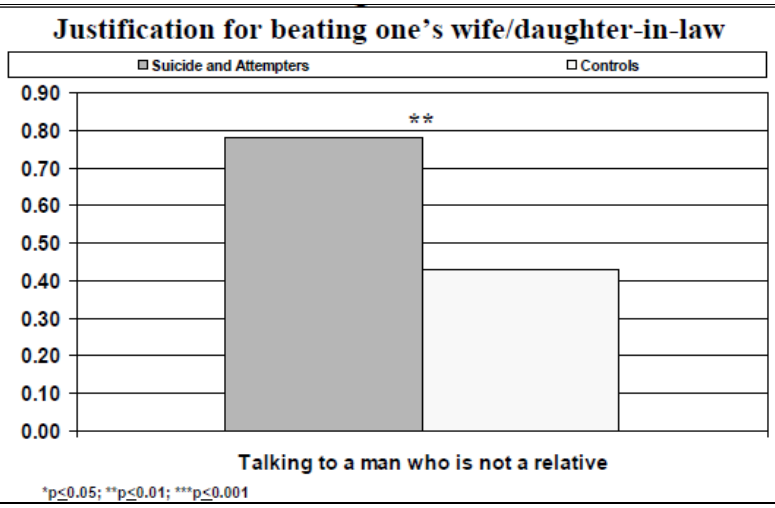
Figure 8. Key Informant's Opinion:



3.3.1b Domestic Violence: Several questions were asked to measure the respondents' opinions of domestic violence against wives, daughters-in-law and their children, to measure the tolerance of domestic violence. Respondents were asked to select all applicable ways that one would be justified in severely punishing/abusing a wife, or a child. The average number of justifications was calculated as a score, where the higher the number, the more ways in which one is justified for severely punishing/abusing a wife or child.

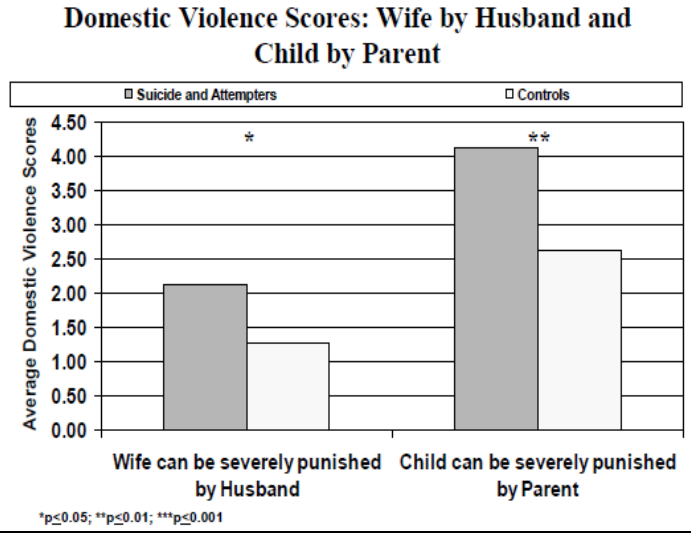
3.3.1c Beating of Wife or Daughter-in-Law: Domestic violence items probed for the belief that a woman may be beaten if someone sees her talking to a man who is not her relative. Significantly more parents of a Suicide or Attempter Young Person reported that beating is justified if one's wife or daughter-in-law is found speaking with a man who is not a relative (see Figure 9).

Figure 9



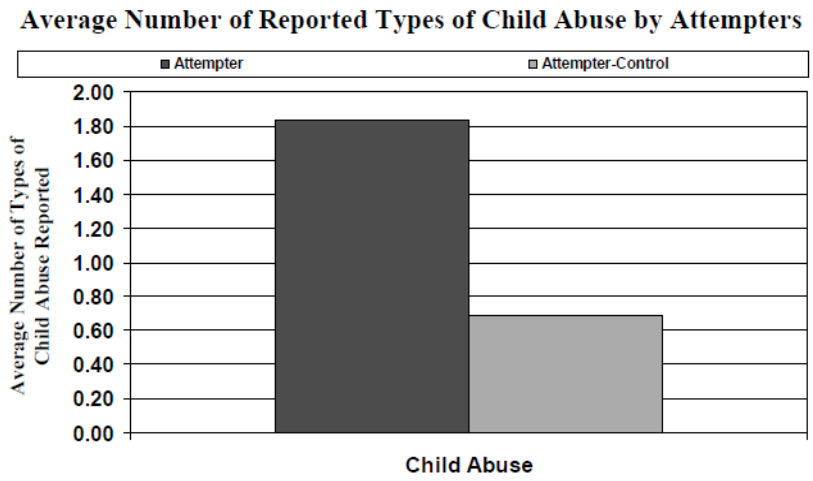
Biological parents' opinions of domestic violence are reported in Figure 10 to illustrate the tolerance of domestic violence in the Young Person's immediate environment. Parents of Suicide and Attempter Young Persons were significantly more accepting of domestic violence than parents of Controls.

Figure 10



3.3.1d Child Abuse in Attempters: Family informants were asked if the Young Person had ever been abused (sexually or physically) as a child and the type(s) of abuse experienced (e.g., hit with an object like a belt, hit or slapped on the face, head or ears.). The average number of reported types of child abuse is illustrated in Figure 11. A higher number of types of child abuse were recorded for the Attempters compared to their matched Controls, with an average of 1.8 different types of abuse per child compared to 0.7.

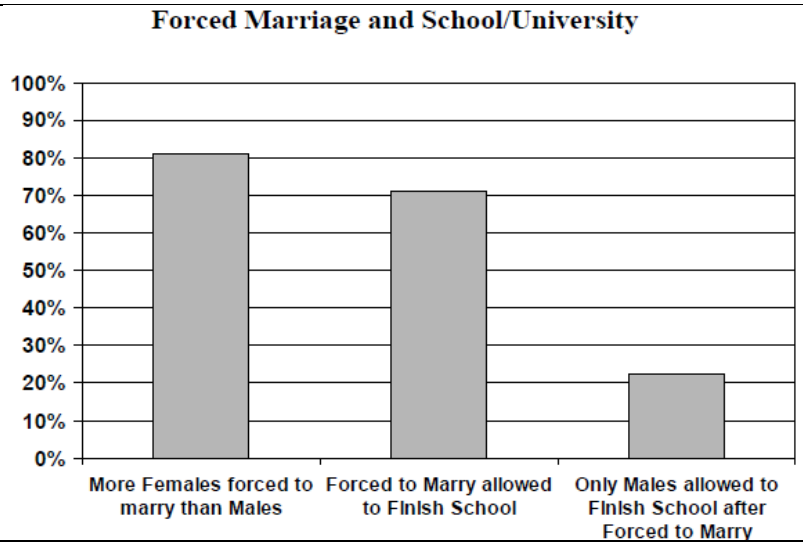
Figure 11



3.3.2 Education

3.3.2a Forced Marriage and School: More than 80% of Key Informants reported that in their District more females are forced to marry than males. Of both females and males, about 71% of Key Informants reported that Young Persons are allowed to finish school/university; however, about 22% also reported that only males are allowed to finish school/ university after being forced to marry (see Figure 12).

Figure 12. Key Informant's Opinion:

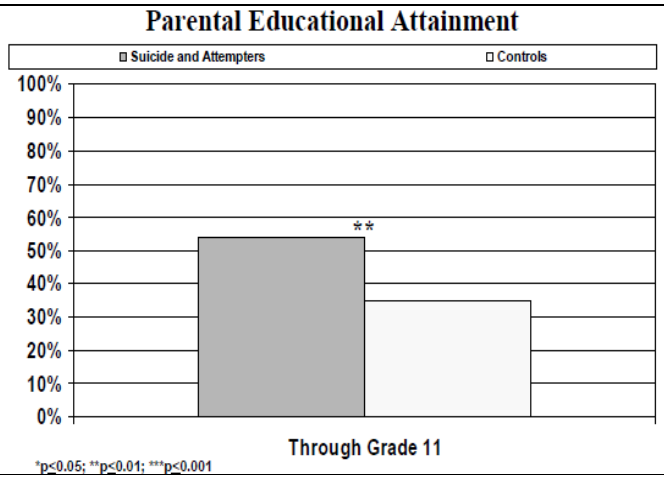


3.3.2b Parental Education:

Higher education is sought by many throughout the world and parental education, especially maternal education, is considered to be a critical indicator for the well-being of a child. A significantly higher number of biological parents of Suicide or Attempter Young Persons

compared to Controls stopped their education at the 11th grade and did not earn a college degree (see Figure 13).

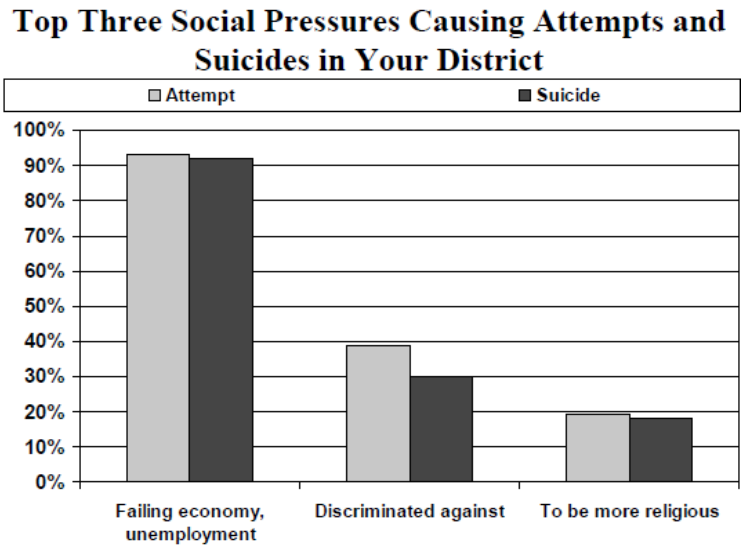
Figure 13



3.3.3 Social Pressures and Policy/Cultural Changes

3.3.3a Social Pressures (Key Informants): Approximately 65% of Key Informants reported that social pressures account for some of the attempts and completed suicides in their Districts, with more than 90% of those reporting that the failing economy and unemployment is a social pressure causing attempts and suicides (see Figure 14). Discrimination (on any grounds) and pressure to become more religious were also reported with high frequency according to the Key Informants interviewed.

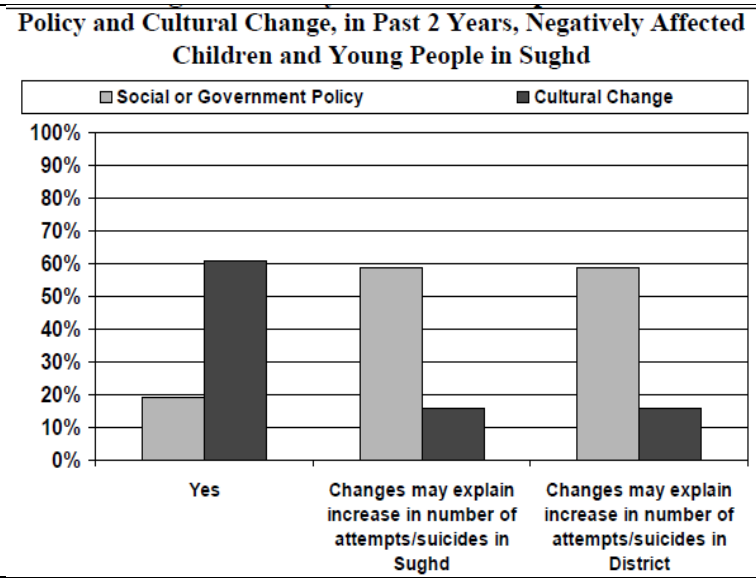
Figure 14. Key Informant's Opinion:



Fifty percent of Key Informants suggested that being bullied is one of the underlying causes of suicides and attempts. While 12% reported forced religiosity, 5% reported forced marriages as underlying causes of suicides and attempts in their Districts (see Appendix XI).

3.3.3b Negative Policy and Cultural Changes: Past 2 Years (Key Informants): When asked about changes in social or government policy and cultural changes in Sughd Region during the past two years and its impact on attempts and suicides, cultural change was reported as having a negative affect by approximately 60% of all Key Informants, compared to 19% reporting social or government policy change (see Figure 15). However, while less than 20% of Key Informants reported that the cultural change may explain the increase in number of attempts/suicides in Sughd and/or their District, nearly 60% of the Key Informants reported that changes in the social or government policy may explain the increase in both Sughd and in their District. A further elaboration on these changes can be found in *Section 3.4.1a.*

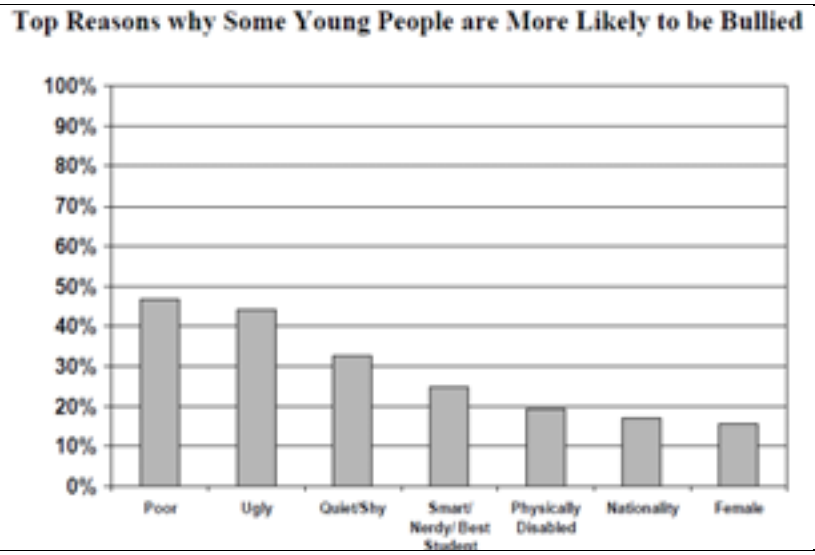
Figure 15. Key Informant's Opinion:



3.3.4 Bullying

3.3.4a Reasons for Bullying: Approximately 43% of all Key Informants had witnessed or heard of bullying in their District, 44% consider it to be a serious issue and 30% reported that bullying had increased in their District over the past two years. When asked for their opinion as to why Young People are more likely to be bullied, being poor (47%) and "ugly" (44%) were the top two answers (see Figure 16). Being female was reported by 16% of all Key Informants interviewed. While only 5% reported that bullying occurred in the classrooms, 32% reported that it occurred on school/university grounds outside of the classrooms. Outside of school/university grounds and "other" were reported (30% and 22% respectively). Eleven percent of all Key Informants were not sure where the bullying occurred.

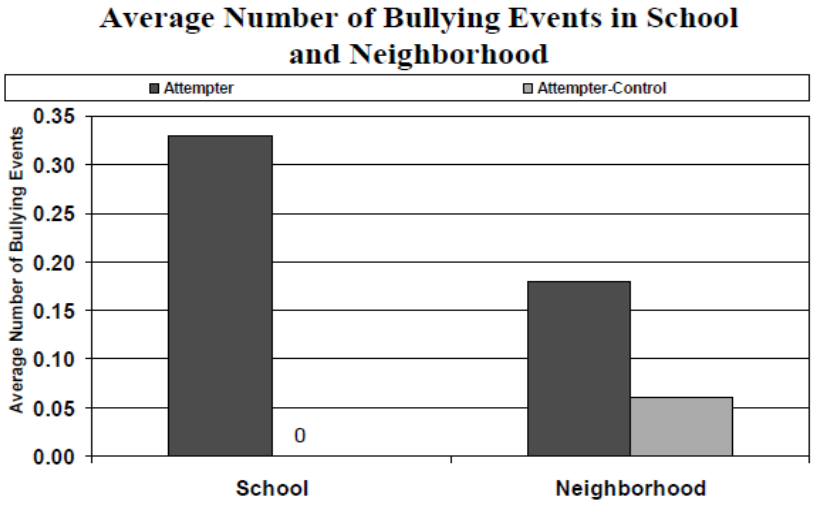
Figure 16. Key Informant's Opinion:



3.3.4b Young Persons' Being Bullied: Young Persons and Primary Informants were asked if the Young Person had been bullied (any type) at either their school/university or in their neighborhoods within the 12 months prior to the event. Bullying occurs when a Young Person says or does unpleasant things to another Young Person, not in a friendly and fun way, or purposely excludes the Young Person. Generally, bullying frequency was low in all groups, but there were important differences at school. The Suicide and Suicide-Control groups reported no incidents of being bullied. Attempters reported the greatest number of incidents of bullying. For bullying which occurred in the Young Person's neighborhood, all groups reported incidents.

The average number of school and neighborhood bullying events reported for Attempter Young Persons and their matched Controls is presented in Figure 17. While average number of events is less than one for each of the groups, Attempter Young Persons were bullied more in their school/university and in their neighborhoods (average of 0.33 school events and 0.18 neighborhood events) than their matched Control.

Figure 17

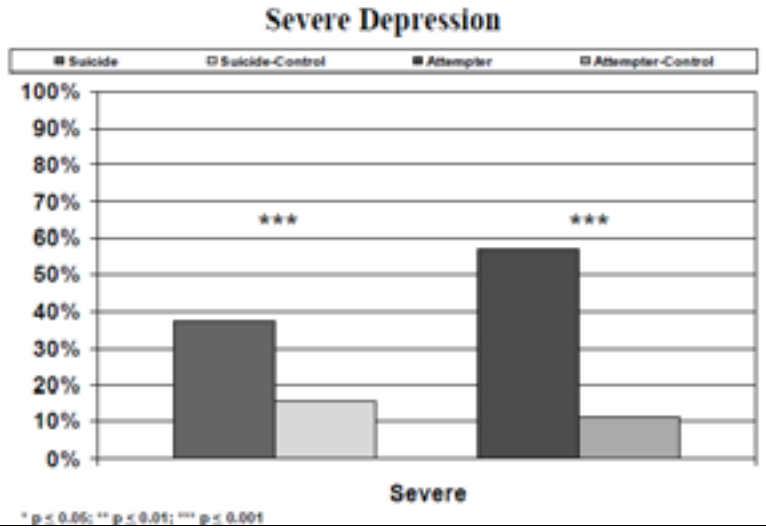


3.3.5 Mental Health

3.3.5a Substance Use and Suicide Risk: Less than 10% of the Young Persons in the Study groups smoked cigarettes or used nasvai (Nos). Alcohol use was low across groups, with less than 10% reporting having ever drunk. In lifetime usage, the Suicide group was slightly higher than the Suicide-Control group, as was the Attempter group compared to the Attempter-Control group. Five percent of the Suicide group drank heavily the month before the event. No illegal substance use (marijuana, etc.) was reported for any Young Person in the Study (see Appendix XII and Appendix XIII).

3.3.5b Severe Depression: Severity of depression was assessed with the Beck Depression Inventory (BDI). Young People reporting minimal and mild depression was low for all groups except for the Attempter-Control group. In this group, minimal depression was over 30%, and mild depression over 10%. Moderate depression had the highest severity level in nearly each group of Young Persons, with the Suicide-Control group reporting over 80% moderate depression, followed by just under 60% in the Suicide group and Attempter-Control group, and the lowest in the Attempter group. Severe depression varied widely by group type. The Attempter group reported the highest proportion of severe depression, at just under 60%, followed by the Suicide group at just under 40%, the Suicide-Control group, and finally the Attempter-Control Group. Both the Suicide and Attempter groups reported significantly higher rates of severe depression than their matched Controls (see Figure 18). The Young Person's biological and in-law family history of mental illness, alcohol use, and suicidality was also measured. Less than 10% of each group reported that their biological family, spouse, or in-laws had a history of these items.

Figure 18

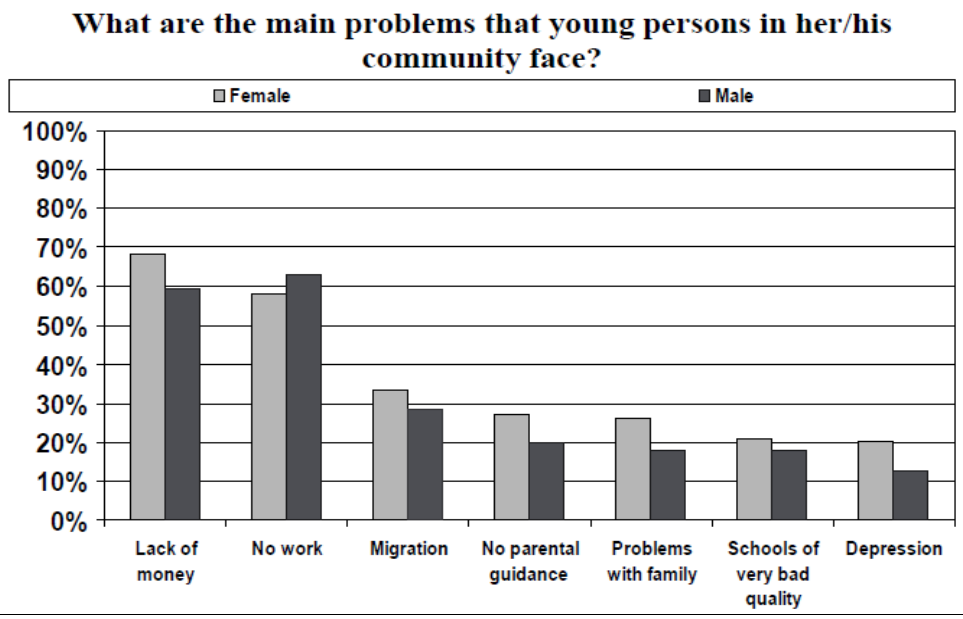


3.3.5c Reported Warning Signs: The suicide and attempt history of the Young Person was assessed, including the circumstances surrounding their last attempt. Clear warning signs were reported by the Young Persons one month before the event, with 24% of female and 12% of male Young Persons openly stating that **"**life was not worth living"; 20% of female and 17% of males openly stating that **"**they wished they were dead**"**; 17% of females and 16% of males openly stating that **"**they thought of taking their own life**"**; and, 16% of females and 10% of males openly stating that they **"**had reached the point of taking their own life**"** or had "made suicide plans" (see Appendix XIV).

3.3.6 Life Events

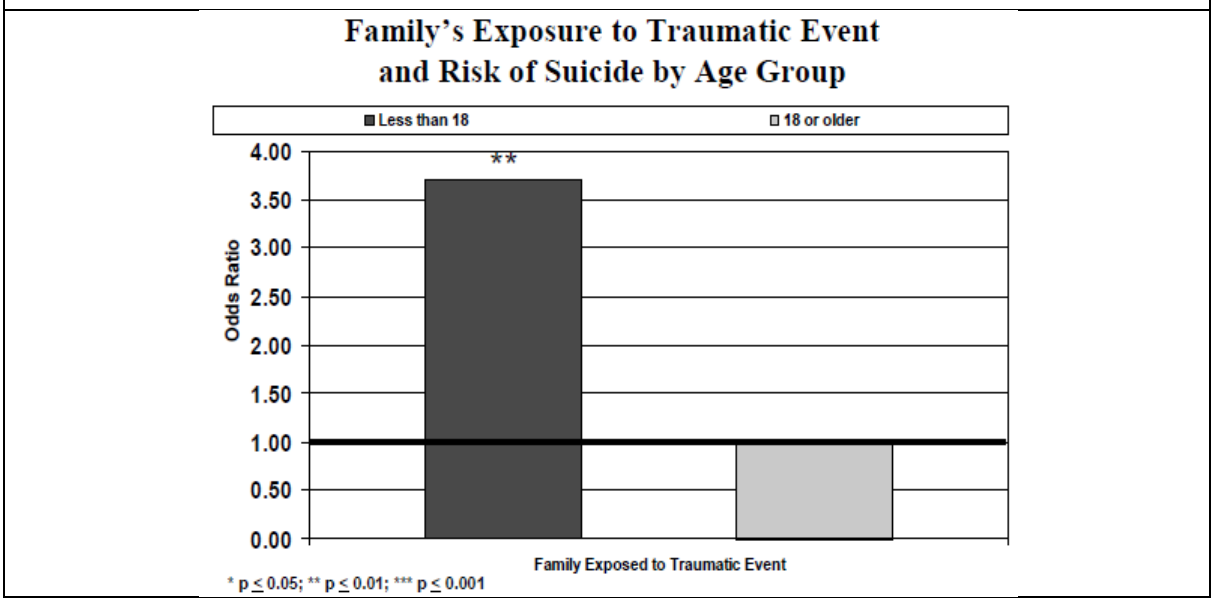
3.3.6a Problems Faced by Young People: Approximately 60% of the female and male Family Informants (Primary and Secondary Informants combined) reported that lack of money and not having work are the main problems faced by Young Persons in her/his community (see Figure 19). Migration ranked third (approximately 30%). Family problems, quality of schools, and depression were all between 13% and 28%. Lack of money (60%) and health (20%) were reported as the greatest barriers to reaching one's goals in life (see Appendix XV).

Figure 19



3.3.6b Family Exposure to Trauma and Young Person's Risk of Suicide: Exposure to 30 potentially traumatic events (e.g., being shot at, being kidnapped, being raped, being sexually or physically abused, being fired from a job), including traumatic events that a family member or loved one may have experienced, were assessed in the interview. A significant difference of those reporting at least one traumatic event was found between the Suicide and Suicide-Control groups (34% and 18% respectively) (see Appendix XVI). Although no significant difference was found between the Attempter and Attempter-Control groups, they trend (lower proportions for Controls than attempters) in the same direction (28% and 22% respectively). Those Young Persons under age 18 who had a family member or loved one exposed to a traumatic event were more than 3 times more likely to have attempted or completed suicide compared to the Control group (see Figure 20).

Figure 20



3.3.6c Exposure to Suicide: To assess the potential effects of exposure to suicide in the media, all Informants were asked to list the media sources they knew that broadcast occurrences of suicide (see Figure 21). More than 25% reported TV, with the Attempter Young Person and the Attempter Control Young Person having the highest rates of endorsement (38% to 41%). Approximately 20% of all Informants reported that newspapers and magazines were media sources that broadcast suicides. Approximately 30% of all Informants and 42% of the Attempter Young Persons reported that they had seen actual news coverage on TV, heard on the radio, or read a newspaper story about suicide/suicide attempts (other than the Study Young Person's own attempt/suicide). Seventeen percent of Attempter Young Persons reported personally knowing someone else who attempted suicide and 13% reported that they had attended a memorial/funeral or mosque event in memory of a suicide (see Figure 22).

Figure21

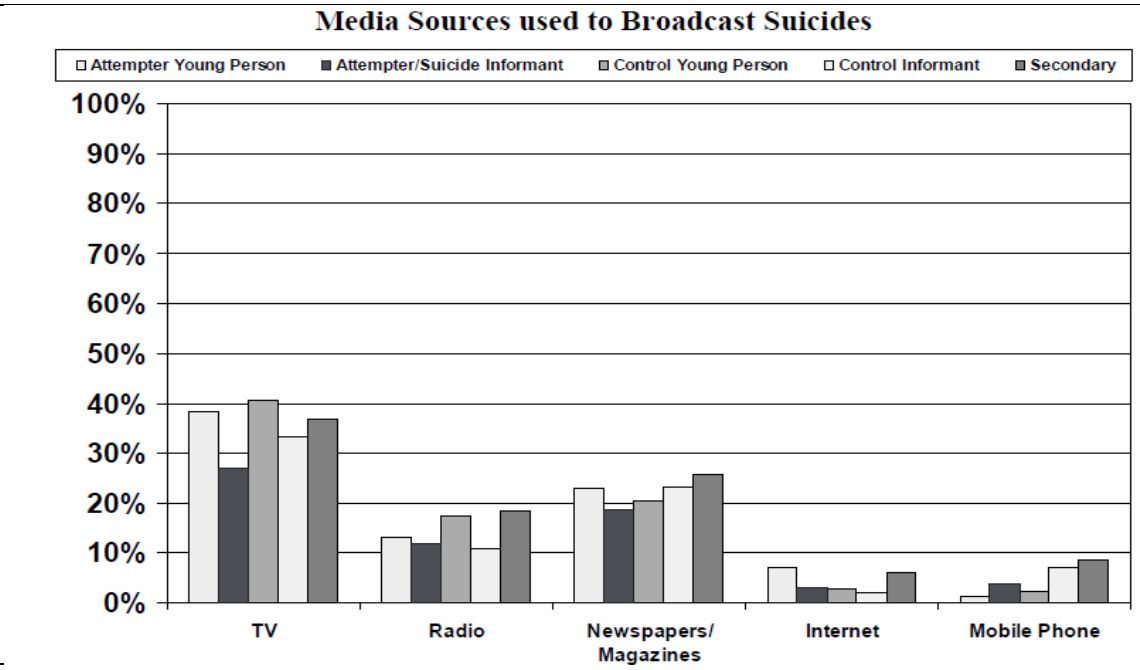
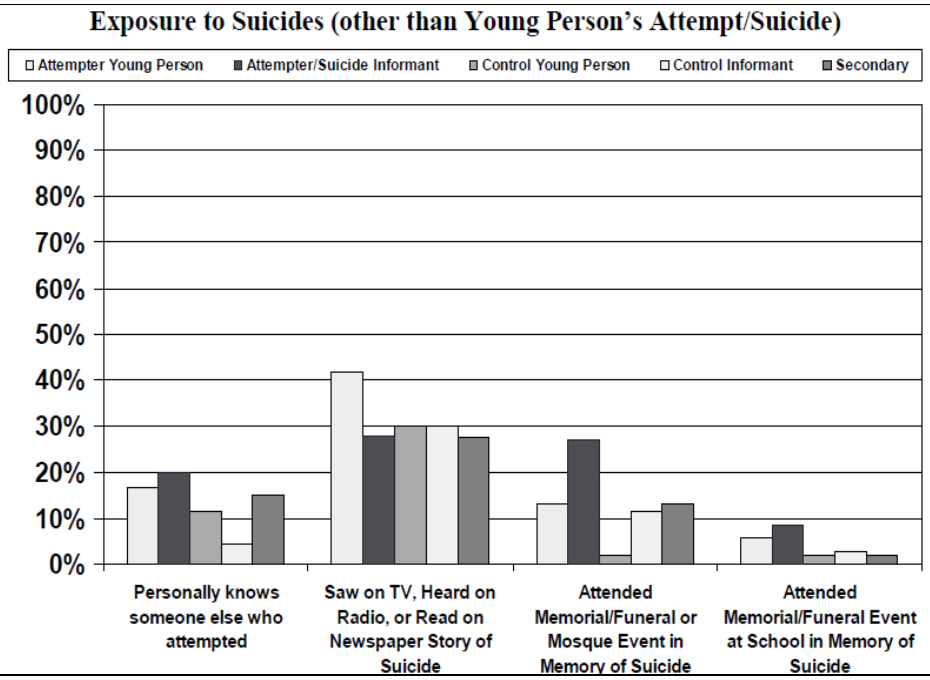
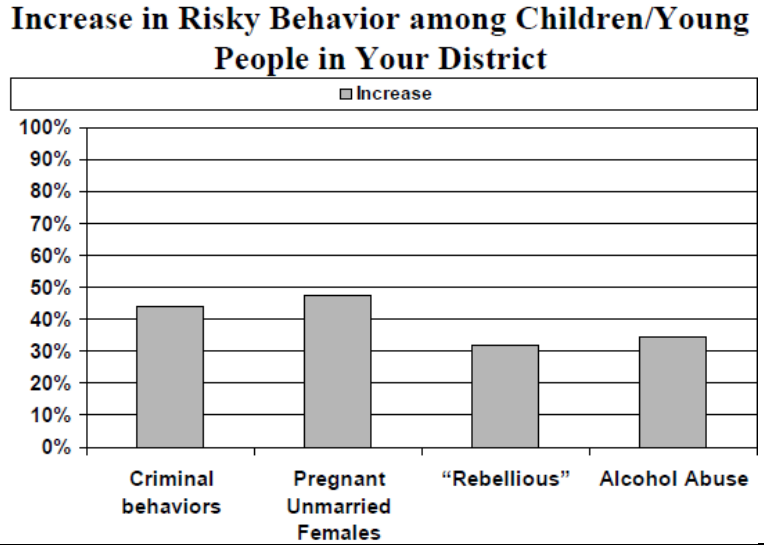


Figure22



3.3.6d Increase in Risky Behavior: Key Informants were asked if they had observed increases in several social domains within their District. In relation to risky behavior among children/Young People, more than 40% of all Key Informants reported that they had observed an increase in criminal behaviors and in pregnant, unmarried females and more than 30% reported increases of "rebellious" behavior and alcohol abuse (see Figure 23).

Figure 23. Key Informant's Opinion:



3.3.6e Parental Migration: Gender differences are very evident in the Family Informant's perception of migration. Sixty one percent of female informants and 72% of Informants reported that a Young Person whose *mother* has migrated will do worse or much worse in life. In sharp contrast, 46% of female and 37% of male Informants reported that a Young Person whose *father* has migrated will do better or much better in life. However, Informants' opinions are divided when asked if Young People whose mother has migrated will have more or less problems at home. Approximately 43% reported they would have more or much more problems and about 43% also reported that they would have less or much fewer problems. When asked the same question, but if the father had migrated, 44% to 53% of the Informants reported that a Young Person whose father has migrated would have less or much fewer problems at home (see Appendix XVII).

3.3.7 Most Significant Suicide Risk Factors

Based on the analyses discussed above, significant factors were selected for further study to identify the most important risk factors of suicidal behaviors (completed suicide and suicide attempt), as well as to help to understand the contribution of each unique risk factor. The analyses were conducted for the whole sample, by gender and by age group.

The results in Table 10 show that low parental education level (through grade 11 or less) was significantly associated with suicidal behaviors. Youth from families with low parental education are twice as likely to have suicidal behaviors as others. However, family wealth was not associated with suicidal behaviors. Parental punishment is also significantly associated with suicidal behaviors. As expected, youth with severe depression were three times likely to have

suicidal behaviors than others. Two factors seemed to have differential effects both on youth under age 18 and older youth, but were risk factors for suicidal behaviors only for the younger group. Young Persons under age 18 whose family members or close loved ones have experienced traumatic events were significantly more like to attempt or complete suicide. Although religion and religious beliefs throughout the world have been reported to be protective, regardless of religion, in this Study, among the Young Persons under age 18, frequency of religious practices is not protective and is marginally but significantly associated with suicidal behaviors. This pattern is not found in the older group.

Table 10. Logistic Regression Predicting Suicidal Behaviors (whole sample)

Factor	AORa	95%CIb
Female	1.01	(0.56, 1.77)
Parental Low Education	2.28**	(1.27, 4.10)
Family Wealth c	0.99	(0.93, 1.06)
Parental Punishment c	1.30**	(1.05, 1.29)
Severe Depression	3.22***	(1.68, 6.19)
Religious Practicec by Age Groupd		
Younger than 18	1.81+	(0.98, 3.34)
18 and older	0.78	(0.56, 1.09)
Family Life Eventscby Age groupd		
Younger than 18	2.94*	(1.10, 7.92)
18 and older	0.87	(0.56, 1.36)

[+] p<0.10; * p<0.05, ** p<0.01; *** p<0.001.
[a]Adjusted Odds Ratio; [b] Confidence Interval; [c] Continuous variables;
[d] The interaction by age group is statistically significant.

Separate analyses of risk factors were also conducted for males and females. Two more factors, specific to females only, were also included (Table 11). These are (1) family member's attitudes towards domestic violence, i.e., level of punishment toward a wife when a husband is angry with her, and (2) family member's attitudes on whether a woman should be beaten by her husband or mother-in-law if she talks with a man who is not a relative. The results show that this later factor significantly contributes to suicidal behaviors in females.

Table 11. Logistic Regression Predicting Suicidal Behaviors (Females)

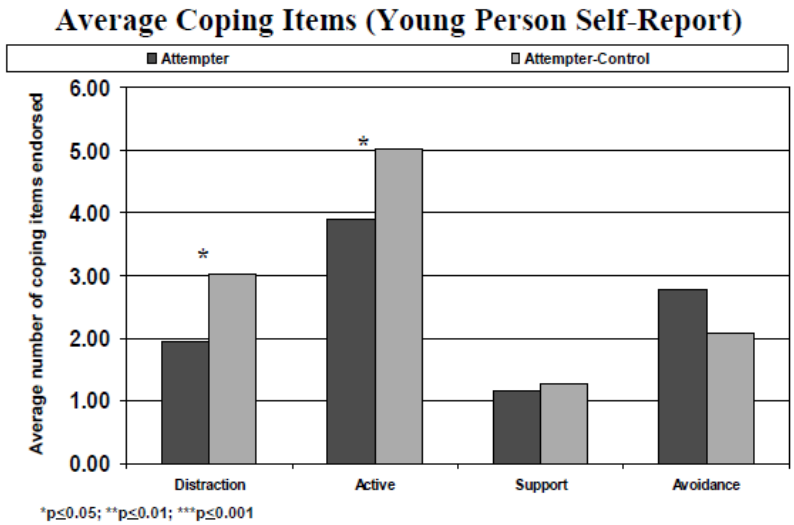
Factor	AORa	95%CIb
Parental Low Education	2.68*	(1.11, 6.50)
Family Wealth c	1.04	(0.94, 1.14)
Parental Punishment c	1.05	(0.88, 1.24)
Domestic Violence c	1.01	(0.77, 1.32)
Woman should be beaten if talking to a man who is not a relativec	2.05*	(1.14, 3.71)
Severe Depression	5.51***	(2.14, 14.18)

* p<0.05; ** p<0.01; *** p<0.001.
[a]Adjusted Odds Ratio; [b] Confidence Interval; [c] Continuous variables

3.3.8 Protective Factors

3.3.8a Use of Coping Strategies by Attempters and Controls: Use of coping strategies is an important factor for resilience among children and adolescents. A 15-item coping questionnaire was administered to the Study Young Persons (Attempters and Controls). Attempter Young Persons reported significantly less distraction and active coping strategies, such as reading or learning more about the problem, and reported more avoidant coping strategies, such as avoiding people and skipping school, than their matched Controls (see Figure 24).

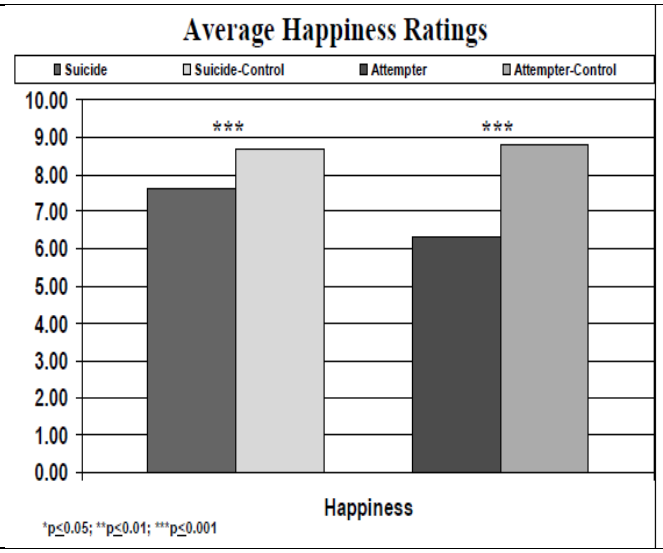
Figure 24



3.3.8b Family Relationships as Protective Factors: Having a positive relationships with one's closest loved ones, such as biological parents and spouse, are important protective factors against suicide. Young Persons with positive family relations with their biological mother, father or spouse were found to be significantly less at risk of attempting/completing suicide than the attempter/suicide Controls.

3.3.8c Happiness Ratings: During the interview, respondents were asked to rate the Young Person's happiness during the month before the event on a scale from 0 to 10, where 0 is extremely unhappy and 10 is extremely happy. Suicide Completers and Attempters had significantly lower happiness ratings than their Controls (see Figure 25). It was also reported for Suicide Completers and Attempters that their level of happiness had declined since the year before the event.

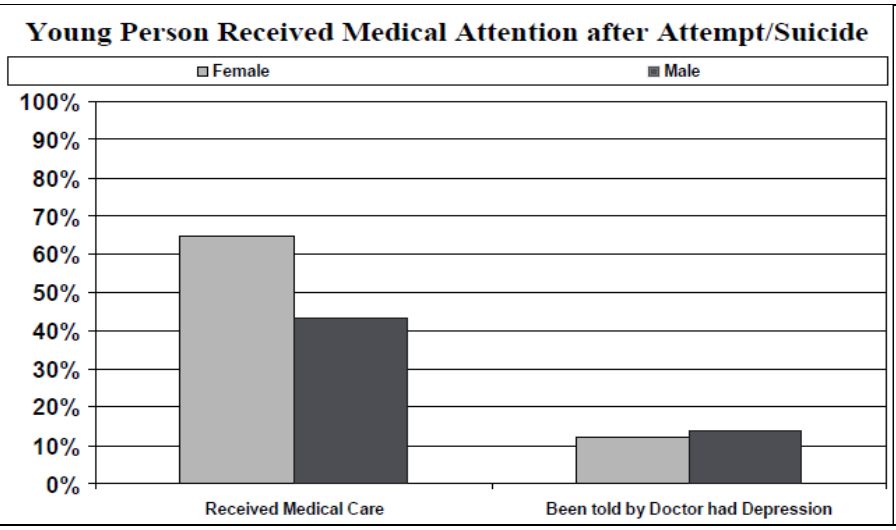
Figure 25



3.3.9 Service Systems, Attitudes and Outlook

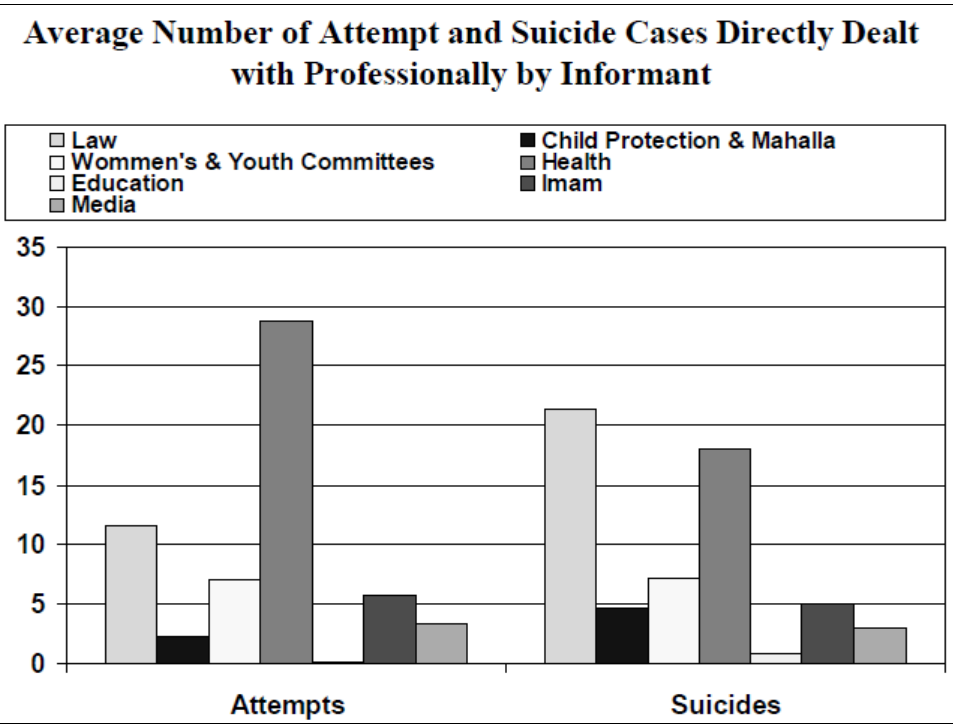
3.3.9a Medical Attention after Attempt: Sixty-five percent of female and 43% of male Young Person Attempters and Suicides received medical care/were brought to the hospital after their attempt/suicide, with between 12% and 14% having been told by a doctor that they suffered from depression (see Figure 26). Of those Young Persons who did not receive medical attention after their attempt, less than 20% spoke with their parents about it and 49% to 58% had never spoken to anyone about it since their attempt.

Figure 26



3.3.9b Average Number of Suicide/Attempt Cases Dealt with by Key Informants:
Direct contact with attempted and completed suicide cases differed among systems (see Figure 27). Among attempted suicide cases, the Health system Key Informants reported more direct contact, on average, than any other system group, with an average of 28.7 cases per informant. Law was second with an average of 11.6 cases, while Education had no attempted suicide cases reported. With completed suicides, however, the Law system reported the highest average (21.4 cases), followed by the Health system (18.0 cases). Again, the Education system had the lowest average number of cases dealt with directly, with an average of just 0.8 cases.

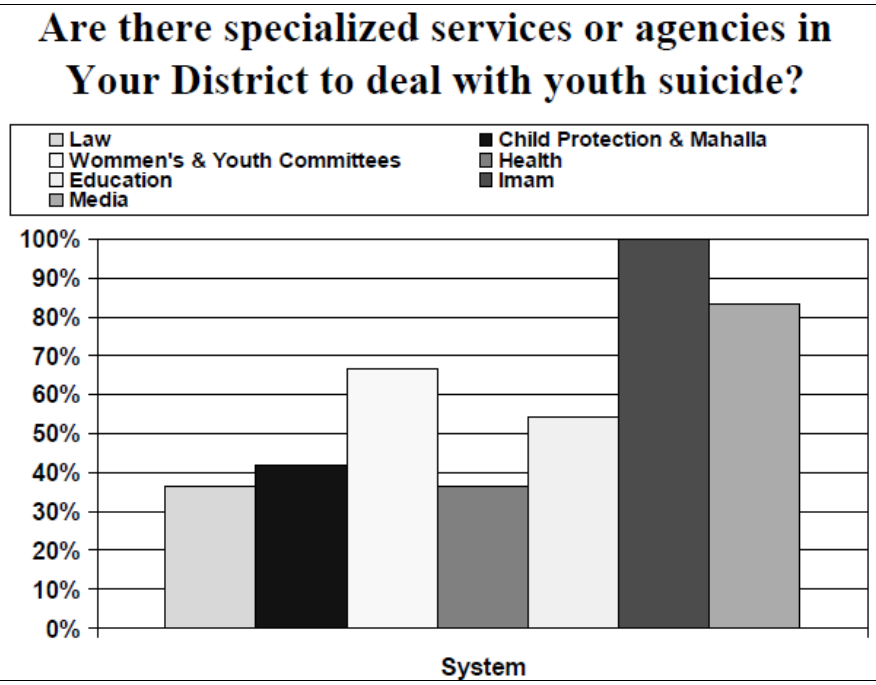
Figure 27. Key Informant's Opinion:



3.3.9c Specialized Services Dealing with Youth Suicide: While 100% of Imams and more than 80% of Media systems reported that there are specialized services or agencies in their District to deal with youth suicide, less than 60% of Education, 40% of Child Protection & Mahalla, and less than 40% of Health systems reported the availability of such services (see Figure 28). Lack of specificity about which services are being considered makes these data difficult to meaningfully interpret.

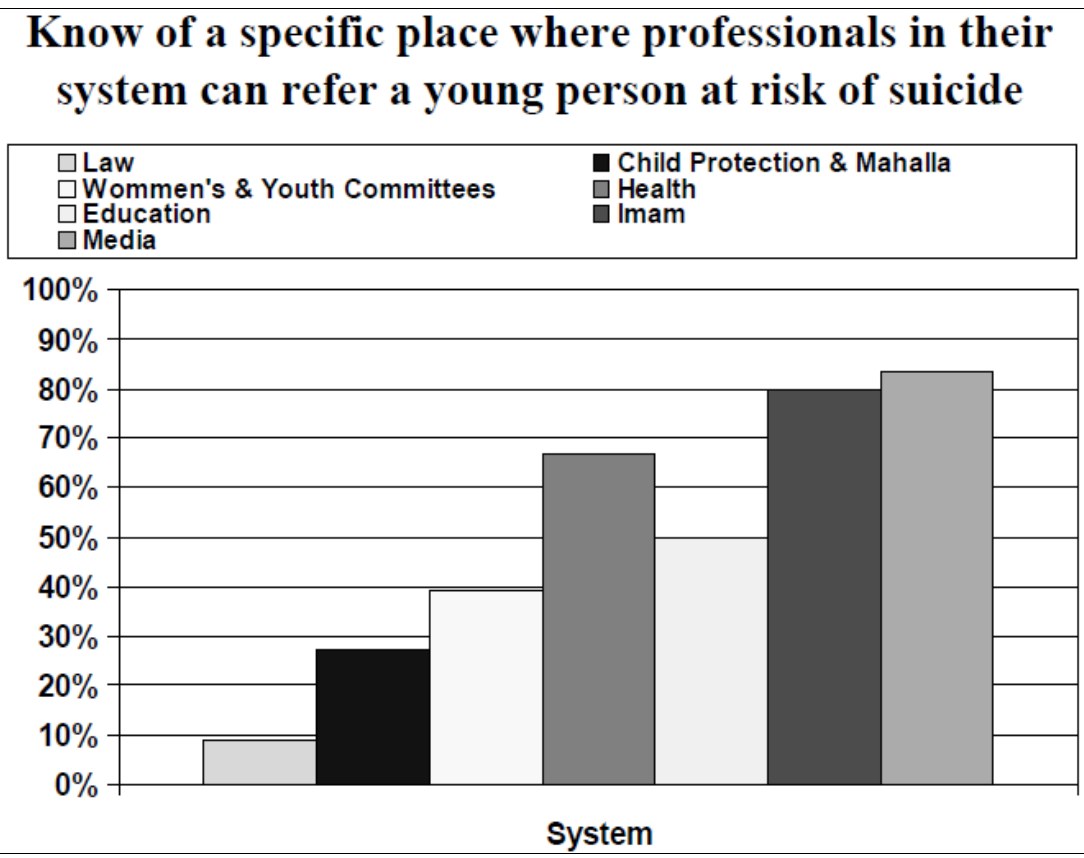
However, less than 40% of all Key Informants (and no Imams) reported that their District has a sufficient number of services or agencies to deal with youth suicide. Only the Women's & Youth Committees reported higher, with 46%.

Figure 28. Key Informant's Opinion:



3.3.9d Knowledge of a Place to Refer a Young Person at Risk: Differences were reported when Key Informants were asked if they knew of a specific place where professionals within their systems could refer a Young Person at risk for suicide (see Figure 29). Less than 10% of Law and less than 30% of Child Protection & Mahalla systems knew of a specific place for such a referral, while 80% or more of the Imams and Media Key Informants knew of such a place. Because no annotated list of services exists within each District, it is not possible to determine if these specific places are adequate.

Figure 29. Key Informant's Opinion:

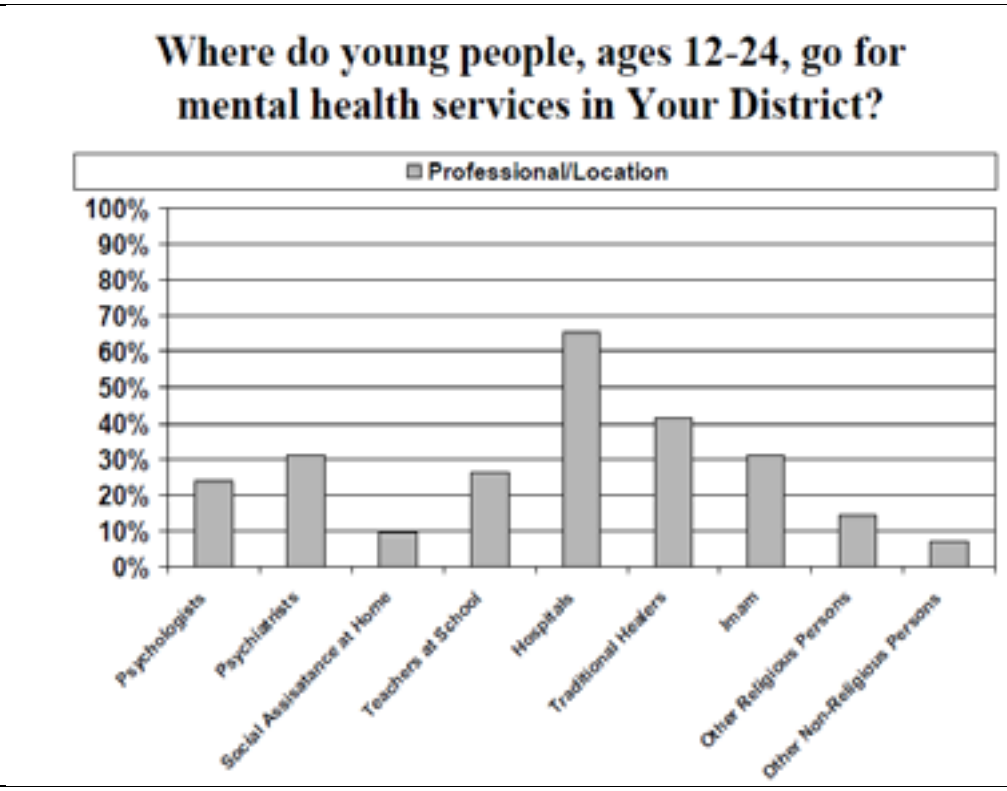


3.3.9e Acceptability of Young People Seeking Help: Between 90% and 100% of all Key Informants (see Appendix XVIII) reported that a Young Person under the age of 18 can directly seek help from their system. With the exception of the Education system Key Informants (67%), at least 85% of all Key Informants interviewed reported that it was culturally acceptable for either females or males under the age of 25 to ask for help from their system. Ninety percent of all Key Informants reported knowing of specific local measures to prevent attempts and suicides and more than 90% reported that these measures have helped to save lives.

3.3.9f Reporting and Receiving Information about Suicide: More than 70% of Media Key Informants reported that they had complete freedom to report all news, including news about suicide attempts and suicides. The Media Key Informants received information about suicide from several sources. More than 70% of Media Informants reported that they obtain information regarding attempts and suicides from the Prosecutor's office, more than 40% acquire information from healthcare facilities and family members/friends and only 14% reported that they obtain information from other government agencies (see Appendix XIX).

3.3.9g Where Young People go for Mental Health Services: All Key Informants were asked where Young People, ages 12-24, go for mental health services in their Districts (see Figure 30). While 66% reported hospitals, 42% reported traditional healers, and 31% reported Imams, only 24% and 31% reported psychologists and psychiatrists, respectively. Furthermore, only 26% reported that Young People visit teachers at school for mental health services.

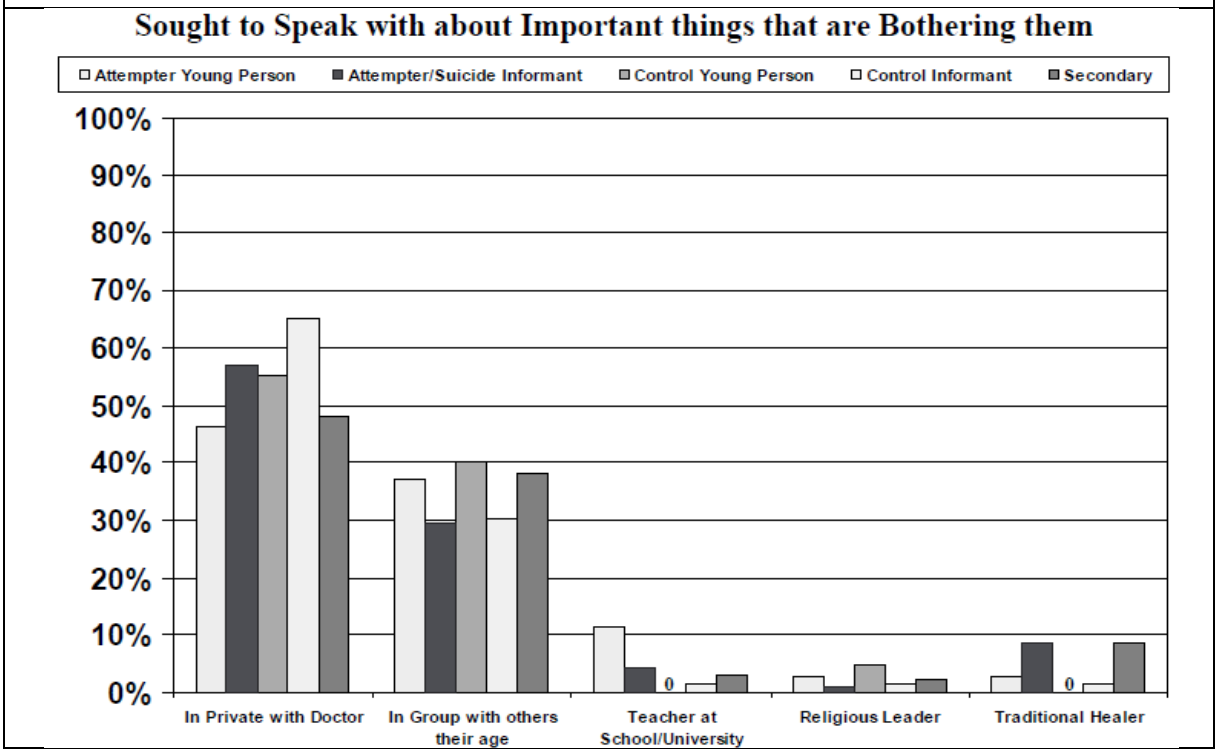
Figure 30. Key Informant's Opinion:



3.3.9h Mental Health Awareness: Mental health awareness was measured across all Informants (Young Persons, Primary and Secondary Informants). First, Informants were asked for their opinions on several items related to child mental health. At least 90% of all Informants believed that a child with an emotional or behavioral problem can be helped and at least 80% of all Informant types reported that a child with an emotional or behavioral problem will eventually overcome it. At least 80% reported that a child feeling sad or worried all the time can be helped by talking to someone and at least 70% reported that feeling sad or worried all the time or being in a bad mood all the time is something that can be cured. Approximately 40% of all Informants reported that a child with an emotional or behavioral problem will always have these problems. Although at least 80% of all Informants reported that people with emotional or behavioral problems are suffering and need help; only between 42% and 58% of the Informants reported that emotional or behavioral problems are diseases. Between 25% to 70% of all Informants reported that people with emotional or behavioral problems are really just lazy, weak, or have trouble thinking (see Appendix XX).

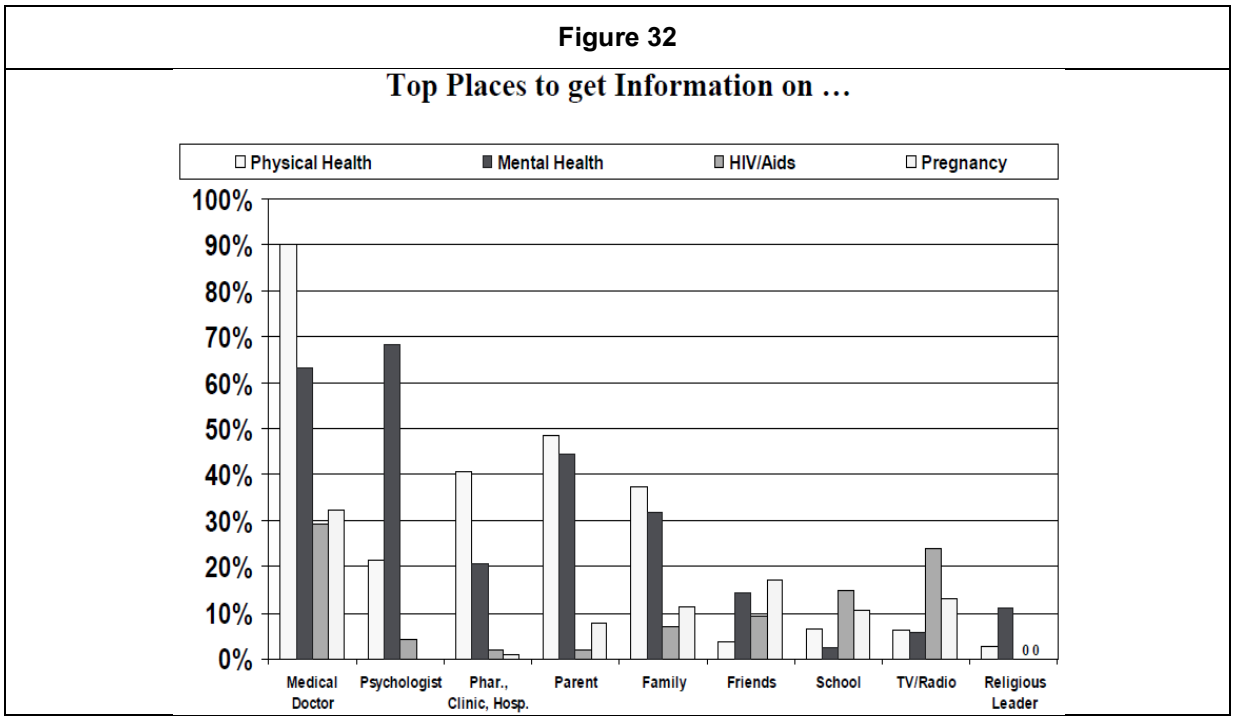
3.3.9i Help-Seeking: Wanting to Speak with Someone: Between 70% and 82% of all Informants reported that they would like to talk to someone about important things that are bothering them, with 46% to 65% reporting that they would prefer to speak in private with a doctor – the lowest rate (46%) reported by the Attempter Young Person (see Figure 31). In contrast, 38% of Attempter Young Persons would prefer to speak in a group with others their own age (similar to Control Young Persons). Like the Key Informant reports on where Young People receive mental health services (see Figure 30 above), these Informants reported very low rates for use of teachers at schools/universities and religious leaders. In contrast to the views of Key Informants, these Informants also reported very low usage of traditional healers.

Figure 31



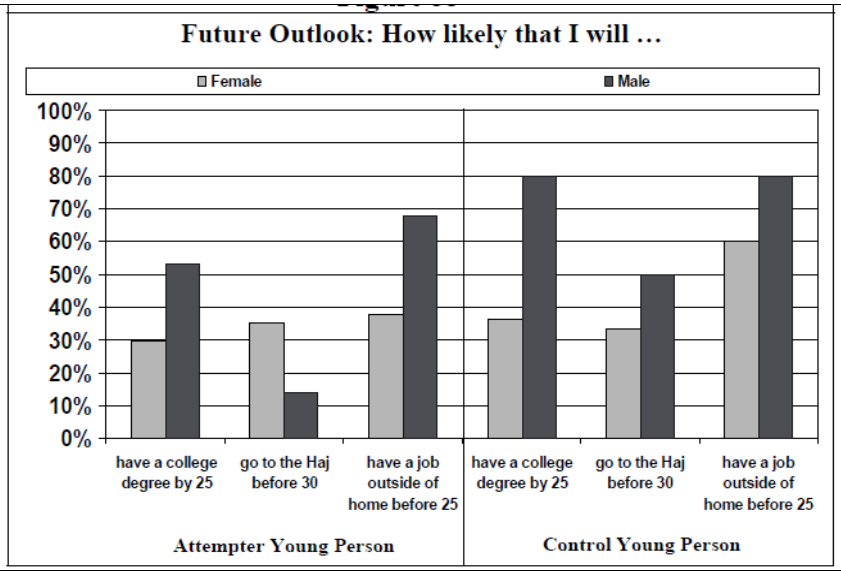
3.3.9j Psychosocial or Mental Health Awareness: Sources of Information: When asked where they get information on physical health, mental health, HIV/AIDS and pregnancy, 68% of the Informants reported receiving mental health information from psychologists, 63% from medical doctors, and 44% from parents (see Figure 32). The most common place where the Informants obtain information on physical health is medical doctors.

Figure 32



3.3.9k Future Outlook, Challenges and Social Norms: Attempter and Control Young Persons were asked several questions designed to measure their outlook on their future (see Figure 33). Several gender differences are evident in their responses. While 68% of the male Attempters and 80% of the Control Young Persons reported that they will have a job outside of the home, only 39% and 60% of the females so reported. A similar pattern is observed in which significantly more males than females (Attempter and Control) reported that they would have a college degree by the age of 25.

Figure 33



3.4. Qualitative Data Analysis

3.4.1 Key Informant: Qualitative Data Analysis

The Key Informant interviews of Service Directors and Service Providers were administered not only to obtain insights from Sughd Region professionals and agency staff concerning their opinions about issues that affect Young People, but also to provide them with an opportunity to make suggestions for changes that could reduce suicide and suicide attempts. It is important to remember that these interviews focused on opinions, in general, and were not targeted to any individual or specific situation.

Key Informants identified several social, governmental, cultural, and religious changes in the past two years that they believed contributed to suicide among Young People in the Sughd Region. According to the Directors of the participating service agencies, the most frequently-cited change was the high level of unemployment and increased economic hardship. They also noted the number of boys and men who migrate outside of Sughd for work, ultimately leaving family members without a husband or father.

According to Key Informants, there have also recently been religious changes in Sughd that affect Young People. What, of course, could not be obtained from Key Informants is the extent to which these changes may have actually influenced suicide and suicide

attempts in the region. For example, eight out of the thirteen Service Providers (62%) said there had been changes in religious practices in the past two years that affected children and Young People. Some suggested that a rise in religiosity and involvement in Islamic movements are associated with an increase in suicides and suicide attempts in the region. However, it was also observed by some Providers that a rise in suicide is linked to the introduction of non-Islamic religions. Only two of fifteen Directors (13%) noted that they believed that an increase in religiosity led to an increase in suicide and suicide attempts.

Thirteen service Directors noted cultural changes affecting Young People in the region and ten said that some of the changes were positive. They identified increased sports activity and the introduction of community concerts, as well as the construction of venues for entertainment as being important, positive changes for Young People. One Director also cited the improved position of women in society as a recent, cultural change.

In addition, Key Informants noted several current or proposed policy measures intended to aid Young People, most commonly under the aegis of national or international entities, as positive changes for Young People. Service Providers referenced the Law on Parental Responsibility, which was adopted shortly after the completion of this Study's data collection. They also referred to recent laws prohibiting early marriage and child labor.

Key Informant Suggestions: The majority of Directors and Imams stated that additional laws and policies for child protection and parental responsibility should be enacted to prevent children and Young People from committing or attempting suicide. They noted that the most important changes required to improve conditions for youth include enhancements in the economy, education, familial interaction, and an understanding of mental illness and other factors that contribute to suicide. Further training for psychologists and psychotherapists was also suggested, as was increasing the number of psychologists. Furthermore, Key Informants advocated for establishing roundtables, which would both raise awareness of the issue and improve communication among potentially influential people. It was also suggested that holding meetings for Young People could potentially expand their awareness of social and psychological issues, including suicide.

3.4.2 Family Informant: Qualitative Data Analysis

Qualitative or open ended questions were also included in the individual interviews. Using this format, several respondents detailed circumstances that they thought significantly influenced the Young Person's life and may have contributed to her or his suicide or attempt. The examples below include the respondents' perceptions of circumstances and are included here to provide context to the Study's findings. There was no effort to confirm stated circumstances, but these examples, presented by attempters and family members of completed suicide, are instructive. *NB:* Identifying information about the Young Person, possibly including gender and age, and specific details of each example have been altered to protect confidentiality.

One issue faced by many Young People in Sughd is the practice of both arranged and forced marriage, which can potentially negatively impact a Young Person's well-being. One Young Person was driven to suicide because she was being forced by her family to marry an older man who was institutionalized. After being released for just a few days to marry her, he was expected to return to the institution for the foreseeable future and the Young Person

would be required to move in with her new husband's mother. It was suggested that the family's poor economic situation led relatives to pursue this opportunity of marrying their daughter off to this older man. She, on the other hand, had dreamed of going to the university. She did not want to kill herself, but felt that she was forced to do so to escape this situation.

Another respondent described a Young Person who recently entered a forced marriage. She supposedly explained to her parents that she did not want to live with her new husband, but they did not accept this plea. Instead, they believed she would adjust to the circumstances and develop tolerance for living with him. The Young Person's social network consisted of just her parents and close relatives, as she did not get along well with her peers. Her marriage was described as the one significant event in her life that occurred before the Young Person's suicide attempt.

Some Young Persons consider themselves too old for marriage. The relative of a young woman said that the reason a particular Young Person committed suicide was because she had grown too old to be married. Living in a village where girls do not get married past her age, she concluded that no one would ever marry her. Reportedly, out of fear of being unmarried for the rest of her life, she killed herself.

Other issues concerning the family were also described, including domestic violence. A Young Person described a good relationship with her spouse until he started to drink, after which there was physical abuse. She explained that she suffered frequent humiliation on behalf of her spouse, so she attempted to kill herself. Another respondent described a situation in which a Young Person was cursed at and beaten by her mother-in-law and sister-in-law.

Another factor perceived as a contributor to suicide among Young Persons included the death of a close relative. One relative of a Young Person claimed that individual's suicide occurred shortly after the death of his father.

Experiencing unjust blame is an additional social pressure felt by some Young Persons in Sughd. A friend of a Young Person who committed suicide recounted that someone had told the Young Person's parents that she was talking to other youths over the phone and they considered that to be disobedient. The Young Person, afraid of her parents and wanting to prove that she was innocent, committed suicide. In another case, a relative explained that the Young Person had committed suicide after being accused of stealing money from an acquaintance. The money was later found, but the Young Person had already killed himself.

Economic Hardship was also described an important factor in the life of Young Persons and a possible contributor to their suicide. A number of mothers said that the primary reason their young sons committed suicide was because of the poor economic situation in the family.

In order to improve life for their families, a significant proportion of the population migrates to another country in search of employment. One relative highlighted the direct impact that labor migration had on a Young Person, describing how that individual returned from working abroad with psychological issues that affected his family relationships. The respondent described how the Young Person was satisfied with life before his migration, but returned to Sughd unable to control himself and frequently prone to causing stressful

situations for himself and others. The respondent believed the Young Person had acquired a drug habit while out of the country.

While most adult respondents were able to discuss circumstances in a Young Person's life that they believed contributed to her or his suicide, many described feeling surprised or shocked at the Young Person's death, and several people explained how suddenly and without warning the suicide had occurred. Warning signs seem not to have been observed or effectively acted upon. As one relative described, he was talking to the Young Person and seemed to be having a good interaction, just moments before she committed suicide.

The cases above provide insight into the challenges faced by distressed and suicidal Young People in Sughd Region. However, these are merely examples that contribute to the myriad of possible factors, interactions and circumstances that ultimately lead a Young Person to take her or his own life. Although there was no effort to verify the circumstances described above, the views expressed provide an important perspective of the lives of Young People in Sughd, as well as influences that may play a role in the decision to commit suicide.

3.4.3 Analysis of Prosecutors' Records

In addition to the information gathered from family and Key Informant interviews, the Study design called for an examination of the case notes of the Prosecutors' offices made during the investigation immediately following a report of a suicide attempt or completion. These investigations are routinely conducted with the intention of identifying any possible maltreatment or other contributing factors of a Young Person leading to her or his suicidal act. As requested, the Public Prosecutor's Office of Sughd Region provided information regarding the circumstances surrounding suicide and attempter cases from Panjakent, Khujand, Istaravshan, Isfara, and Gafurov. Unfortunately, only summary versions of these reports were presented rather than the full original versions, as requested, which would have undergone a rigorous qualitative analysis. However, these summaries still provide a valuable, unique perspective from individuals who explored these cases soon after their occurrence.

Following the report of a suicide or suicide attempt, an investigation is conducted to establish possible causal factors. The admirable goal of the investigation is to determine any abuse or malfeasance visited upon the person involved, that may have driven her or him to the suicidal behavior, as well as to reveal if the event was, indeed, self-inflicted. In general, the Prosecutors' notes support responses obtained from this Study's Family interviews and Key Informant interviews regarding reasons why Young People from Sughd might commit or attempt suicide.

Common causes for suicidal behavior noted by the Prosecutors included mental and physical illness, economic difficulties, and disputes with parents or other loved ones. In some cases, it was noted that a particular individual may have been overwhelmingly responsible for the suicidal actions taken by the Young Person, such as subjecting her or him to repeated beatings or otherwise abusive conditions. The Prosecutors' notes generally attribute the decision to attempt or commit suicide to a single narrow aspect of the Young Person's life or circumstances, which may, indeed be accurate as it is thought that many suicides are the result of an impulsive act. For example, in one case, a report describes an argument between a parent and a child in which the parent, who was angry with the child for not efficiently helping around the household, lead directly, at least according to this report, to his suicide.

This report indicates that there was little or no consideration of possible underlying pre-existing difficulties in the Young Person's life. These reports, in general, indicate a lack of awareness that suicidal behavior is usually generated from a complex network of experiences.

An interesting trend in the Prosecutors' reports involves a distinction they make between Young People who, in their view, did or did not have reason to attempt or commit suicide. The reports include recurring references to violations of "dignity and honor," as though Young People who experienced abuse had a more acceptable reason to attempt or commit suicide. In some cases, the reports refer to an apology offered by the attempter, suggesting that if blame cannot be placed elsewhere, it should ultimately fall on the Young Person.

4. CONCLUSIONS

Implications of the conclusions listed here are discussed below:

- The ratio of completed suicides to attempts for those aged 12-24 in Sughd Region is estimated at 2.5:1. The ratio, generally, in Western countries is 1:10-20.
- The proportion of male and female suicides among those 12-24 years of age in Sughd is 45% to 55%, respectively. These proportions are, generally, 80% and 20% in Western countries.
- Asht District was found to have the highest suicide rate among 12-24 year olds in Sughd Region of 19.2 Young Persons (per 100,000), including 24.8 for females and 13.7 for males. Youth in that District should be a priority to receive suicide prevention and intervention services. This District should also be the focus of an in-depth investigation to better understand these findings and how best to address them.
- As expected, youth with severe depression were at high risk for suicide and mental health disorders were the most commonly cited reasons for suicidal behaviors.
- Girls and young women frequently reported being forced to marry as a main reason to attempt or consider suicide.
- The current system of investigating suicides and suicide attempts in Sughd is problematic and can be made more effective by replacing the prosecutorial approach with a medical/social services model, including assistance from the Prosecutor, as needed, for suspicious circumstances.
- Approval of family violence, e.g., wife beating, severe punishment of children, etc., is more common among family members with a child who attempted or completed suicide.
- Major life events, family trauma, interpersonal violence, loss of a loved one through migration, death or separation, loss of a job or economic hardship are all potentially fairly common and generally damaging to a Young Person's mental health. These circumstances were also often reported as being responsible for suicidal behavior.
- Young Persons whose family members or loved ones experienced traumatic events were significantly more likely to attempt or complete suicide.
- Key Informants frequently reported that religiosity is associated with increased risk of suicide among Young People. While causation cannot be determined from these data, frequency of religious practices among Young Persons (under age 18), as reported by Young Persons and family members, was associated with suicidal behaviors. However, frequency of religious practices was found in these data to be protective of Young Persons over 18 years of age.
- Children of parents with low levels of education (less than 12th grade) were at significantly higher risk for both attempted and completed suicide.
- Schools and teachers are currently not viewed by Young Persons, families or teachers as places where supportive psychological services are available. Because schools are the only place where large numbers of children gather on a regular basis, it would be

cost-effective to consider mounting suicide prevention-intervention programs in these settings.

- Across all types of informants, a significant gap exists in the level of knowledge and awareness concerning mental health issues and possible risk factors for suicide and potential life-saving interventions. Public Health awareness campaigns about mental health issues could cost-effectively address this situation.
- Although Tajikistan has a method in place for reporting suicides on a regional basis, it unfortunately does not include a completely reliable, uniform, national suicide reporting system that would allow ongoing monitoring of variations in suicide rates, including gender differences, or allow such data to be understood in relation to Tajikistan's Census data.
- In Sughd, reliable reporting of suicides and suicidal behaviors is hindered by what seems to be the government's sanctioned, current blame and punishment response to suicides. It is unlikely that accurate reporting will occur without this approach being altered through reassignment of post-suicide activities and an improved appreciation of the major risks for suicide.
- Community-based mental health services are lacking throughout Sughd Region. However, based on a community Network of services established for this Study, an unexpected willingness of the population to utilize such services was identified.
- There are strong indications, as elsewhere, that suicide risk varies in Sughd by gender, and that these differences warrant further investigation and gender specific interventions.

4.1 Suicide Reporting: Lacking a reporting system at the Regional level poses difficulties in determining if suicide rates of Sughd are, in fact, increasing, decreasing, or remaining constant (in relationship to an age-specific population, by nationality, by District, etc.). Without these data at the national level it is also not possible to distinguish how suicide rates in Sughd compare to other Regions of Tajikistan. The absence of national suicide data, similar to the data obtained in this Sughd suicide Study, also limits the possibility of drawing meaningful contextual comparisons between and across other Regions in Tajikistan.

Under-reporting of suicide attempts is fairly common in most countries throughout the world. Understandably, suicide data are complex and very difficult to obtain accurately. The current suicide and suicide attempt reporting system in Sughd, upon which this Study's sample is based, is not entirely reliable or accurate. Cases that are incorrectly classified, including a total of six provided for this investigation, skew rates and could present challenges in a clinical setting. Also, based on other epidemiological studies, the generally accepted ratio of completed suicides to suicide attempts is approximately 1:10-20, or ten to twenty attempts for every completed suicide. For Sughd, according to available data, the ratio is approximately 2.5:1, or 2.5 completed suicides for every one attempt. While there are expected differences in the number of attempts compared to the number of completed suicides, according to age and gender, culture, etc., it is highly unlikely that there are actually more suicides in Sughd than attempters, simply because all attempts are not successful. One can safely assume that there are many Young People in Sughd who have attempted suicide at least once, yet have failed to receive help or were excluded from this Study as an attempter because they were not identified through the existing reporting system. This is a critical

issue, as a prior suicide attempt is generally considered the strongest risk factor for subsequent completed suicide.

Another possible reason for the seemingly disproportionate number of completers versus attempters in Sughd, is that preferred suicide methods include hanging or poisoning. As a result of these deadly methods, it is both statistically and medically more likely that an attempter will become a completer. Selecting an extremely lethal technique suggests that there are undoubtedly many cases for which there was no turning back from the attempt. Other possible reasons for this data discrepancy, of course, could be the high level of stigma associated with suicidal behavior and strong religious prohibition opposing it, each potentially resulting in failure to seek help. Unless someone's attempt is so severe that they require professional intervention, it seems that a suicide attempt frequently goes unreported.

4.2 Current Response to Suicidal Behavior: The current Prosecutorial approach to suicide undoubtedly contributes to the very low ratio of reported suicide attempts to completions. It is very probable that this approach, which emphasizes finding and assigning blame for the event, discourages individuals or families from reporting suicidal events, unless they cannot be hidden. Although Prosecutors have good intentions, their actions may produce unintended negative consequences, as their approach is legal rather than help oriented and the investigations seem to create an atmosphere of blame, and defensiveness. In this context, both family members and persons surviving an attempt focus on avoiding self-incrimination, rather than sharing the whole truth leading up to the suicidal behavior. This, in turn, leads to serious deficits in helpful responses, as well as the promulgation of inaccurate but legally safe narratives. Perhaps most importantly, it also hinders and often precludes the possibility of early prevention, as individuals or families dealing with suicidal thoughts or attempts are less likely to report it and thus to receive the early help they need. Preventive intervention today would potentially preclude an attempt from turning into a completed suicide tomorrow.

4.3 Opinions about Reasons for Attempts/Suicides: Opinions regarding Young Persons' reasons for attempting or committing suicide were assessed from a variety of perspectives, including that of Family Informants, Young Persons, and Key Informants. Recurring themes in their reports include economic hardship, family quarrels, physical illness or injury, and problems related to love or marriage. The most commonly reported reasons for suicidal behavior of family respondents include family quarrels, physical illness or injury, being very sad, and being blamed unjustly. While forced marriage was more likely offered as a reason for females under the age of 24 to commit or attempt suicide, financial reasons or debt were more common for males.

Over 90% of Key Informants reported that a failing economy and high unemployment were important forms of social pressures that contribute to attempting or committing suicide. Other reasons frequently reported by Key Informants included mental health disorders, abuse by family members, marital discord and bullying.

According to Key Informants, forced marriage, child abuse and domestic violence have increased (40-54%) in the past two years, while only half of the Key Informants reported that help was available for those affected. More than 40% of all Key Informants reported that they had observed an increase in criminal behaviors among Young People and pregnancy among unmarried females More than 30% reported increases of "rebellious" behavior and alcohol abuse. These reports possibly indicate a range of new or increased social and family

stressors that may put Young People at increased risk of suicide. Many different types of Key Informants also noted that they considered forced marriage to be a factor in suicide among young persons. This Study found, as in most studies, an association between child abuse and bullying with suicidal behavior. Respondents also indicated that family quarrels and/or abuse by family members are reasons for suicide, particularly among females, suggesting a need of targeted supportive services for girls and young women.

***4.4 Traumatic Life Events*:** Families throughout the world are known to provide the primary learning environment for their children and it is generally true that disruptions within the family potentially have a more significant, negative impact on children than a disruption at other times in life. As these data indicate, consistent with other research, major life events, family trauma, interpersonal violence, loss of a loved one through migration, death or separation, loss of a job or economic hardship are all potentially damaging to a Young Person's mental health. In some cases, the disruption or hardship has been reported as being responsible for suicidal behavior, including completed suicide. It is noteworthy that suicide risk is particularly acute for Young Persons under 18 years of age whose family has experienced a traumatic event.

4.5 Teachers: Teachers are important individuals in any child's life because they provide information, both formally and informally and they spend so many hours together each day. The quality and quantity of information provided by the teacher is therefore critical to children's attitude formation. However, these data strongly indicate that schools and teachers are currently not well utilized for supportive psychological services. Teachers in many other countries are viewed as having a supportive function and thus have the potential to prevent or reduce suicidal behavior among Young People. In these data, however, Young Persons with suicidal thinking and behaviors do not appear to view teachers as an important resource for discussing mental health/protection related concerns. Similarly, teachers do not view themselves as having a vital role for students regarding the student's psychological needs or well-being. Moreover, parents and service providers do not currently view teachers and schools as important resources for students, beyond academic classroom work. Finding a way to involve teachers in the necessary suicide prevention activities, as is done elsewhere, would be cost-effective.

4.6 Suicide Prevention: Knowledge about mental health issues, in general, was found to be inadequate and frequently inaccurate across all types of Study participants. There was also a significant knowledge gap regarding possible risk factors for suicide and potential life-saving interventions. However, the vast majority of respondents were aware that individuals suffering mental health problems could possibly be helped. As expected, youth with severe depression were three times more likely to exhibit suicidal behaviors than others. While mental health disorder, economic hardship, abuse by family members and bullying were correctly identified as potentially contributing to suicidal behavior, much less was known by respondents about how or where to obtain mental health services.

During the data collection phase of this Study a personal "Safety Plan", designed to protect people from self-harm, was administered to each participant (child or adult) who indicated suicidal thinking or behavior. This simple cost-effective intervention, which could be taught to a wide range of service providers, enabled suicidal individuals to effectively utilize life-saving information, at least in the short term. This intervention could easily be taught to a wide range of persons who frequently interact with Young People.

***4.7 Access to Mental Health Services*:** As expected, this Study's findings confirm that community-based mental health services are significantly lacking throughout most of Sughd Region. More importantly, however, this Study also clearly demonstrated that NGOs located in almost every District, are prepared and very willing to provide mental health services to both Young People and adults. This Study's investigators required that mental health services be available to participant families throughout the Study, especially those identified as needing psychological or suicide intervention during the interview. Based on this requirement, UNICEF assumed a leadership role in developing a Network of services, while Khujand State University Psychology Department, in collaboration with Tajikistan National University, was responsible for implementing it. Individuals, especially Young People and mothers, were identified and provided with appropriate, community-based mental health intervention within their own District. Most received psychosocial or mental health related services for the first time. The most significant outcome of the Study's psychological intervention was, perhaps, the actual extent of the utilization of services generated by this Network arrangement. The wide-scale use of service coupons that were given to each Study family for use with NGO providers indicates a major unmet need for community-based mental health services in Sughd. However, despite the ability and willingness of Khujand State University's psychology faculty to assist and supervise the NGO clinicians, as necessary, the major deficiency in this otherwise excellent Network of services was the lack of advanced clinical expertise within the NGOs and at Khujand State University. Every effort should be made to address this deficit. Interestingly, between 70%-80% of all those interviewed, including young attempters, family members and Controls, indicated that they wanted to talk to someone about an important problem that bothers them. This finding suggests that there is a greater willingness to engage in help services than previously assumed.

5. RECOMMENDATIONS

There is no known solution for eliminating, or simple approach to reducing the number of completed suicides in any society. However, based on data presented in this report and what is understood about suicide worldwide, it is important to note that a number of steps can be taken to help reduce suicide and suicide attempt in Sughd Districts. Recommendations, based on findings from this Study, noted here and elaborated below, should be considered in Sughd.

- A Regional (or national) program, focused on violence prevention, healthy life-styles and girls' and women's health, is needed.
- Healthy lifestyle education, including suicide prevention, should be added to the school curriculum.
- One of the most immediate cost-effective methods of suicide intervention and prevention should be the development of a helpline or crisis hotline. A Regional (or national) phone call-in center is an inexpensive means of providing mental health support and suicide prevention, while also increasing mental health awareness in the community.
- The Ministry of Health or Ministry of Labour and Social Protection should assume the leading role in responding to completed suicide or attempts, replacing the current system directed by the Prosecutor's office.
- Shelters for women, youth and families exposed to violence, forced marriage and other forms of abuse should be established, which include psychosocial intervention and educational and vocational training opportunities.
- Media coverage of suicides in Tajikistan should be significantly reduced and visual coverage of events surrounding the event should possibly be eliminated entirely.
- Based on the success of the clinical intervention Network developed for this Study, serious consideration should be given to establishing a Regional or even national psychology training center at Khujand State University, focused on training clinicians in NGOs, with a special emphasis on suicide prevention in Young People.
- A Task Force on Young People that includes majority youth representation, in addition to civic and governmental leaders, should be developed to systematically address the psychosocial needs of Sughd's youth.
- A National Suicide Reporting System should be developed in order to accurately account for trends in suicide in the country.
- A school-based Mental Health Awareness program should be developed to address issues such as stigma, self-esteem, bullying, peer relations, school violence, knowledge about mental illness, help-seeking, etc., among both students and teachers.
- Teachers-in-training should be educated in methods of increasing mental health awareness, including ways to combat bullying, stigma, family violence, hopelessness, substance use, etc., in order to empower them to assume a greater role in the well-being of their students.

5.1 Rethinking the Role of Women and Girls

There is abundant evidence worldwide that the health, education and psychological status of women is critical to the well-being of families, including its economic success. The endemic gender inequality found in Tajikistan is currently a major limiting factor for any effort to generate improved psychosocial health and economic well-being among all citizens in Sughd. Therefore, the role, rights and expectations for girls should be a major focus of any new social, health or education policies. These data show that parents who stopped their education prematurely had a significantly increased risk of having children who attempted suicide. As parental education is a critical indicator for the well-being of children, investment in the educational attainment of young people in Tajikistan should be improved as an investment in the next generation. Investing in higher education should become a priority at the Regional and national level. Especially important are equal education opportunities for women and men, as maternal education is known to be a determining factor for the well-being of children and families. A discussion of equal opportunities must first address existing attitudes of domestic violence towards women, which has been shown here to significantly affect risk for attempted suicide.

Determining how to implement change in Sughd regarding the role of women and increase opportunities available to girls should be the responsibility of this segment of society, that is, the women of Sughd, with financial support from appropriate government authorities. It is suggested that a high profile women's organization, either currently in existence or newly created and concerned primarily with advocating for the rights and welfare of women, either indigenous or with international alliances, become officially recognized and empowered to explore new options for women within Sughd. The existing Women's Committee has great potential to carry out these responsibilities but its budget and mandate would need to be significantly expanded. Obviously, a reasonable budget must be allocated to the group assuming this leadership function for such an effort to succeed.

5.2 School-Based Child Mental Health Awareness Program

Developing a cost effective school-based program of Mental Health Awareness would aid in addressing stigma, self-esteem, bullying, school violence, lack of knowledge about mental illness, help-seeking, healthy lifestyles, etc. A traveling team of trained individuals could offer this program in schools throughout the Region. For example, a program could be developed at the Regional level (or within the Ministry of Education), where individuals would be trained to administer the program and on a regular basis provide services within schools throughout a specific District or in the entire Region. These experts, possibly trained and coordinated by the Psychology Department at Khujand State University, would then circulate among schools, ensuring that the program's goal of raising awareness is accomplished. Child Mental Health and Psychosocial Awareness Programs have been developed specifically for often developing countries and could quite readily be adapted for use in Tajikistan. This approach could also be incorporated with between schools, health workers and existing services and crisis centers in a collaborative effort to improve detection of need and referral. Printed information, such as the NGO Directory Pamphlet developed for this study, should be available at all places where young people congregate, especially schools, to help raise awareness and make it easier to seek help.

5.3 Crisis Helpline

Based on Key Informant interviews, 90% of all service providers believe that a child with an emotional or behavioral problem can be helped. However, less than 70% of service providers (other than health workers and Imams) knew where to refer a Young Person at risk of suicide. A service that could be used anonymously and remotely would be a significant resource for at-risk Young People within the Region. This is especially significant in light of the observation that between 70% and 82% of all individual Informants Youth and adults reported that they would like to talk to someone about important things that are bothering them.

One of the most cost-effective methods of addressing suicide in Sughd and providing support to those in need is a phone helpline or hotline. Providing support over the phone, the helpline would allow those in need of psychological support to call-in anonymously and to speak to a trained mental health service provider. In addition, the implementation of a helpline would contribute to raising awareness about mental health issues and help to change the way mental health concerns are thought about in Sughd.

5.4 Services Availability and Access

During the Sughd Suicide Study a NGO Directory Pamphlet containing the name, address and contact information for each NGO or other service provider available to render psychosocial support was distributed to each Study participant. The information was listed for each District. Feedback from both participants and providers indicated that this pamphlet filled an important information gap. Developing a similar, more inclusive Regional and District specific service directory for wide-scale distribution is strongly recommended. The access to such services should be improved. While services provided by NGOs can be an important method of reaching families in need, implementing and improving existing governmental social services, such as the recently mandated Social Assistance at Home program, at the Regional and district level is crucial for addressing the multi-faceted mental and family health needs of the community.

5.5 Modifications to Post-Event (suicide or suicide attempt) Investigations

In order to build upon the strengths of the current suicide reporting system in Tajikistan, it is recommended that health professionals assume the major responsibility for conducting post-suicide situation analyses, which is currently the responsibility of a Prosecutor. The goal of this new form of response would be to conduct a holistic "evaluation", without a criminal investigative stance. This supportive, family-based intervention model would treat the suicidal behavior from a non-judgmental perspective, with the assumption that most of the time the reasons behind such behavior are multifaceted and not necessarily the responsibility of another individual. Importantly, the person conducting the "investigation" would also provide psychosocial support to the family, arranging for further intervention and follow-up, as needed.

This non-accusatory approach would encourage the family and other loved ones to share information regarding the event more openly and honestly. Instead of compounding the recent distressing experience by approaching the situation with the purpose of assigning blame, a health professional would be prepared to provide the necessary on-site counseling, as

well as additional available supportive resources, such as social services. Of course, in the situations in which one or more individuals appear to be criminally responsible for actions leading to suicidal behavior, guidance from the local Prosecutor should be sought.

5.6 Community-Based Services

The opportunity to target a suicide intervention strategy for an individual attempter is significantly limited, because in the current climate it can be assumed that the vast majority of potential attempters do not make themselves known. The challenge then is to determine how best to intervene at a group or population level to prevent unnecessary deaths of individuals. Unfortunately, there is no single or successful system of suicide prevention. If there were, it would have been widely implemented. However, systematic suicide prevention activities are the most universal, cost-effective approach of reaching the largest proportion of the population, in this case, Young People. Selecting which strategies to use are determined by a wide range of factors, but extensive no-cost resources are readily available, for example, through the WHO. The recently mandated Social Assistance at Home program, or a similar cadre of workers, might be an appropriate group to train to implement some or all of a Community-Based Prevention Program.

A relationship exists between violence and suicide and, therefore, focusing exclusively on preventive mental health services is not sufficient to address suicide. Developing a range of age-appropriate protective services that are responsive to gender issues is also necessary. Some individuals, especially women and youth, require shelter in response to sexual and physical abuse, while some need a safe haven to avoid a forced marriage. A system of Protective Services, including secure or protected safe houses, is necessary. Such facilities should offer family counseling or arbitration, if desired, but should also feature psychosocial, educational support and training, with the expectation that those in residence would not only safely withdraw from their previous abusive situation, but also discover new opportunities for self-actualization.

5.7 Media Coverage

Based on the Study's Key Informant interviews with a wide range of media personnel, including those from newspapers, TV, and radio, representing local and national outlets, it appears that coverage of suicide, for the most part, is unrestricted in Tajikistan. There is mounting evidence, however, that media exposure to suicide can provoke additional suicides. For a vulnerable person, the opportunity of assuring themselves Regional, if not national media coverage, is sometimes irresistible and thus the suicidal behavior portrayed in the media is sometimes copied. In some countries that are already actively trying to reduce suicide, education and negotiation between government and media outlets have resulted in significant reductions in the coverage of suicides. Without press censorship, the display of harmful visuals in many countries have been drastically reduced or even eliminated. The goal, of course, is not to restrict the media, instead, rather to encourage it to serve an informational function rather than sensationalize harmful events such as suicide. Rather than sensationalizing instances of suicide, journalists can be better educated about mental health and encouraged to report on the issues that influence the occurrence of youth suicide, especially issues related to child rights and gender issues. It is strongly suggested that this approach to the media be adopted with media outlets in Sughd, as well as in national media throughout Tajikistan.

5.8 Regional Clinical Network

Providing psychological services to participants in this Study was a necessary component for ethically conducting research on such a sensitive topic. Therefore, as a Study requirement, NGOs were contracted by UNICEF in each of the 16 Districts where interviews were conducted. These NGOs were available to provide appropriate support and services to any Study participant or their family member throughout the duration of the Study. Eight coupons were given to each family at the time of the interview, which could be used to receive free services from any of the participating NGOs. The services offered by these organizations were not limited to psychological support, but also included judicial, economic, social, and medical services. NGOs in 13 of the 16 Districts were able to provide statistics for services rendered and the number of coupons collected (see Table 12). These services were also provided by the Study clinicians from Khujand State University. As indicated in Table 12, many Study participants sought these services, with the volume of use likely indicating a previous lack of awareness of the availability of such services. Undoubtedly, the Suicide Study interview experience provided support for seeking these services.

Table 12. Clinical Support Services

District	Services/Support Provided					Coupons Used
	Psychological Support	Judicial Support	Economic Support	Social Support	Medical Support	
Khujand	18	5	4		3	24
Isfara	26			5	4	33
Konibodom	34				12	100
Asht	19					104
Gafurov	21	3		2	5	34
Chkalov						
Kairakkum						
Istaravshan	16	2		3		24
Ghonchi	15					24
Panjakent	19	3		4		24
Spitamen	19				3	8
Aini	6					
Mastchoh	6					16
Sughd Region	78					96
Total	**277**	**13**	**4**	**14**	**27**	**487**

As a result of being involved in this Study, the participating NGOs, in collaboration with Khujand State University Psychology Department created a Network of providers among all of the Suicide Study service sites. At the conclusion of this Study, the service sites expressed a strong desire to continue their collaborative Network, identifying a need for ongoing training in the provision of psychological services. Consequently, dialogue was initiated with Khujand State University by the Study team, suggesting that consideration be given to establishing a permanent Regional or even national psychology training center for NGOs, with a special emphasis on suicide in Young People. Leadership at Khujand State University was most receptive and they should be encouraged and supported in this effort.

5.9 Regional and District Leadership, with Youth Participation

Before identifying specific suicide intervention methods, there must first be a decision by the authorities to prioritize suicide prevention, especially for Young People. Having asked for this Study, there is reason to believe the Governor of Sughd is ready to assume such leadership. The initial step would be to appoint a small group of interested, informed leaders to work in collaboration with other interested parties, such as UNICEF, WHO, etc, while also including youth. This effort would empower the group members to develop a plan of action based on the data contained in this Report. The Sughd Suicide Study Working Group would be an excellent group to start this process, as those individuals have already demonstrated a commitment to critically considering different options for dealing with suicide among Young People in Sughd.

5.10 Regional Task Force on Young People

Sughd Region has a multi-ethnic, multi-lingual population with a wide range of beliefs, both religious and cultural. Some of these differences appear to contribute to the rate of suicide and suicide attempts among Young People, who are particularly vulnerable to pressures, as they transition into adulthood, parenthood and confront the shrinking economic opportunities of our time. How should the legal system, including the Prosecutors' office, help to improve the future of these Young People? How can Imams best be supportive of Young People who could benefit from their guidance? How can schools foster a love of learning equally among all the students, both female and male, so that they graduate from high school in equal numbers? How can government Social Services, Health Services, Family Services, etc., work together to improve the outcomes of Young People? How can the Sughd Governor and other political leaders convince Young People that they have a real stake in the future of Tajikistan? How can the Women's Committee have a more meaningful role in helping young women to achieve all that they can? How can the NGO's develop new and interesting services and programs to help improve the quality of life of all Young People in Sughd Region? How can the colleges and universities within Sughd work more effectively in helping all Young People, both female and male, to obtain the highest level of education? These are all questions that can and should be addressed.

Many options exist to improve the lives of Young People and consequently help to reduce some of the major risk factors for suicide. What is needed is a Task Force on Young People that includes majority youth representation, in addition to civic and governmental leaders, who are all committed to understanding and improving the psychosocial outcomes of Sughd's youth. As suggested by Key Informants in this Study, the establishment of regular meetings and roundtables, which would both raise awareness of important issues and improve

communication among potentially influential people, would be beneficial to all. A Task Force on Young People, in which youth have a stake in the Task Force's agenda, is one important way to empower Young People, while potentially, simultaneously addressing problems of suicidal behavior. After all, as in all countries today, as a result of the unprecedented speed with which the world is changing, Sughd's Young People are significantly unlike their parents and grandparents in outlook and opportunity and they must be encouraged and supported in finding their own path to the future.

5.11 National Suicide Reporting System

Obtaining reliable, analyzable, suicide data in Sughd is currently problematic. This limitation complicates the task of knowing whether the rate of suicide in Sughd is actually decreasing, staying the same or getting worse. Although this is a national issue, not just a Sughd concern, this Region has already taken the leadership to investigate suicide and may want to pursue this issue further. Better information is necessary to most effectively plan for and target suicide prevention. Making comparisons of suicide trends over time and among and between Districts should be a priority now that the National Census data is available. Therefore, establishing a National Suicide Reporting System for Tajikistan should be discussed at the highest levels. The one mental health statistic that fortunately, or, unfortunately, defines a country's mental health status and is a figure by which some countries are identified, is their suicide rate per 100,000. These numbers are made available worldwide on a yearly basis by WHO (2011b), and it is important nationally and internationally to show improvement over time. Without reliable suicide data, as would be possible with a National Suicide Reporting System, it would not be possible to determine whether suicide prevention efforts in Sughd or in any other Region are making a difference. Importantly, this reporting system will require a greater emphasis on confidentiality within the health community than currently exists.

5.12 University Based-Teacher Awareness Training

Many of the suicide risk factors identified in this Study's data, including ways to combat bullying, stigma, family violence, hopelessness, substance use, etc., can be easily incorporated into a classroom teaching agenda. Training teachers about these issues during their university program is the most cost-effective way to insure that all children and youth eventually receive a well-designed mental health awareness and suicide prevention program. The intention would not be to transform teachers into therapists, but rather to inform and empower them to assume a greater role in the well-being of their students by effectively recognizing early warning signs of psychological problems. This would enable the delivery of appropriate referrals (when necessary) to sites where psychosocial intervention is available, such as Youth Friendly Health Services. Students are not likely to increase their knowledge of how to reduce stress, live a healthier life-style and effectively cope with personal of familial psychosocial issues, if they are not properly informed about these issues. Teachers have the ability to provide this type of fact-based education. Increasing teacher responsiveness to the larger psychosocial needs of Young People also has the potential to increase reasons for students to remain in school while decreasing their reasons to drop out. Similarly, the teaching profession would be empowered if teachers viewed their role more holistically and naturally caring, having a broader impact on their students and society at large.

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APPENDIX I. STAFF

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Sughd Region Working Group

- Child Rights Department (Chair)
- Women and Family Affairs Department
- Health Board
- Governor’s Office
- Education Department

- Regional Prosecutor's Office
- Police
- City of Khujand's Child Protection and Social Protection departments

Organizations at Tajikistan Meetings

- UNICEF-Tajikistan Leadership
- UNICEF-Tajikistan Child Protection Section
- WHO-Tajikistan Leadership
- Aga Khan Foundation
- Tajik State National University Psychology Department
- Presidential Office's Commission on Child Rights
- Ministry of Health
- Committee on Women and Family Affairs
- Strategic Research Center of the President
- Division on Minors and Youth of the Ministry of Interior
- Ministry of Labor
- International Relations
- Sughd Region, Governor's Office
- Sughd Region, Child Rights Department
- Sughd Region, Women and Family Affairs Department
- Sughd Region, Regional Prosecutor's Office
- Sughd Region, Police
- Sughd Region, Health Board
- Khujand, Child Protection
- Khujand, PMPC
- Khujand, Social Protection
- Isfara and Gafurov Districts, Social Sector Leadership
- Gafurov District, Educational Department
- Local NGO, Girl and Human Trafficking
- Local NGO, Domestic Violence

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APPENDIX II. ESTIMATE OF SUGHD SUICIDE RATE

Table 13. Khujand and District Young Person (YP) Completed Suicide Rate per 100,000 population.

District/City	YP Population2	Female YP Population2	Male YP Population2	Average Cases YP Per Year (09-10)3	Average YP Female Cases Per Year (09-10)	Average Male YP Cases Per Year (09-10)	YP Rate (per 100,000 YP)	Female YP Rate (per 100,000 YP)	Male YP Rate (per 100,000 YP)
Khujand	46,901	21,766	25,135	7.5	4.5	3.0	16.0	20.7	11.9
B. Gafurov1	96,273	46,996	49,277	11.5	5.5	6.0	11.9	11.7	12.2
Konibodom	50,131	25,094	25,037	9.0	4.0	5.0	18.0	15.9	20.0
Isfara	62,870	31,201	31,669	3.5	1.5	2.0	5.6	4.8	6.3
Panjakent	70,732	35,570	35,162	8.0	5.0	3.0	11.3	14.1	8.5
Asht	36,412	18,181	18,231	7.0	4.5	2.5	19.2	24.8	13.7
Ghonchi	37,367	18,952	18,416	4.5	2.5	2.0	12.0	13.2	10.9
Istaravshan	60,562	30,336	30,227	4.5	2.0	2.5	7.4	6.6	8.3
Spetamen	31,792	15,705	16,087	4.0	2.5	1.5	12.6	15.9	9.3
J. Rasulov	30,961	15,520	15,441	2.5	1.0	1.5	8.1	6.4	9.7
Kairakkum	11,258	5,606	5,652	2.0	1.0	1.0	17.8	17.8	17.7
Mastchoh	30,251	15,040	15,211	2.0	1.0	1.0	6.6	6.6	6.6
Aini	18,173	9,958	8,215	1.0	0.0	1.0	5.5	0.0	12.2
Zafarabad	17,065	8,780	8,285	1.5	1.0	0.5	8.8	11.4	6.0
Sharhriston	9,545	4,809	4,736	0.5	0.0	0.5	5.2	0.0	10.6
MastchohiKuhi	6,342	3,230	3,112	0.0	0.0	0.0	0.0	0.0	0.0
Sughd Total	**616,637**	**306,745**	**309,892**	**69**	**36**	**33**	**11.2**	**11.7**	**10.6**

1. B. Gafurov District includes Chaklov and Taboshar (due to population size and number of suicides).
2. Population figures were obtained from the Tajikistan State Agency on Statistics (2010).Because the population figures were provided in age groups, the population ages 12-14 were estimated to be 60% of the 10-14 age group (assuming equal age distribution).
3. Young Person completed suicides are all cases obtained from the Sughd Region in February 2011 and include those families interviewed and not interviewed.

APPENDIX III. MENTAL HEALTH CARE IN TAIKISTAN

Although psychiatry was introduced to Tajikistan during the mid-20th century, Latypov(2010) characterizes the current state of mental healthcare in Tajikistan as remaining in a "dormant" phase; that is, one where mental health research is generally neglected, and where traditional healers remain a primary source for mental healthcare. Tajikistan's Chief Psychiatrist notes that, because many trained mental health specialists left Tajikistan following the dissolution of the Soviet Union in 1989, Tajikistan now sorely lacks such persons.

Before passing its own legislation in 2002, Tajikistan's mental healthcare was regulated by the *Soviet Law on Psychiatric Care*. According to WHO's Assessment Instrument for Mental Health Systems, in surveying the state of mental health in Tajikistan, it was concluded that mental health data are often misreported or analyzed improperly (Saxena et al., 2007). At the moment, there is no agreed upon mental health policy in the country, nor an official agency or governing body such as a Department of Mental Health or Mental Health Office, in the Ministry of Health (MOH) to oversee mental healthcare. Rather than one group or organization overseeing mental healthcare, a sole senior specialist at the MOH covers all non-communicable diseases, including mental illness. Of all Tajik health care expenditures (4.6 percent of Gross Domestic Product in 2007), only about one percent is directed toward mental health. The health insurance system, still in its pilot stage, does not cover psychiatric care (WHO, 2010).

Currently, Tajikistan has adopted the centralized Soviet model of healthcare, emphasizing hospitalization and inpatient care. Mental healthcare receives little attention under this system (WHO, 2010; Varnik, Kolves, & Wasserman, 2005; Varnik et al., 2010). Only 53 outpatient mental health facilities exist in Tajikistan, treating only 629 persons per 100,000 of the general population (as compared to 282 facilities in neighboring Uzbekistan, serving 1,474 people per 100,000 in the general population [twice the rate as in Tajikistan], and 72 facilities in Kyrgyzstan serving 1,142 per 100,000 people (WHO, 2010)). In addition, three day-treatment centers and three community-based psychiatric inpatient treatment centers in Tajikistan provide 65 beds per 100,000 population (compared to a rate 12 times as high, 733.6 beds per 100,000 in Uzbekistan (WHO, 2010). Moreover, the cost of medication for treating mental illness is currently not a financially feasible option for Tajikistan.

Not only are treatment facilities lacking, but very few mental health professionals live and practice in the country. Moreover, just 2% of the curriculum for training medical doctors focuses on mental health (WHO, 2010). The State University and State Pedagogical University together graduated 134 psychologists in 2007. However, these graduates are not specifically trained in the provision of mental health services. Only 9.3 human resource officials per 100,000 work in mental health facilities (WHO, 2010). This general lack of mental health professionals was observed by the Columbia University research team during its visit to Sughd Region in October 2010. Just ten psychiatrists were available to provide care to an estimated 730,000 children who live in the area. Yet, an order from the Ministry of Education (2009) requires every school to maintain at least one psychologist on staff, a requirement that obviously has not been met. In fact, for the whole of Tajikistan, the number of resident psychologists is 0.1 per 100,000 population (WHO, 2005). Without reform, this insufficiency of mental health services is unlikely to change (WHO, 2010).

APPENDIX IV. DEFINITIONS OF SAMPLES AND INFORMANTS

Samples:

Completed Suicide Sample: Includes family and/or close acquaintances of a Young Person aged 12-24 who completed suicide.

Attempted Suicide Sample: Includes Young People aged 12-24 who attempted but did not complete suicide, as well as their family and/or close acquaintances.

Control Sample: Includes Young People matched to a Young Person from the completed suicide or attempted suicide sample based on age, gender, ethnicity, and geographic location, as well as their family and/or close acquaintances.

Informants:

Index Informants: Young Person of interest from the *Attempted Suicide* and *Control* samples.

Primary Informants: Immediate family, including but not limited to parents and age-appropriate siblings, and close acquaintances of the Young Person.

Secondary Informants: Other individuals (including but not limited to siblings, neighbors, and teachers) with whom the Young Person may have had a close relationship.

Key Informants: Directors/providers having contact with large numbers of Young People, particularly from Districts with high rates of suicide completions.

APPENDIX V. ETHICAL CONSIDERATIONS

All participants, including Key Informants, were required to read or have read to them (in the case of illiterate subjects or children) the consenting script explaining the Study, thus giving them an opportunity to refuse participation. All participants were informed that their participation in the Study was completely voluntary and that they reserved the right to refuse to participate or withdraw their agreement to participate at any time. Verbal consent was documented in the appropriate section of a consent checklist.

Respondents were informed that they could end their participation at any time and could refuse to answer any questions that she or he did not want to answer. As there was the possibility for psychological distress to arise as a result of topics addressed in the interview, or in the case of an emergency, participants were provided contact information for local services.

All identifying information collected during the interview was secured in locked safes and cabinets for the duration of the Study, to be destroyed following data cleaning. The local research team ensured that data was stored with participant Study ID numbers only and that no one but the primary researchers had access to the information linking subject identities and participant Study ID numbers. All researchers were carefully trained in confidentiality procedures and were instructed to utilize participant Study ID numbers, rather than names, in routine Study procedures. Additionally, all interviewers and office staff signed a pledge to keep all identifying aspects of the Study completely confidential.

For some participants, the interview ended with a tape-recorded qualitative section, if the participant agreed. In order to maintain confidentiality, information obtained in this section was not connected to a participant's name, but rather an ID number, and was not used for any purpose outside of this Study. All tapes were stored in a locked cabinet during the Study and were destroyed upon the Study's completion**.**

In keeping with the rules of confidentiality, participants were told that their confidentiality would be breached in a few circumstances, such as if a subject intended to harm herself/himself or someone else, or if a researcher witnessed or was told about abuse or neglect. In such situations, researchers followed a protocol that involved contacting appropriate authorities or medical personnel.

Each person in the suicide and Control samples was asked a series of questions about mental health, including feelings about attempt(s) to commit suicide, real or imagined. If the respondent had feelings of wanting to attempt suicide or was under psychological distress (determined by meeting a set criteria), the interviewer was trained to administer a "safety plan" at the conclusion of the interview (adapted from Stanley & Brown, 2008). This plan, which was reviewed together by the interviewer and respondent, followed six steps. The respondent was instructed to use these steps until the crisis was resolved or the threat was reduced. The steps of the safety plan are as follows:

1. **Recognizing the Warning Signs**

   The interviewer first helped create a list of warning signs that the respondent could use to identify when she or he was under psychological distress or feeling suicidal.

2. **Using Internal Coping Strategies**

   Personal coping strategies that could be used when such feelings were present were then identified and listed.

3. **Social Contacts Who May Distract from the Crisis**

   A list of social contacts and social situations was also listed and included people and social situations that would help the respondent take her or his mind off problems.

4. **Contacting Family Members or Friends Who May Offer Help to Resolve a Crisis**

   In addition to social contacts, family and friends who could be contacted during a time of crisis were listed.

5. **Contacting Professionals and Agencies**

   Professionals and agencies were also included among contacts and included the Study clinicians and local NGOs identified for this Study.

6. **Reducing the Potential for Use of Lethal Means**

   If the respondent was currently suicidal and steps 1 through 5 above did not resolve this concern, the interviewer immediately contacted the Study clinician and Study coordinators. The clinician asked the respondent which means he or she would use during a suicidal crisis and, with the respondent, identified ways to remove these means.

Every participating family was provided with a Study brochure that included contact information within each of the sixteen Study Districts. After the interview was conducted, regardless of whether feelings of suicide or psychological distress were present, the participants were given a list of local non-governmental organizations, or NGOs, and clinicians who could be contacted in case the need for psychological services arose. The NGOs were contracted by UNICEF for the duration of the Study to provide free services to anyone who presented a coupon. Each family was given eight coupons that could be used to receive services at any of the NGOs contracted throughout Sughd Region and listed in the brochure provided.

Each individual respondent, from all completed suicide and attempted suicide cases, in addition to one-third of Control and secondary respondents, was called by the Study clinician within 24 hours of completion of the interview. The purpose of these calls was to determine

that the interview was conducted in a polite, professional manner, that the length of the interview was appropriate for the interview type, and, if the family was in need of services, to offer appropriate assistance. The Study clinician provided these services directly whenever possible. However, as interviews were conducted throughout Sughd Region it was frequently necessary to direct the respondent to the appropriate local organization, including the available NGOs.

Additionally, all interviews returned to the Study office were checked immediately for issues of clinical concern that may have been noted during the interview, so that, if necessary, an appropriate response could be taken.

APPENDIX VI. DATA ANALYSIS

All interviews were semi-structured and contained both quantitative and qualitative sections, which were analyzed independently.

Quantitative Data Analysis

Distributions of all quantitative variables were examined, identifying potential outliers and calculating descriptive statistics. Non-parametric models were used for variables with skewed distributions. Chi-square tests were conducted to detect group differences for categorical variables (gender, ethnicity). For quantitative variables (e.g., age, number of traumatic events), T-tests were used for two-group comparisons where these continuous variables have approximately normal distributions. Scatter plot and correlation analyses were used to examine the relationships between quantitative variables. All tests were two-sided with significance level of .05.

Generalized Linear Models were used to model the associations between the outcome measures and the predictors. Specifically, linear regression models were used for continuous outcome variables (after appropriate transformation for normality and homoskedasticity of errors, if necessary). Logistic regression modeling was applied for binary outcomes.

Qualitative Data Analysis

Ideally, the qualitative questionnaire would be audio-recorded to ensure the fidelity of what was actually said, rather than the potential interpretation of the interviewer, thus allowing for themes to be drawn from the actual words of the participant. As participants had the right to stop the interview at any point, some did not want to continue after the quantitative questions and refused the qualitative section altogether. Of the 379 participants who were interviewed from the Suicide and Attempter Samples, 309 (82%) agreed to take part in the qualitative questionnaire. Surprisingly, however, of the 309 respondents who were administered the qualitative instrument, only nine agreed to be audio-recorded. While reasons for refusing the audio recording varied, respondents generally felt uncomfortable with the idea of their words being captured and did not trust the procedure. The few audio recordings were transcribed by trained data-entry personnel. These transcripts, in addition to few interviews where notes were taken, were translated from Tajik or Uzbek to English in order to be analyzed by the research team from Columbia University. Given that a robust qualitative analysis could not be undertaken due to the lack of audio-recordings (see *"Assessment Difficulties"* section of Appendix VIII), back translations of the qualitative responses were not done.

Unfortunately, the information recorded of the Primary and Secondary Informant qualitative sections was too limited to conduct a meaningful and informative analysis. Furthermore, a significant number of questions received no response, or the responses were not audio recorded; and the information that was documented generally lacked sufficient detail. This could have been due to either the respondents' lack of detail in

answering the questions or the interviewers' inability to capture everything. Because the information was not captured verbatim during this process, true qualitative analysis, was not possible. Although a full qualitative analysis could not be conducted, examples of life circumstances met by Young People are included in section 3.4.2 of Findings.

In the Key Informant interviews, questions requiring qualitative open-ended responses generated relatively brief but valuable information. An analysis and discussion of these responses is included in Section 3.4.1.

APPENDIX VII. OUTCOMES OF INTEREST

Based on the literature reviewed before the present Study was conducted, the following outcomes were hypothesized by the research team:

Affects of Violence within the Family

Youth with suicidal behaviors (either completed or attempted) are more likely to have experienced maltreatment and/or violence within the family that may be associated with cultural and religious practices, such as early or forced marriage, living with in-laws, or adapting to restrictive customs at an early age, and to have been exposed to more violent encounters such as abuse, rape, sexual harassment, and inhumane treatment, than youth in the Control group (Sisask et al., 2010; Hoven et al., 2010; Baca-Garcia, Perez-Rodriguez, Mann, & Oquendo, 2008; Lizardi et al., 2008).

Presence of Psychological Problems

Youth with suicidal behaviors (either completed or attempted) are more likely to have, or have had, psychiatric or substance use related problems, experiences of traumatic events, or to have been bullied, than youth in the Control group (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2008; Brunstein, Marrocco, Kleinman, Schonfeld, & Gould, 2007; Klomek et al., 2009; Grunebaum et al., 2010; Burke et al., 2010; Sher et al., 2007; Brent & Mann, 2006; Dumais et al., 2005; Brent & Melhem, 2008; Miranda et al., 2008; Wu et al., 2004; Gould et al., 2005; Sisask, Varnik, Kolves, Konstabel, & Wasserman, 2008; Bertolote, Fleischmann, De, & Wasserman, 2004; Brent et al., 2009).

Affects of Exposure to Suicide

Youth with suicidal behaviors (either completed or attempted) are more likely to have been exposed to suicide in the community or through media than youth in the Control group (Mittendorfer-Rutz & Wasserman, 2008; Mittendorfer-Rutz, Rasmussen, & Wasserman, 2008; Bertolote et al., 2010; Gould, Wallenstein, Kleinman, O'Carroll, & Mercy, 1990; Melhem et al., 2007; Szanto, Kalmar, Hendin, Rihmer, & Mann, 2007; Mann et al., 2005).

APPENDIX VIII. CONSIDERATIONS FOR FUTURE RESEARCH IN TAJIKISTAN

Each research study encounters unforeseen difficulties and limitations, especially international investigations conducted in developing countries where models for appropriate research activities are limited. The present Study encountered several difficulties and limitations documented here, as well as suggestions for overcoming such obstacles. These experiences will, hopefully, serve to improve future research in Tajikistan.

Psychosocial Autopsies

Psychosocial autopsies of completed suicides necessarily differ from most other interview-based studies in that the subjects of interest cannot directly be interviewed or observed. This presents unique methodological obstacles, e.g., it may be difficult for another individual to truly understand both the circumstances and mindset of the deceased person in the period prior to the suicide (Velting et al., 1998). The sleuthing process is in some ways akin to an actor's putting herself or himself in the shoes of the person. In some cases, respondents may engage in "search after meaning," which describes the attempt to discern the internal and external factors responsible for a suicide. In order to best overcome these limitations, so as to achieve the most complete and accurate assessment of the circumstances surrounding a suicide, such autopsies usually require multiple viewpoints (Shneidman, 2004). Multiple informants are asked to suggest a series of causal factors that may or may not have been identified before the death. In addition to these accounts, supplementary evidence including coroner's records, medical records, and psychiatric records offer a sufficiently well-rounded account of the event (Cavanagh et al., 2003). While the present Study benefited from the inclusion of the attempter sample, as the Young Person who attempted suicide was able to be interviewed, the vast majority of the respondents were Primary Informants who needed to step into the shoes of the Young Person to understand and make sense of the situation surrounding the suicide.

Assessment Difficulties

Interview Length: Conducting an assessment that examines a wide range of aspects of a person's life requires a rather lengthy interview, which can pose several difficulties, particularly in conducting the interview in a time convenient for the respondent. This was especially true considering the distances between interview sites and the time required for travel, as well as the time of year the interview was conducted. Many participating families were economically dependent on long hours of fieldwork during the summer months; while some homes were difficult to reach in winter. Although over 700 in-depth, face-to-face interviews were conducted for this Study in less than four months, time issues for the interview team, which was composed primarily of students, also caused conflicts with exam periods.

Qualitative Instrument: As stated in Appendix VI, the vast majority of Study participants refused audio-recording for the qualitative section of the interview, a

critical component of the qualitative analysis. While interviewers were trained to write the responses to each question, a very limited amount of information was actually written, further demonstrating the need for the audio recordings. Unfortunately, proper qualitative analysis is not possible when the information is already processed and rephrased by the person documenting the information.

Even when interviews were recorded, they involved translating the recorded information into English for analysis. Because different languages are used throughout Tajikistan, along with different dialects of these languages, it was also difficult to locate translators capable of translating each document from the recorded language into English.

Cross Cultural Challenges

Translations: All interview materials were compiled in English by Columbia University and then translated into Tajik, Uzbek, and Russian by translators provided by UNICEF. In order to verify that these interviews were accurately translated from the English version, the protocol outlined during the Inception Phase of the Study, called for all questionnaires and consenting scripts to be back-translated into English. However, due to unforeseen difficulties, this step of the process was not always completed as thoroughly as possible.

Local Input: Knowledgeable members of the community, such as this Study's Working Group, gave feedback about the Study design and questionnaire. In order to produce quality data, realistic timeframes for conducting interviews should be available, including buffer time for any unforeseen problems. A pilot Study should be conducted in future studies to test the questionnaire and methodology in the real-world environment, paying close attention to any unexpected culturally-influenced reactions to the content of the questionnaire and logistical constraints that may affect the timeline.

Closed Communities: Of the 16 Districts within Sughd in which interviews were conducted, Taboshar, in particular, posed an unforeseen difficulty due to its status as a "closed" community and subsequent restricted access of the research team. This initial restriction delayed the interview process in this District by over one month, as a request to approach the families in the District was sought from the Regional government. For future studies, delays and conflicts created by closed communities may be avoided through early contact, possibly including written contracts, between officials and the Study team.

Recruitment Issues

Reaching Families: Many homes were located in isolated villages far from the District center, accessible only by buses that operated only once or twice per day or by expensive taxis. In a few cases, especially in Khujand, families had a different address than the one recorded at the time of the suicide event necessitating the recruiters to search for their new home, often with the aid of the local mahalla.

Respondent Availability and Willingness to Participate: Many of the potential participants, especially during the summertime, were either out in the fields for many hours each day, or had departed Tajikistan to work in Russia or elsewhere. It was also common that family members were dealing with psychological or substance-abuse problems and thus were unable to devote themselves to a demanding interview, or that the father or husband of the Young Person was in jail. In some cases, the persons to be interviewed were hesitant to participate in the Study for understandable reasons regarding concerns about disclosure, especially in the case of female attempters who had just recently been married and the husband was unaware that the attempt had occurred.

Trust: Many families did not immediately trust the interviewers and needed repeated assurance of the Study's pledge of confidentiality. Most importantly, these interviews required participants to remember a painful event in their lives, and many were hesitant to talk about these difficult experiences with strangers.

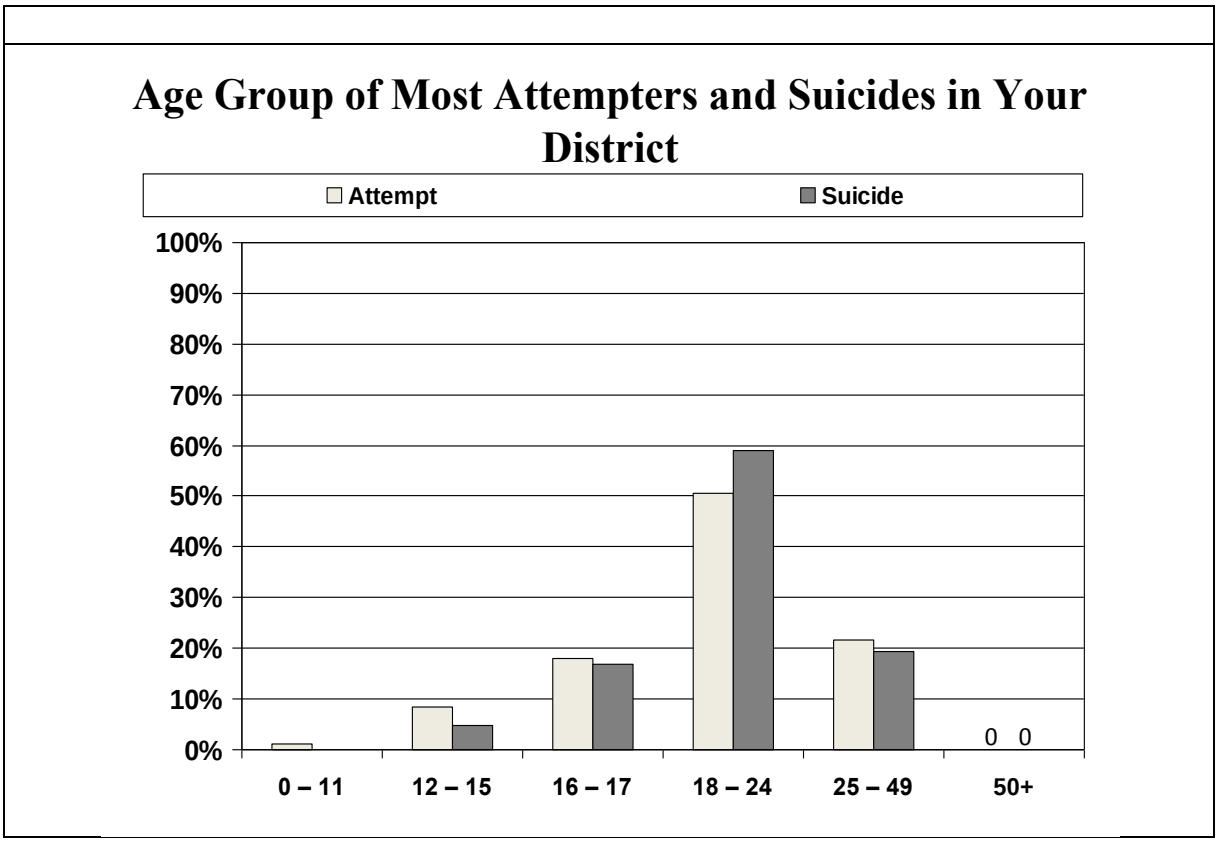
Inaccurately Identified Suicide Cases: Cases of suicide completions and suicide attempts were provided by the Ministry of Internal Affairs and the Women's Committee, which had received the information from District Prosecutors. During the course of the Study it was determined that four reported cases of completed suicide were actually cases of suicide attempt. Additionally, two identified cases of suicide attempt were, in fact, cases in which the suicide was completed. In every case, the misreporting of suicide cases was difficult to reconcile with the family being approached for recruitment. Importantly, this situation speaks to the need for a national suicide reporting system for Tajikistan.

Role of Mahalla: In this Study, recruitment was facilitated the local Mahalla. Any study in this area should consider such involvement.

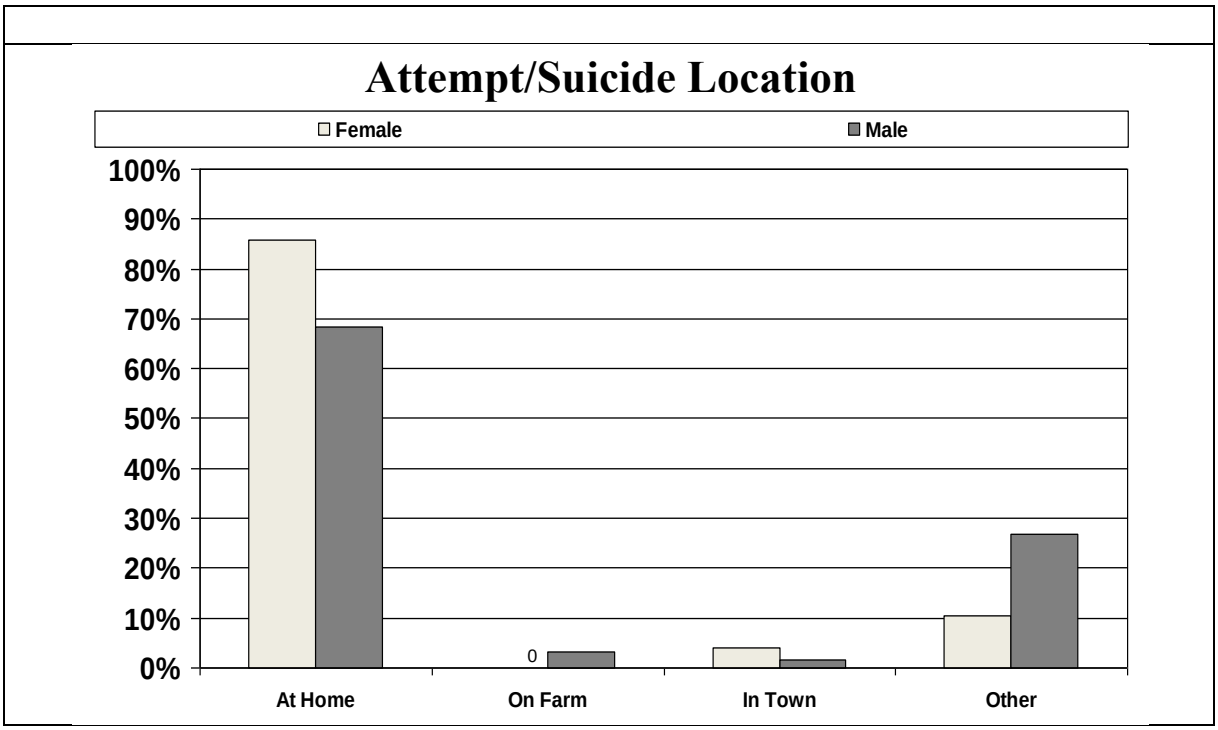
Under-Reporting of Suicide Cases

Although it would be impossible to know the true population of suicide attempters and completers in any society, the disproportionate number of completers to attempters (the Sughd Region official list of completers and attempters included many more completers than attempters, when the opposite is generally true) would indicate a significant under-reporting of attempts. This could have occurred because attempts can be "hidden" more easily than completions. Additionally, as a mostly Muslim country, where suicide is considered a sin by many, both suicide completions and attempts may be hidden more frequently than elsewhere.

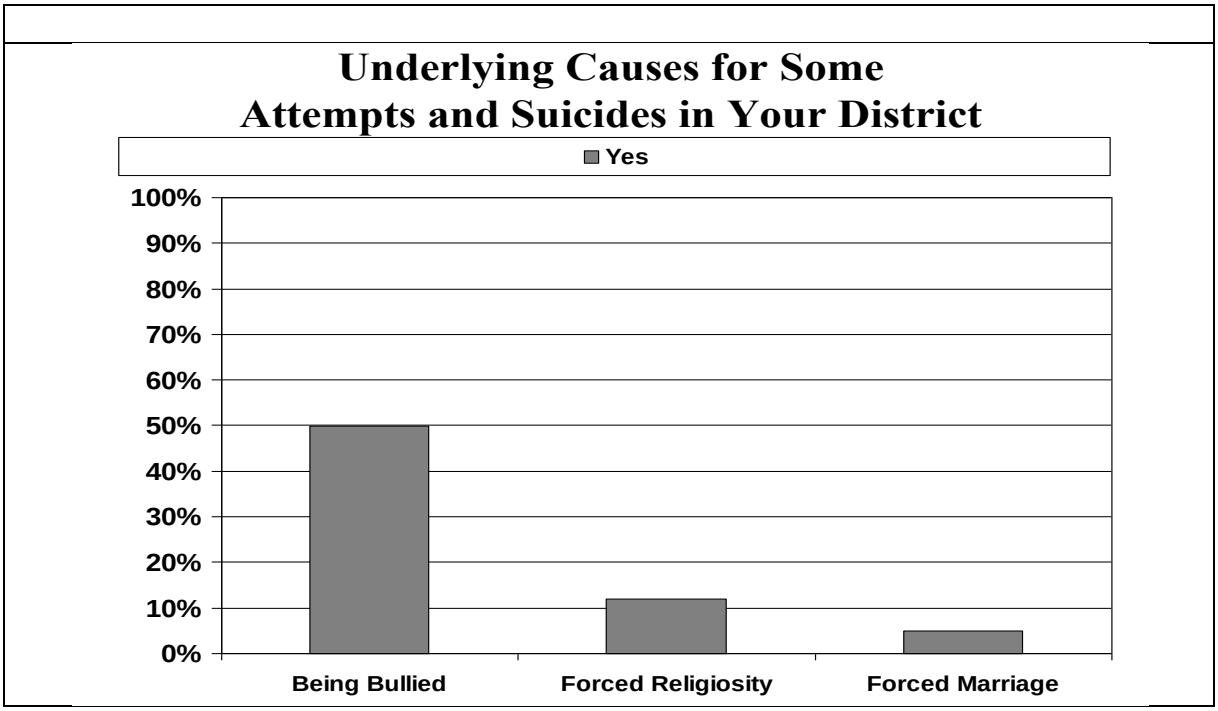
APPENDIX IX. KEY INFORMANT'S OPINION:



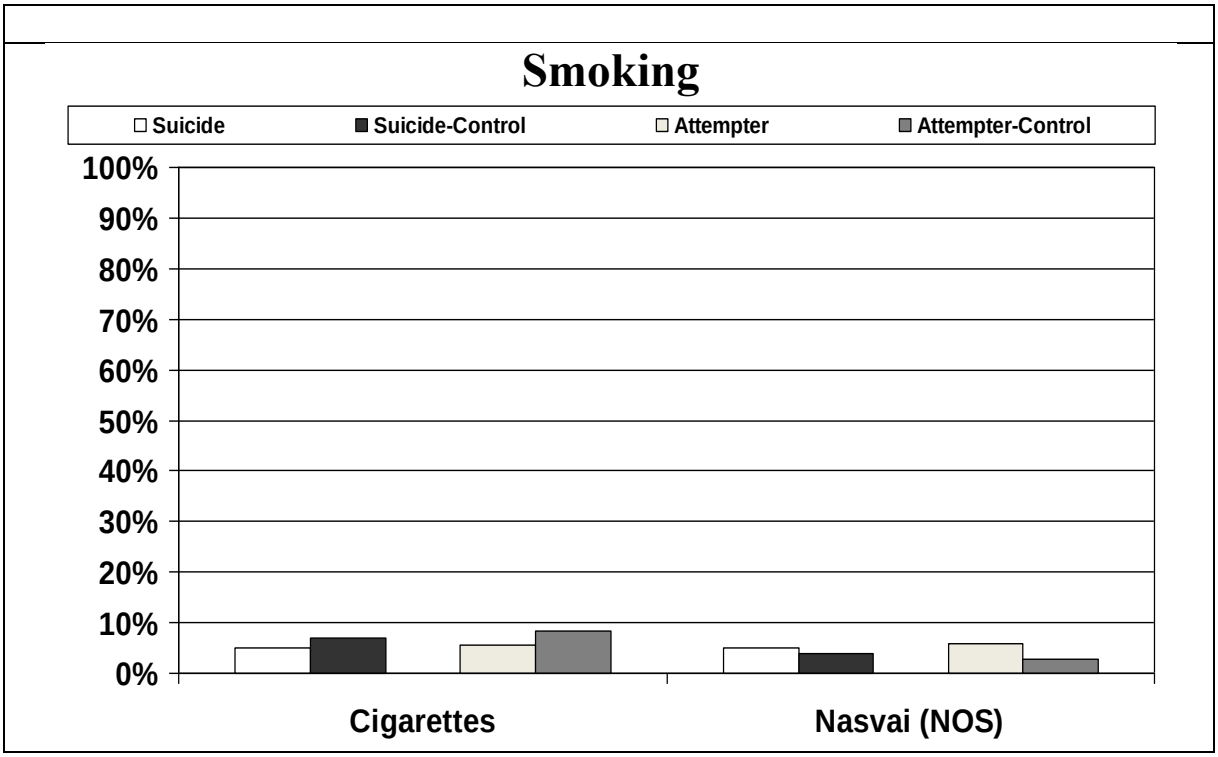
APPENDIX X



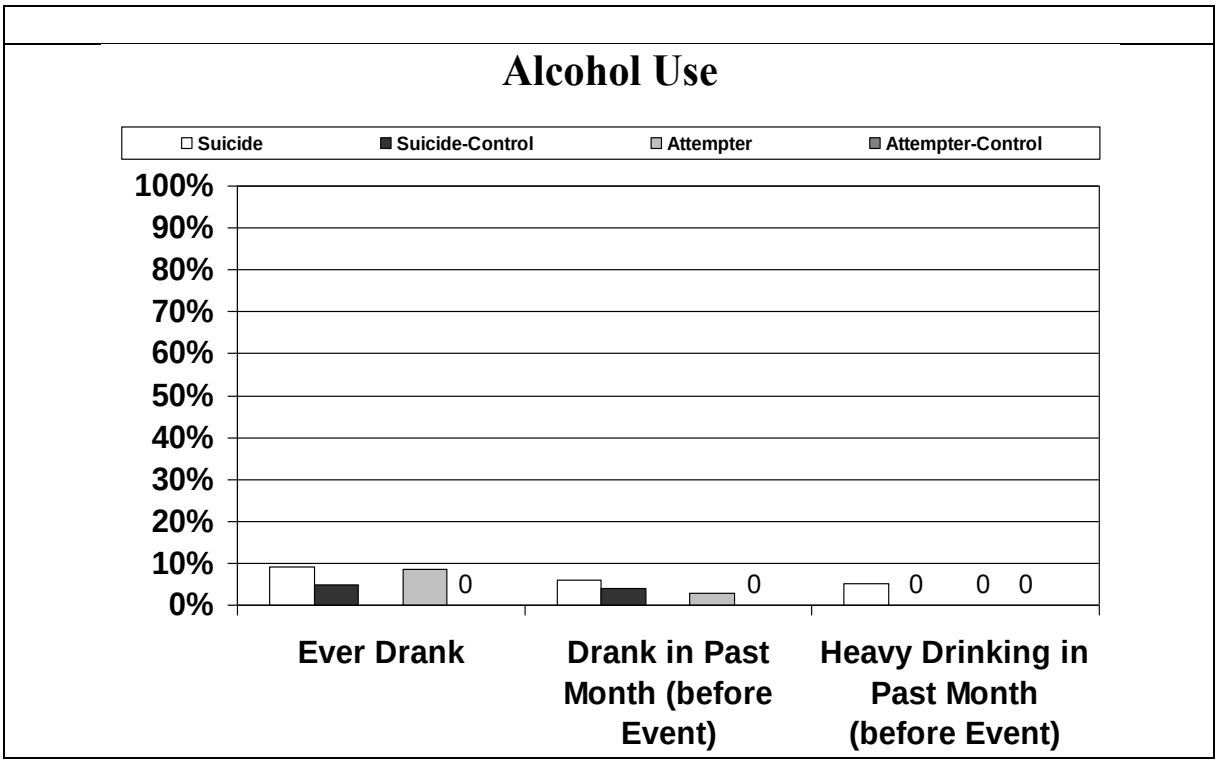
APPENDIX XI. KEY INFORMANT'S OPINION:



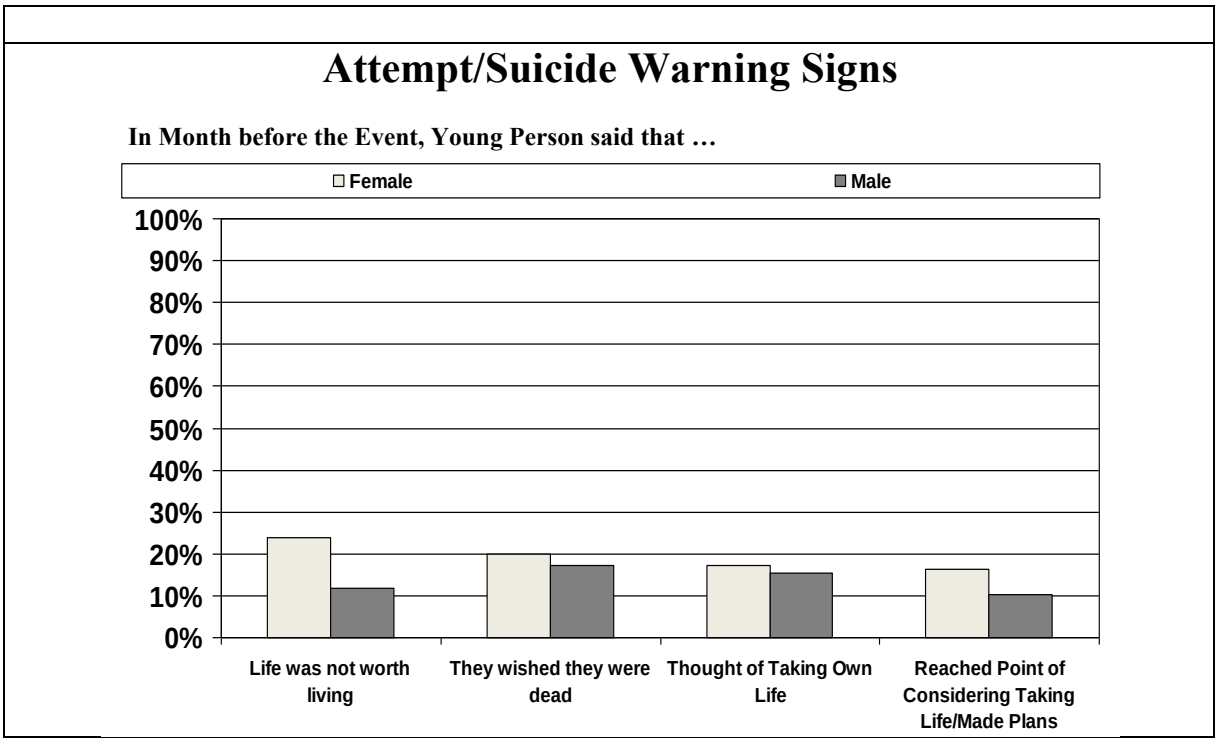
APPENDIX XII.



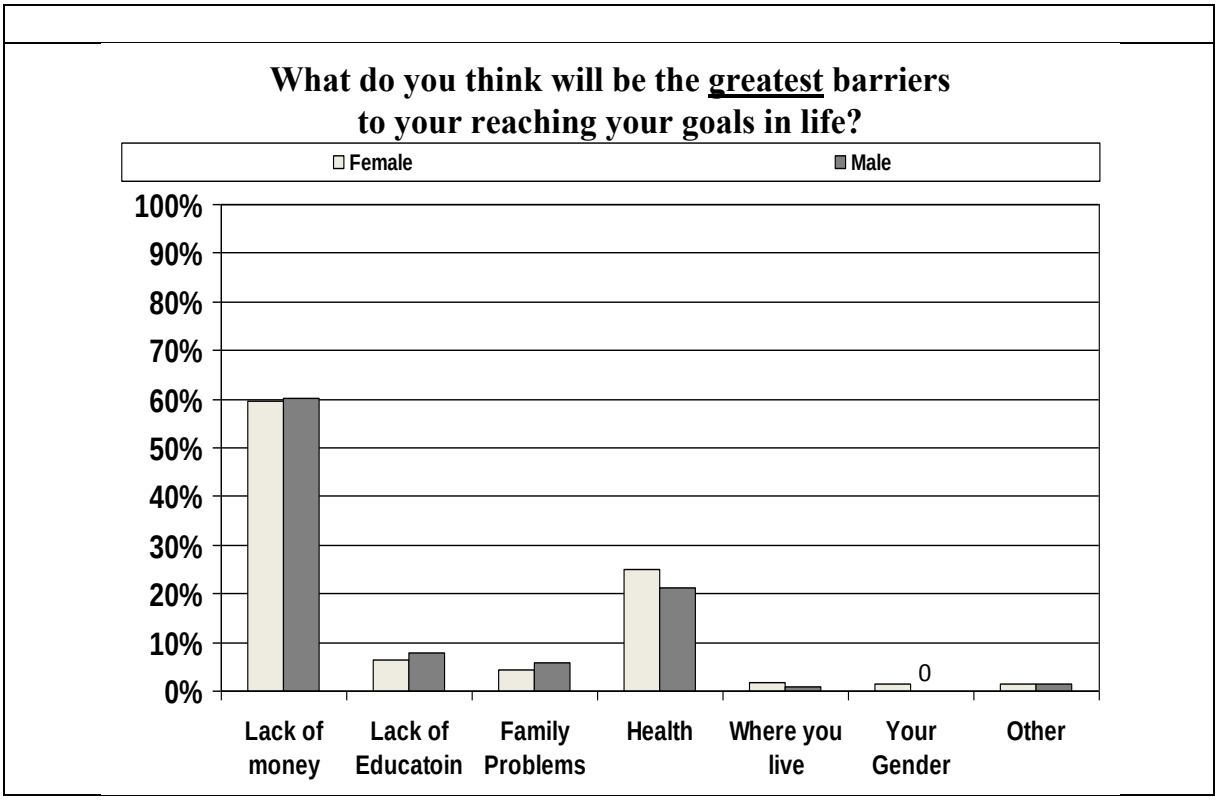
APPENDIX XIII.



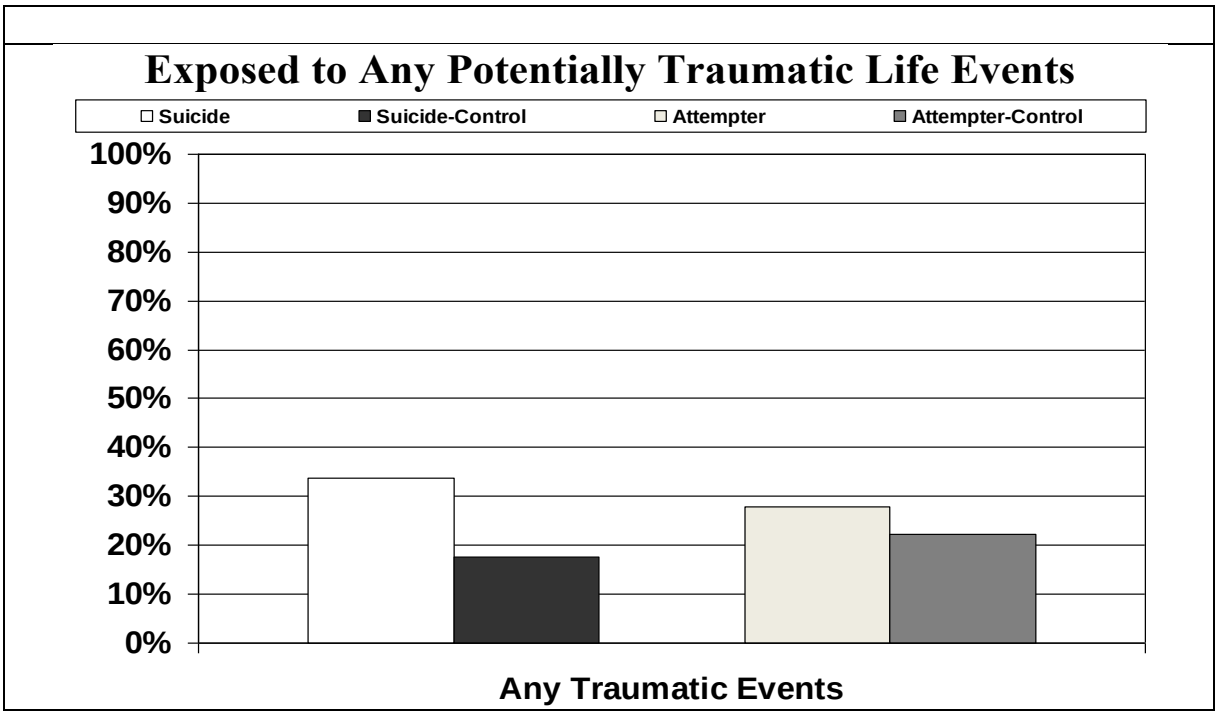
APPENDIX XIV.



APPENDIX XV.



APPENDIX XVI



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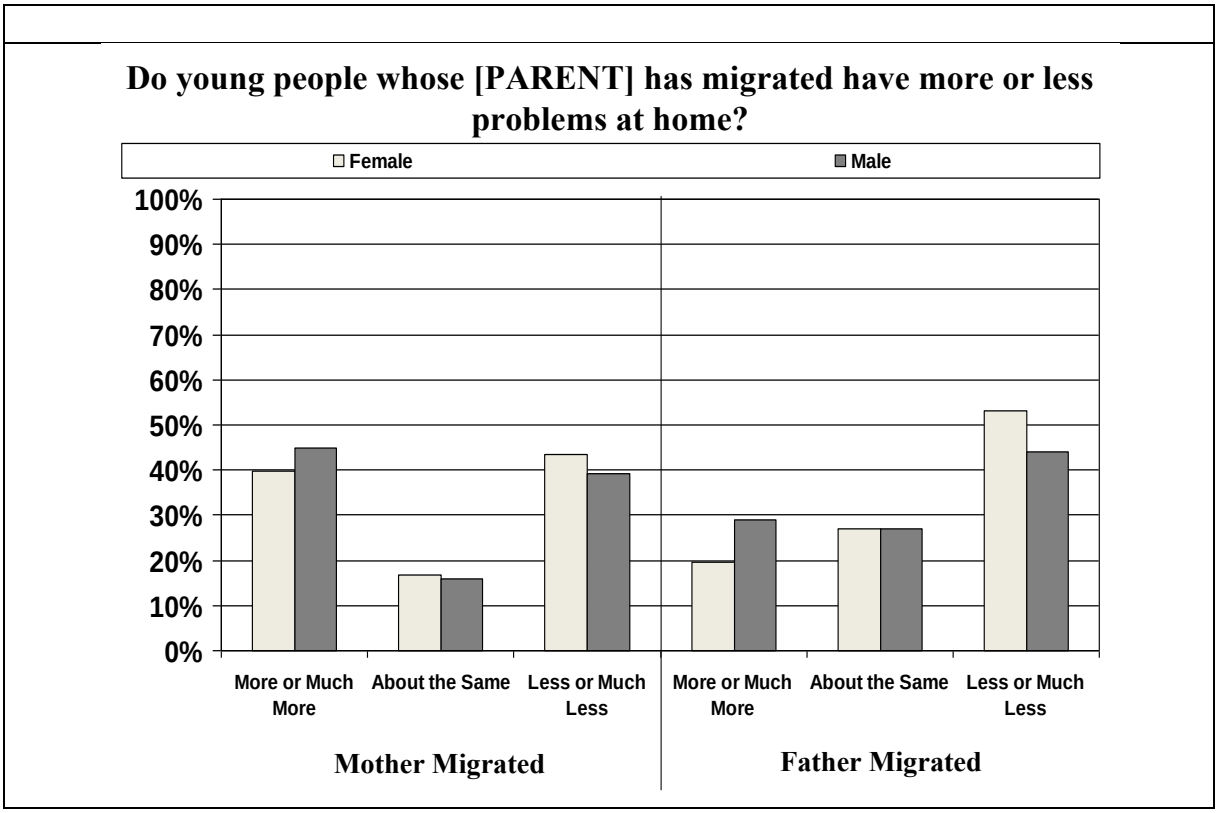

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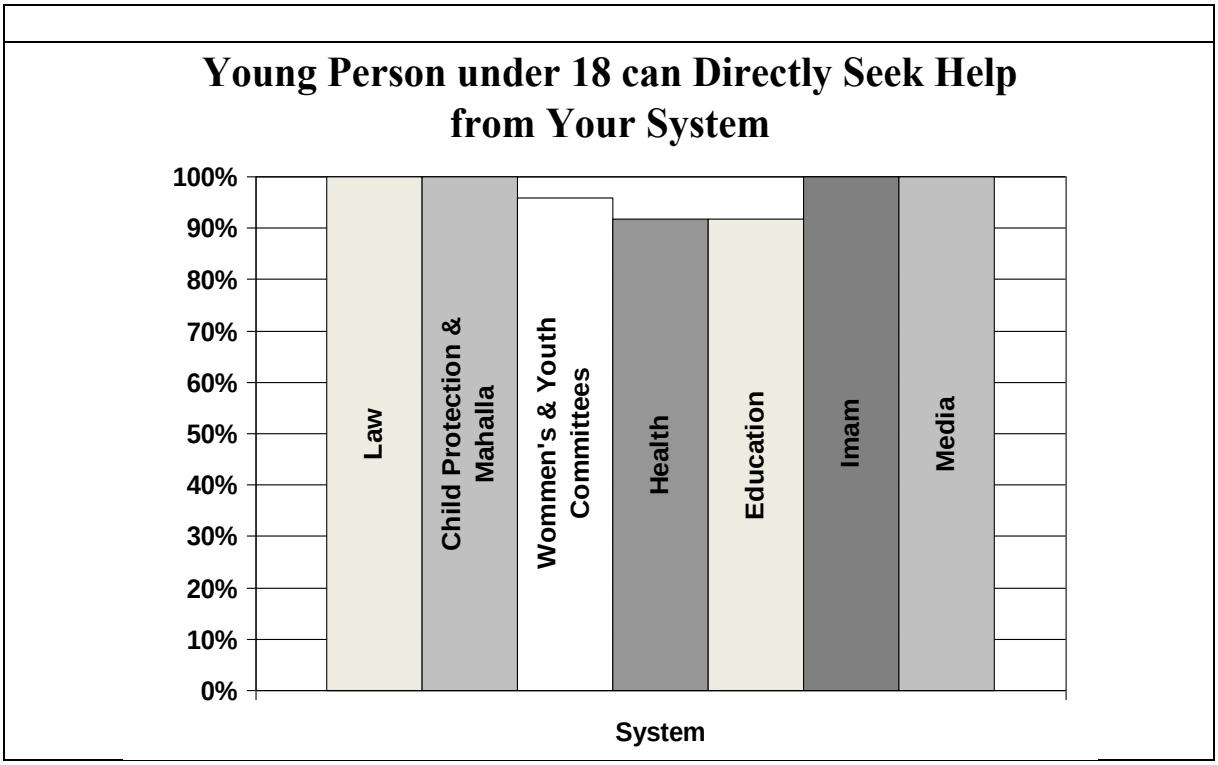

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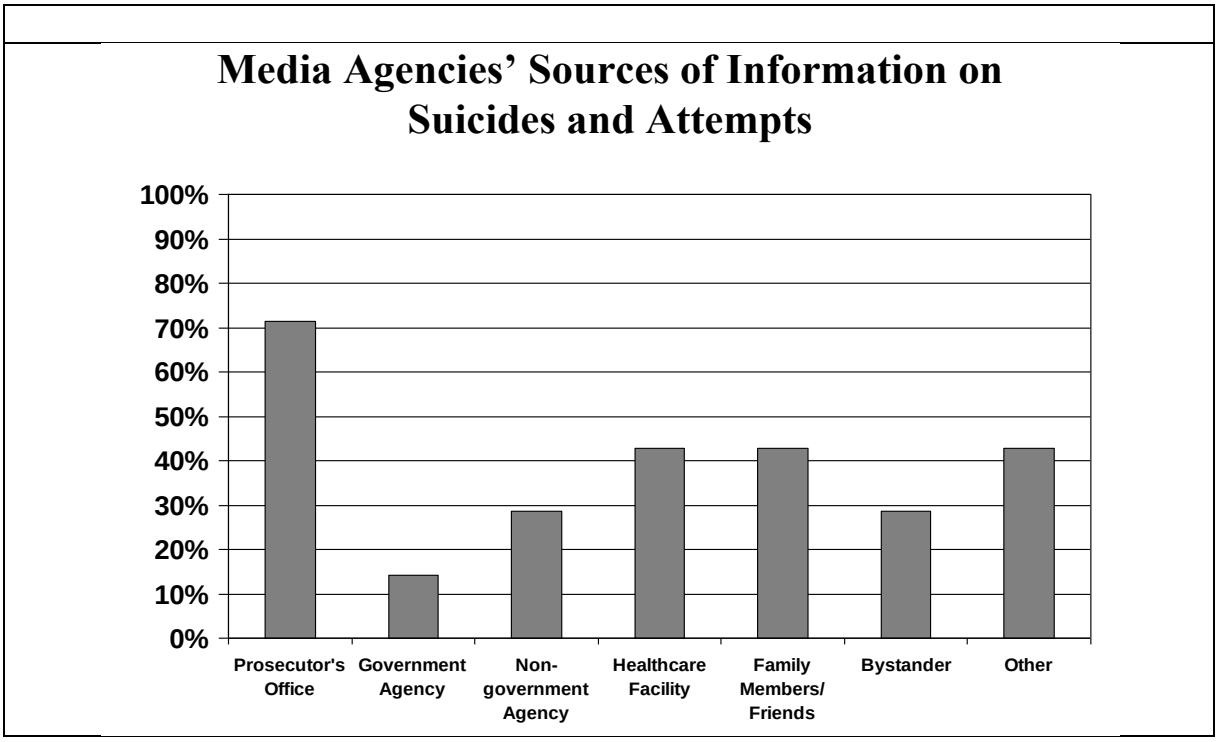

APPENDIX XX.