

**PSYCHIATRIC COMORBIDITY,
RELIGIOSITY AND SPIRITUALITY
IN PATIENTS
WITH CHRONIC PAIN SYNDROME**

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DECLARATION

I hereby declare that this dissertation titled **“Psychiatric comorbidity, religiosity and spirituality in patients with chronic pain syndrome”** is a bonafide work done by me under the guidance of **Dr. Deepa Braganza**, Professor of Psychiatry, Christian Medical College, Vellore. This work has not been submitted to any university in part or full.

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DECLARATION

I hereby declare that the investigations, which form the subject matter of this thesis, **“Psychiatric comorbidity, religiosity and spirituality in patients with chronic pain syndrome”**, were carried out by **Dr. K.S.Jyothi**, a bonafide trainee in Psychiatry, under my guidance. This has not been submitted to any university in part or in full.

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INTRODUCTION

Definition of health by world health organization states “Health is a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity” (WHO, 1946).

A major criticism for this is that, health cannot defined as a state at all, but must be seen as a process of continuous adjustment to the changing demands of living and of the changing meaning we give to life.

Severe or persistent pain is one of the most challenging experiences that a person can face and it affects health. Psychological impact of chronic pain on individual is important; many of them have adjustment disorders, major depression or anxiety. From the mid to late 1990s, structured interviews such as the Diagnostic Interview Schedule have been used to ascertain the presence of formal psychiatric diagnosis in chronic pain patients. (Francis JK *et al*, 2002).

In a state of chronic pain how people give meaning to spirituality and religion is an area relatively unexplored by research. Despite claim that religious or spiritual belief is conducive to better health (Levin *et al*, 1987) spiritual belief are rarely considered in psychological or medical publications (Larson *et al*; 1986, Craig *et al*, 1998). Usually, only the presence or absence of religious practice is considered (Sheril & Larson, 1998; Pressman *et al*, 1990). A narrow use of the term religious has led to a failure to appreciate the broader metaphysical understanding of the word spiritual and the presumption that, if someone does not profess a recognized religious faith, they have no spiritual discernment or need (Speck *et al*, 1988).

Religion pertains to the outward practice of a spiritual understanding and /or the framework for a system of belief, values, and codes of conducts or rituals (King *et al* 1995). The term spiritual can be taken broadly to mean a person's belief in a power outside of his or her own existence. Some people may use the term god; others are less specific (King *et al* 1995).

Studies related to psychological effects of pain in an Indian context are scarce. Western studies show that chronic pain is a state of continuous distress that causes psychiatric morbidity. Identifying these psychiatric morbidities and treating them are important. Evaluating the spiritual and religious beliefs will provide a wider understanding of the client's experience, and will help in devising coping strategies.

REVIEW OF LITERATURE

'An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage'. This is the definition of pain accepted by the International Association for the Study of Pain (IASP) and it is a modification of Merskey's original definition. The striking characteristic of this definition is that it does not tie the experience of pain to a stimulus, thus making pain a wholly subjective issue. It is for the individual who has the experience to determine whether pain is present or not. This ultimate reliance on subjective self-report makes pain one of the most tantalising and challenging of all symptoms requiring consideration (Robert GL, 1996).

Measurement

Unlike so many other symptoms, for which a correlate can be found on physical examination, pain can frequently be experienced without obvious physical signs. Acute, severe pain may be accompanied by autonomic changes, but there is no reliable way of gauging the severity, or even the presence, of pain by physical examination or physiological measurement. As a consequence, all of the useful measures of pain are ways of formalising and quantifying the person's subjective description. These start with simple methods of quantifying severity, as in the variety of 'box scales' and visual analogue measures, which are simple to use and can monitor change over time for the same individual (Stong J *et al*, 1991). A simple measure of intensity can be usefully complemented with an adjectival description, which is formalised in the McGill Pain Questionnaire (Melzack, 1975). Research on this instrument suggests that there may be a different significance attached to words that are sensory descriptors, as opposed to words that have 'evaluative' or 'affective' connotations (Readind A *et al*, 1983). Another

approach that is useful clinically has been to use body drawings that enable the patient to show the sites and areas of the body where pain is experienced (Margoles M *et al*, 1983). A combination of a measure of intensity, an adjectival description, and a pain drawing are suggested as a useful set of basic data by which the subjective experience of pain can be measured.

The psychological effects of pain

Acute pain is nearly always a cause for anxiety and avoidance, as befits its function as a warning mechanism. Children learn to avoid stimuli they associate with pain, as do adults. Physiotherapists are very aware of this issue when they engage patients in movement and remobilisation after injury, whether accidental or surgical. This natural and expected response is a potent cause of continuing pain and disability. Many people with chronic musculoskeletal pain avoid activity they believe will aggravate their pain (Fordyce 1982). The result is deconditioning, loss of fitness, loss of confidence, and increasing disability (Bortz *et al*, 1984). Most enigmatic of all pain syndromes is the reflex sympathetic dystrophy (complex regional pain syndrome). The avoidance of movement and stimulation may be central to the pathophysiology of the disorder. Chronic pain is associated with a range of psychosocial problems that have been described as part of the 'chronic pain syndrome (Black *Ret al*, 1975). Arguments continue about the relative importance of psychosocial factors that may sensitise patients to the development of a chronic pain syndrome, versus the psychosocial sequelae of the pain itself. Patients describe changes in relationships with others and with doctors, a sense of alienation within the family, problems with depression and anger, and a loss of bodily integrity and of a sense of self. Pain is experienced as an added burden to the normal demands of living, which saps energy and often cannot be

talked about because others have grown tired of listening. Some patients reach the extremes of helplessness, hopelessness, and suicide (James F R *et al*, 1991).

Psychiatric disorders in chronic pain

Studies investigating the presenting symptoms of patients attending both medical and psychiatric outpatient clinics have found that pain is a frequent presenting complaint in both these groups of patients (Devine R *et al*, 1975). Pain, therefore, is as likely to be a problem for people with psychiatric disorders as it is for those with general medical problems (Dalaplaine *et al*, 1982). There are now a number of published studies that have looked at the psychiatric diagnoses in pain clinic patients. These data have to be interpreted cautiously, because of the selection factors that make it likely that patients who reach pain clinics are likely to be experiencing more psychosocial distress than those seen in primary care (Merskey H *et al*, 1989). The general findings are that a majority of patients with chronic pain have an intercurrent psychiatric disorder-commonly a mood disorder-with major depression or dysthymic disorder; an anxiety disorder with generalised anxiety, panic disorder, or phobic anxiety; an adjustment disorder related to their pain problem or one of the somatoform disorders, pain disorders, or somatisation disorder. The possibility of an underlying dementia must be borne in mind, particularly in the older age group, and substance use and abuse are, not infrequently, complicating factors in the presentation (Large R *et al*, 1980). The important point about these psychiatric presentations is that they seldom explain the pain fully and most patients have both medical and psychosocial factors contributing to their pain condition. Table 1 shows the distribution of psychiatric diagnoses in a consecutive series of 50 patients, seen at the Auckland Hospital Pain Clinic, in whom independent assessors using DSM-III criteria validated the diagnoses.

Table I: Clinical psychiatric diagnoses among 50 consecutive patients with chronic pain using DSM-III criteria

Diagnosis (%o)	Frequency
Dysthymic disorder (ie low grade chronic depression)	28
Major depression	8
Psychogenic pain disorder	8
Somatisation disorder	8
Anxiety disorders	8
Psychological factors affecting physical condition	34
No psychiatric diagnosis	6

Only one of these patients (2%) did not have a clear physical diagnosis (Large R *et al*, 1986). Reick *et al* (1883) reported that 98% of chronic ‘pain patients reviewed by a university Pain Board had an Axis I disorder, and 37 % had an Axis II disorder. Atkinson *et al* (1991) reported a naturalistic study of pain and psychiatric co morbidity. In this study they evaluated 100 consecutive low back ache patients. Life time and 6 month rates of major depression were 32% and 22%, respectively (vs. 16% and 6% for control). More importantly it was found that after onset of pain, patients had a relative risk of 9.0 for developing major depression. The life time alcohol abuse/dependence rate of chronic pain patients was 65%, compared with 39% for controls. The rates of generalised anxiety, panic and OCDs were also comparatively high for pain patients, but failed to reach significance in analysis.

Another study conducted by Edward A et al (2002), evaluated 40 consecutive chronic pain patients for psychiatric diagnosis and treatment response. 70% of patients had some Axis I disorder, 19% had a formal Axis II disorder and 54% had either Axis II traits or disorder. Overall 45% of patients improved with participation in a standard pain management programme. For those without an Axis I or Axis II disorder, 86% improved. Of those with Axis I disorder, only 32% improved and of those with Axis II disorder, only 40% improved. 52% of those without substance abuse benefited, while only 27% of those with substance abuse had improved at follow up.

In a population-based study conducted by Sidney Benjamin et al (2000), 1,953 subjects (75% of a random sample of individual's age 18–65 years) completed a questionnaire that included a pain assessment and the 12-item General Health Questionnaire (GHQ-12). Of 710 subjects scoring >1 on the GHQ-12, 301 were assessed further using a structured psychiatric interview and detailed assessment of medical records to identify cases of mental disorder, in accordance with criteria of the 10th edition of the International Classification of Diseases. The overall population prevalence of mental illness was 11.9%. The odds of having a mental disorder for subjects with versus those without CWP (chronic widespread pain) were 3.18 (95% confidence interval 1.97– 5.11). Most subjects with mental disorders were diagnosed as having mood and anxiety disorders. Only 3 cases of somatoform disorders were identified, and all were associated with pain. This study, although unable to demonstrate a cause-and-effect relationship, showed that 16.9% of those with CWP were estimated to have a psychiatric diagnosis, suggesting that these disorders should be identified and treated.

Whether all the psychiatric diagnoses made by these studies are actually psychiatric disorders or understandable distress associated with adversities like chronic

pain is an ongoing controversy. These uncertainties largely revolve around differences between medical and sociological approaches to psychological distress. The medical approach argues that such distress reflects an underlying illness, which merits treatment. The sociological perspective argues that it is the consequence of a failure to respond adaptively to social challenge. The former focuses on diagnosis and the provision of treatment, the latter on understanding and clarifying patients' dilemmas (Hugh M *et al*, 2000).

Only a part of the identified cases can be expected to be suffering from a definite depressive illness, or anxiety disorder that undeniably falls into conventional conceptions of "illness". Most of the rest may be distressed. It is not always accurate and sometimes harmful to assume that all of them are cases. We would gain much from clarifying this area. Patients with ill defined psychiatric problems can have a poor prognosis. (Lloyd KR *et al*, 1996).

There is increasing evidence that many of the clearly defined neurotic syndromes - panic attacks, social phobia, obsessive compulsive disorder, and agoraphobia—are best construed as discrete disorders and treated accordingly, with appropriate medication or cognitive behavioural psychotherapy (Clark DM& Fairburn CG, 1996). This can happen only if the neurotic syndrome is identified as a primary cause of distress and disability, rather than a consequence of adversity and personal difficulties. Conversely, people with personal and social difficulties who might benefit from counselling are ill served if they are misunderstood and encouraged to view their difficulties as disease meriting treatment. Ill directed treatment is a potent cause of costly and disabling abnormal illness behaviour and may contribute to long term morbidity (Woodward RV *et al*, 1995).

The new DSM-IV classification uses a category of 'pain disorder' for patients who are preoccupied with pain, but in whom there is no clear physical explanation. This is a dualistic diagnosis and it is debatable whether this is a useful way to characterise pain that lacks obvious physical pathology. Dualistic thinking is dangerous to pain patients, because it leads to the dual hazards of the patient being dismissed as a 'crazy' obsessive, or having their psychosocial needs totally ignored whilst clinicians enthusiastically try to cut, stab, or poison the pain out of them. We need to develop modes of management whereby proper attention can be paid to physical and psychosocial factors simultaneously (Large RG, 1996).

Psychosocial precursors to pain

George Engel published an influential article on the 'pain prone patient' that suggested that many patients with chronic pain had a pattern of defeat, punishment, and emotional deprivation in early life, that continued on into unsatisfactory relationships in adult life, often with continuing abuse and defeat. Another theory refers to the concept of "pain proneness" as an explanation of chronic pain. Systematic research is difficult here, because of the problems inherent in unravelling subtle psychodynamic variables from complex life histories. There are, however, some studies that lend credence to the idea that life's disadvantages can predispose some people to a chronic pain problem. In recent years, attention has focused on the frequency of past sexual abuse in patients with chronic pain and for some groups, particularly women with chronic pelvic pain, the incidence is very high indeed (Walker E *et al*, 1988). The linking of past sexual abuse to any medical or psychiatric disorder is fraught with difficulty as one tries to distinguish the factor of sexual abuse from other social disadvantage, but in the case of pain there does seem to be some face validity to the idea that past painful experiences could sensitise the individual to later pain problems (Hudson J *et al*, 1995). One way of

understanding these connections is to postulate some process of sensitisation that may follow traumatic and painful experiences. This sensitisation could be psychological or neurophysiological or both, and there are parallels here in current thinking about possible 'kindling' processes in posttraumatic stress disorder and in bipolar mood disorders (Large R *et al*, 1990).

Another possibility might be that such experiences determine the coping strategies people develop and that the transition from acute pain to a chronic pain syndrome might be determined by the adaptiveness of the individual's defences or coping strategies. Poor prognosis has been linked to a tendency to 'catastrophise'. This is a common attitude in patients with chronic pain and depression, in whom there is a tendency to see the worst possibility in any given situation. This characteristic, and a tendency toward a low sense of 'self efficacy', has been shown to predict poor outcome in pain management programme evaluations (Turner J *et al*, 1991).

Coping and chronic pain

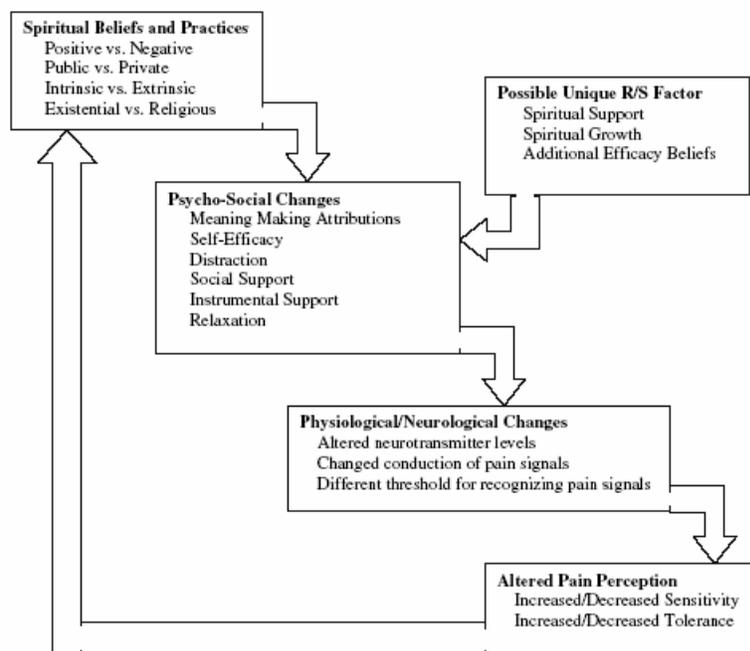
Coping is a very topical issue in the current psychological literature on pain. Pain can be construed as a stressor, and coping as the strategies used by people to manage in the face of the stressor. This is a complex process and involves some appraisal and evaluation of the threat, in addition to the mental and physical attempts made to deal with the threat, as it is perceived. People who appear to be adapted to 'living with' their pain problem seem to emphasise the importance of acceptance, of using a wide range of mental and physical strategies, of having flexible strategies, and of being able to hope for a better future. Despite the high value placed by professionals on coping, those people with pain who define themselves as copers tend to regard this as something of a 'necessary evil' and would far rather be free of their pain. Health care professionals need to bear in mind, therefore, that even individuals who appear to be

managing their pain well may be longing for the day when their pain will stop (Strong *et al*, J 1995).

Coping and religiosity

Another area of research is how far religiosity and spirituality(R/S) can be useful for coping in chronically stressful situations. Unfortunately, little empirical research has explored the specific ways in which R/S coping may directly or indirectly impact chronic pain. Hypothetically Amy B has proposed six different ways in which R/S practices and coping strategies may help individuals to manage the experience of pain and suffering (Amy B *et al*, 2007)

Figure: Potential pathways between spirituality and pain.



First, individuals may make religious attributions in order to create meaning and purpose for their experience of chronic pain. Placing the experience of illness and pain in a religious framework could provide comfort and encouragement (e.g., this event will make me stronger and bring me closer to God). The opposite can also be true:

forming negative R/S attributions (e.g., God has abandoned me) can lead to demoralization and negative health outcomes (Pargament *et al.* 2000; Pargament *et al.*, 2001).

A second way proposed is by increasing feelings of control and self-efficacy; through forming specific R/S-based attributions about one's ability to effectively manage a particular situation (Carver & Harris, 2000). Self-efficacy appears to be influential in improving adaptation to pain (Lefebvre *et al.*, 1999), increasing pain tolerance (Keefe *et al.* 1997a, b), improving pain-related disability (Ferguson 1980), and encouraging more active coping techniques (Keefe *et al.* 1997).

Third, R/S coping techniques, such as daily prayer or reading spiritual texts, may serve as a distraction from pain, thus allowing individuals to tolerate pain for longer periods of time (Alexander *et al.* 1991). One of the potential purposes of R/S coping is the separation of the mind from immediate (or daily) stressors. Moreover, R/S coping may provide the copier with a more positive source of distraction than secular coping techniques.

Fourth, actively participating in a religious community or church may provide many opportunities for instrumental, social, or spiritual support, as well as giving support to others. Level of involvement in religious community has been shown to be the most powerful predictor of both mental and physical health outcomes (Powell *et al.*, 2003; Krause 2006).

Fifth, R/S practices such as meditation and prayer may create feelings of relaxation that directly alter the physiological experience of pain. Indeed, there is growing interest in the possibility that interventions that encourage positive R/S coping might be beneficial in managing pain. Carlson *et al.* (1988) compared relaxation techniques to R/S meditation. After the 2 week intervention, the researchers found that

students who were assigned to the devotional meditation condition reported less anxiety and anger than those who were assigned to the relaxation group (Carlson *et al*, 1988).

Finally, there may be something unique about R/S that directly or indirectly influences the experience of pain. Spiritual support stems from a positive approach to God and a feeling that God is a benevolent higher power. It involves feeling loved and supported by that higher power (Astin 1997, Pargament *et al*, 2004). If individuals feel loved and supported by a higher power, they may be less likely to “give up” on a task and continue active coping with pain, potentially increasing pain tolerance.

Research has revealed that some types of R/S coping are adaptive (i.e., positive religious coping) while other types are maladaptive (i.e., negative religious coping) (Pargament, 1997). Positive R/S coping includes collaborative problem solving with God, helping others in need, and seeking spiritual support from the community and a higher power. Negative R/S coping includes deferring all responsibility to God, feeling abandoned by God, and blaming God for difficulties.

Religiousness, spirituality and mental health

Although some scholars had predicted that religiosity would tend to disappear or sharply decrease throughout the twentieth century that has not been the case, especially in the American Continent. According to a 2005 US poll (Newsweek, 2005) 88% of Americans in the United States describe themselves as religious and/or spiritual. Only 7% said that spirituality is not important at all in their daily life. In the Brazilian 2000 Census, 4 only 7% declared themselves as “religious less”. Even this 7% probably included many people with some expression of spirituality but not related to an organized religion. However, despite the large importance of religion and spirituality for the population, until recently, religion and spirituality were not included in the training curriculum of mental health professionals and were set aside in clinical

practice. Thousands of papers have been published on the relationship of religion and health in the medical and psychological academic literature. Indeed, many medical schools have integrated spirituality into the curriculum. In the US, 84 out of 126 accredited medical schools are offering courses on spirituality in medicine (Fortin AH *et al*, 2005). However, if we understand prejudice as a “preconceived opinion” or an “opinion formed without just grounds or before sufficient knowledge”, we can see that the field studying the relationship between religion and health is undoubtedly full of prejudice. In that case, the prejudice may be for or against religion. The field has seen extremes between naïve acceptances of all claims that “religion is good” to a radical scepticism that rejects even good scientific evidence. In studying the relationship of spirituality with health, it is not necessary to assume any position about the ontological reality of God or the spiritual realm. We can test whether measures of religious beliefs or behaviours are associated with health outcomes, regardless if we believe in the beliefs under investigation (Levin J *et al*, 2005).

The definitions of religiosity and spirituality have been a perennial source of controversy. According to Betson & Ventis, as early as in 1912, the psychologist James Leuba detected 48 distinct definitions of religion. Koenig defines the following terms (Koenig *et al*, 2001).

1) Religion: is an organized system of beliefs, practices, rituals, and symbols designed to facilitate closeness to the sacred or transcendent (God, higher power, or ultimate truth/reality).

2) Spirituality: is the personal quest for understanding answers to the ultimate questions about life, about meaning, and about relationship with the sacred or transcendent, which may (or may not) lead to or arise from the development of religious rituals and the formation of a community

Historical background

The idea that religion and psychiatry have always been in conflict is still very prevalent. Today, most people believe that in the medieval ages most mental disorders were considered as witchcraft or demonic possession. After all, one of the foundational myths of psychiatry is that brave and enlightened psychiatrists liberated mankind from this religious superstition (Vandermeersch *et al*, 2001). However, Vandermeersch states that medical psychiatry's birth at the time of Pinel did not conflict with religion; "The alleged opposition between enlightened medicine and obscurantist theology as well as between the humanitarian physician and the cruel churchman are myths". The first hospital designed specifically to care for the mentally ill was established in Spain in 1409 under the guidance of priests. Religious groups have founded or supported many psychiatric hospitals in the US and Brazil. However, the care provided to the mentally ill by the Church was not always compassionate. The Inquisition killed many mentally ill people under the accusation of being witches during the first two centuries of the Renaissance period in Western Europe.

At the end of the 19th century the psychiatric community raised negative attitudes toward religion, which became prominent during the 20th century. In line with some antireligious intellectuals who considered religiosity a primitive and negative social or intellectual state, many physicians such as Charcot and Henry Maudsley developed critiques and attempted to pathologize religious experiences (Moreira A *et al*, 2005). Sigmund Freud adopted a strong anti-religious stance that had a large influence in the medical and psychological community. In *Future of an Illusion* (1927), he proposed the irrational and neurotic influences of religion on the human psyche. In 1930, Freud wrote that religion results in "depressing the value of life and distorting the picture of the real world in a delusional manner – which presupposes an intimidation of

intelligence”. Although there were some psychiatrists with a positive view of religiosity, the most well known example being Carl G. Jung, negative appraisal was dominant. As late as the 1980s, the psychologist Albert Ellis, the founder of Rational-Emotive Therapy, who had a large influence over cognitive-behavioural psychotherapy, stated that religiosity “is in many respects equivalent to irrational thinking and emotional disturbance”, so “the elegant therapeutic solution to emotional problems is to be quite unreligious, the less religious they (people) are, the more emotionally healthy they will tend to be” (Ellis 1980). However, almost all statements about the impact of religiosity/spirituality in mental health were not based on empirical research, but on clinical experience and personal opinions. One factor that may have contributed to this negative attitude is what Lukoff et al noted as the “religiosity gap” between mental health professionals and patients (Lukoff *et al*, 1992). Psychiatrists and psychologists tend to be less religious than the general population, and do not receive adequate training to deal with religious questions in clinical practice. So, they usually have difficulties in understanding and empathizing with patients’ religious beliefs and behaviour. If the main source of psychiatrists’ contact with religious experiences is through the report of their patients, naturally, those are biased sources. Although psychiatric patients may use religious coping in a healthy way (Koenig *et al*, 1992) they may also express a depressive, psychotic or anxious point of view of their religions. Those perspectives, farther than not reflecting in a fairly way the religious experiences of the general population, were seen as confirmations of the pathological nature of religiosity. Only in the last two decades has rigorous scientific research been done and published in mainstream medical and psychological journals. David B. Larson, Jeffrey S. Levin and Harold G. Koenig were some of the pioneers who opened a new stage for scientific investigation of religion/spirituality in the medical field. They conducted a

series of studies looking at the relationship between religious involvement and mental health in mature adults, either living in the community or hospitalized with medical illness. Since then, many other researchers have produced a large body of research that has usually, but not always, shown a positive association between religious involvement and mental health. Currently, there is a trend favouring a rapprochement of religion and psychiatry to help mental health professionals develop skills to understand better the religious factors influencing health and to provide a more compassionate and comprehensive mental health care (Larson DB *et al*, 1997).

Evidence of the impact of religiosity on mental health

A large part of the research involving religion and health did not have religion as the main focus of the study. Because of that, frequently, the measurement of religiosity involved only a single question, often simply religious denomination. However, the religious affiliation tells us little about what is religiosity and how important it is in someone's life. On account of that, studies using only a subject's religious affiliation have provided, with few exceptions, many inconsistent and contradictory findings (Flannelly KJ *et al*, 2004). The strongest and most consistent results have not been found between different religious denominations, but by comparing different degrees of religious involvement (from a non-religious to a deeply religious person). Church attendance, i.e. how often someone attends religious meetings, is one of the most widely used questions to investigate the level of religious involvement. Other questions are non-organizational religiosity (time spent in private religious activities such as prayer, meditation, and reading religious texts) and subjective religiosity (the importance of the religion in someone's life). However, caution is necessary in interpreting the relationship between private religious practices and health in cross-sectional studies. People may pray more while they are sick or

under stressful situations. Turning to religion when sick may result in a spurious positive association between religiousness and poor health. Conversely, a poor health status could decrease the capacity to attend a religious meeting, in that way creating another bias on the association between religiousness and health. Finally, a very important dimension of religiosity is religious commitment, which reflects the influence that religious beliefs have on a person's decisions and lifestyle. According to the Harvard psychologist Gordon Allport a persons' religious orientation may be intrinsic and/or extrinsic (Allport, 1987).

Extrinsic Orientation: Persons with this orientation are disposed to use religion for their own ends. Religion is held because it serves other, more ultimate interests. They may find religion useful in a variety of ways – to provide security and solace, sociability and distraction, status and self justification. Their involvement in religion is to meet their more primary needs.

Intrinsic Orientation: Persons with this orientation find their master motive in religion. Other needs, strong as they may be, are regarded as of less ultimate significance, and they are, so far as possible, brought in harmony with the religious beliefs and prescriptions. Having embraced a creed the individual endeavours to internalise it and follow it fully. These are the truly religious people.

Usually, the intrinsic orientation is associated with healthier personality and mental status, while the extrinsic orientation is associated with the opposite. Extrinsic religiosity is associated with dogmatism, prejudice, fear of death, and anxiety. It “does a good job of measuring the sort of religion that gives religion a bad name” (Donahu MJ *et al*, 1985). This very important and consistent finding totally contradicts Ellis (1988) who argued that one way that religiosity “sabotaged” mental health was “a lack of self-interest rather than be primarily self-interested, devout deity-oriented religionists

put their hypothesized god(s) first and themselves second – or last.”. It is exactly this behaviour that has been most consistently associated with better mental health. Although the research on religion and mental health involves many others outcomes (e.g.: psychosis, personality, marital satisfaction and stability, anxiety, delinquency), four area have been more thoroughly investigated and, because of that, have the strongest findings: one indicator of positive mental health (psychological well being); and three indicators of mental disorder (depression, suicide, and drug abuse).

1. Psychological well-being

Out of 100 studies (Alexander Moreira-Almeida *et al*, 2006) that examined the association between religious practices and behaviour and indicators of psychological well-being (life satisfaction, happiness, positive affect, and higher morale), 79 reported at least one significant positive correlation between these variables (Alexander Moreira-Almeida *et al*, 2006). Only one study, which had a small and non-random sample of college students, found a negative correlation (Maranell GM *et al*, 1974). While the correlations are usually modest, they often equalled or exceeded those between well being and other psychosocial variables like social support, marital status, or income. This positive association has been consistently similar in samples from different countries, involving a diversity of religions, races and ages. Most of these studies showed an association between religiosity and well being even after controlling for age, gender and socio-economic status. Some studies have shown that the positive impact of religious involvement on well being is more robust among the elderly, disabled, and medically ill people (Musick *et al*, 1996). This probably means that the buffering effects of religious involvement on well being may be higher for those under stressful circumstances. In another study, religiosity was one of the most important factors associated with psychological well-being in a sample of 188 Canadian older

adults following spousal loss, even after adjusting for social support, negative life events, health status and demographic variables (Fry PS *et al*, 2001). With some exceptions, most studies have also found a positive association between religiosity and other factors associated with well-being such as optimism and hope (12 out of 14 studies), self-esteem (16 out of 29 studies), sense of meaning and purpose in life (15 out of 16 studies), internal locus of control, social support (19 out of 20) and being married or having higher marital satisfaction (35 out of 38). Only one study of self esteem had a negative association. As will be discussed later, these may be some of the mediating factors between religiousness and well-being (Salsman *et al*, 2005).

In sum, following Levin & Chatters we can state, “the existing research has shown that religious involvement, variously assessed, has protective effects with respect to a wide range of well-being related outcomes” (Levin JS *et al*, 2001).

2. Depression

A systematic review with meta-analysis summarized the results of 147 independent investigations involving a total of 98,975 subjects on the association between religiousness and depressive symptoms (Smith TB *et al*, 2003). The authors found that religiousness is modestly associated with lower level of depressive symptoms. The size of this association, although modest, is similar to that found between gender and depressive symptoms. The association between religiousness and depression did not vary among the different age, gender or ethnic groups. However, the studies used several types of religious measures and included people under various levels of stress. Therefore, performing the analysis of all these studies together may have decreased the strength of the association that might exist in more specific situations. Corroborating this hypothesis, the review showed that the association between religiousness and depressive symptoms is higher for people under severe life

stress than for people with minimal life stress. These findings are in line with those described above for well-being, the protective effect of religiousness appearing to be stronger for people under psychosocial stress. Koenig et al. conducted the only prospective study investigating the impact of religiousness on the course of depressive disorders. They found out that among 87 depressed senior adults hospitalized for medical illness, intrinsic religious motivation was associated with faster remission from depression in a median follow-up time of 47 weeks. For every 10-point increase in intrinsic religiosity scores (score range 10-50), there was a 70% increase in speed of remission after controlling for functional status, social support, and family psychiatric history. Among patients whose physical disability did not improve during the one year follow-up (that means a poor response to medical treatment), the speed of remission from depression increased by 106% for every 10-point increase on the scale of intrinsic religiosity. The same meta-analysis discussed above showed that the association between religiousness and depressive symptoms differed across the type of religiousness measured. Two specific measures of religiousness had a positive association with high frequency of depressive symptoms: extrinsic religious orientation and negative religious coping. On the other hand, intrinsic religious orientation was associated with low levels of depression. Although the evidence is strongly consistent in establishing the religiousness-depression relationship, the majority of the studies was cross sectional in nature and was performed among US residents, a population with a high religiosity level. However, research conducted in other countries has found equivalent results. One Brazilian study used a screening questionnaire for common mental disorders (depression, anxiety and somatization disorders) in two different religious populations. In a sample of 207 religious ministers, intrinsic religiosity was associated with better mental health (Lotufo Neto *et al*, 2005). A 6-year follow-up

study was conducted in the Netherlands (where rates of church membership are substantially lower than those in the US: 51% vs. 77%) with a nationally representative random sample of 1,840 senior adults (aged 55 to 85). Frequent church attendance was associated with lower depressive symptoms during the follow up, and the association persisted after adjusting for demographic variables, physical health, social support and alcohol use.

3. Drug abuse

More than 80% of the 120 identified studies published prior to 2000 investigating religiousness and alcohol/drug use/abuse found a clear inverse correlation between these variables. The greater the person's religious involvement is, the lower the rates of alcohol/drug use/abuse are (Koenig HG *et al*, 2001). A recent and well-done study in the US with a sample of 2,616 adult twins investigated the relationship involving several dimensions of religiousness with lifetime prevalence of psychiatric and substance abuse disorders. Although several dimensions of religiosity were usually associated with lower prevalence of major depression, anxiety disorders and antisocial behaviour (with the exception of panic disorder that was mildly associated with general religiosity), the strongest association was between almost all the religious dimensions and lower prevalence rates of nicotine, alcohol and drug abuse or dependence (Kendler KS *et al*, 2003). A qualitative study from Brazil investigated the protective factors against drug use among adolescent residents in very poor and violent areas of Sao Paulo. Religiousness was the second most important protective factor, after having a structured family. Family structure was in turn, associated with family religiousness. The study found that 81% of the non-users practiced a religion; amongst users, only 13% did so (Sanchez ZV *et al*, 2004).

4. Suicide

Suicidal behaviours are strongly disapproved of by most religions, and is also a long standing tradition in sociology. However, starting with the classic work of Durkheim, most of the medical and psychological investigations on suicide do not take into account religious factors appropriately (Almeida AM *et al*, 2004). Similar to other areas in the religion-health research field, most early studies investigated the impact of denominational affiliation rather than religious involvement. The findings from these early studies were usually inconsistent; whereas, the most robust results have emerged from the examination of the effects of religious involvement in suicide. In a review, (Koenig HG *et al*, 2001) 84% of the 68 studies identified through 2000 found lower rates of suicide or more objections to suicide among the more religious subjects. These studies basically present two different approaches: aggregate (ecological) or individual data. The first type correlates data on religious involvement of entire populations (e.g.: production of religious literature or rates of church membership) and compares the suicide rates between different populations. Most of these studies found that the level of religious involvement in a given area is inversely proportional to that area's suicide rate. The second type of study correlates the individual religious involvement rates with suicide deaths attempts or ideation.

In a US sample of 584 suicides and 4,279 natural deaths among subjects aged 50 and older, the suicide rate among people who did not attend religious activities was 4 times higher than those who had high participation, after adjusting for sex, race, marital status, age and frequency of social contact (Nishet PA *et al*, 2000). One recent study involving 371 depressed inpatients found that those with no religious affiliation, despite having the same level of depression, had more lifetime suicide attempts (66.2%

vs. 48.3%), perceived less reasons for living and had fewer moral objections to suicide than religiously affiliated patients (Dervic K *et al*, 2004).

The group that received religious education reported less suicide ideation and lower acceptance of suicide, but were more accepting and sympathetic to a suicidal close friend than the secular ones (Eskin M *et al*, 2004). Finally, the use of religious or spiritual beliefs as a source of support and comfort was associated with less suicidal ideation among 835 African-American senior residents of public housings, after controlling for social and medical variables (Cook JM *et al*, 2004). The level of religiousness also has been found to be inversely associated with the acceptance of euthanasia and physician-assisted suicide in the general population in Britain (O Neil *et al*, 2003).

5. Pain

Many individuals who are experiencing persistent pain is using religious/spiritual(R/S) forms of coping, such as prayer, hope, and seeking spiritual support, to manage their pain (Keefe *et al* 1987, 1991). It has been postulated that spiritual beliefs and practices may impact cognitive and emotional processes, which then influence biological mechanisms, thereby directly impacting pain (Rippentrop *et al*, 2005). The Gate Control Theory of Pain (Melzack and Wall, 1965) and the Neuromatrix Theory of Pain (Melzack, 1999) further elucidate the relationship between psychological and biological factors of pain. These theories posit that the experience of pain is more than a simple transmission of pain from a specific part of the body up the spinal cord and to the brain. Instead, multiple pathways involving cognitions, emotions signal, reduce or increase the actual experience of pain at any given moment. More recently, there has been a call for a model that incorporates spirituality into the bio psychosocial framework (Sulmasy, 2002). The bio psychosocial-spiritual model

recognizes the potential impact of spiritual and religious variables in modulating the biological experience of illness. In his conceptualization of the bio-psychosocial-spiritual model, Sulmasy suggests that illness disrupts the biological, interpersonal, and spiritual relationships unique to the individual. The addition of spiritual pathways is congruent with the Gate/Neuromatrix model because spirituality can be viewed as another coping resource that may alter a patient's response to pain. Spirituality may increase or decrease pain responsiveness depending on the valence of the spiritual practice. Positively, spirituality may reduce the impact of pain by reducing stress, distracting from pain, acting as a form of support, and providing social interaction. There is evidence that the density of serotonin receptors in the brain is related to spiritual leanings, which opens up the possibility that spiritual practices may actually influence serotonin pathways in the brain that regulate mood and possibly pain (Borg *et al*, 2003). At the same time, research also shows that negative spiritually based cognitions (e.g. "God is abandoning me") are related to increased pain sensitivity (Rippentrop *et al*, 2005).

In a recent study among individuals with sickle cell disease, more frequent attendance at church was related to lower sensory and affective experiences of pain, as well as fewer symptoms of somatization, depression, and anxiety (Harrison *et al*, 2005). Frequent church attendance (i.e., once or more per week) was also linked to lower self-reports of pain intensity among individuals with sickle cell disease.

According to Amy B, the relationship between R/S coping and pain may also depend on the way in which the outcome of pain is defined, i.e. that the severity of pain is decreasing or the tolerance for pain is increasing. While these concepts are both based in the individual's pain perception, when they are differentiated, a patient may report that they are still experiencing the same level of pain, though they report or

display better coping with that pain (Amy B *et al*, 2007). Research shows that when pain severity and tolerance are both assessed, accessing R/S resources is more often related to improved pain tolerance and less related to reduced reports of pain severity in arthritis pain (Keefe *et al*, 2001), chronic pain (Bush *et al*, 1999), sickle cell disease related pain (Harrison *et al*, 2005) and acute pain (Wachholtz & Pargament, 2005). In these studies, the patient may still identify that they are experiencing the same level of pain but display higher levels of pain tolerance. This suggests that R/S coping does not necessarily change pain severity, but rather it changes pain tolerance, allowing pain patients to continue functioning with their daily activities despite no change in pain levels.

Another aspect is the relationship of mood, religiosity and pain. Yates *et al*. (1981) studied how religious beliefs and activities can modulate the presence or severity of pain indirectly through improving mood. They surveyed 71 oncology patients with various forms of advanced cancer, and found that R/S beliefs correlated positively with general happiness and life satisfaction. Another finding was that while the participants' R/S beliefs did not eradicate the presence of pain, those beliefs and practices did correlate with a decreased level of reported and perceived pain. In other words, those who reported strong R/S beliefs had a reduced sensitivity to pain (Yates *et al*, 2002). This explanation is supported by case reports that suggest R/S activities reduce anxiety; allow relaxation and rest, thereby reducing muscle tension that would otherwise worsen pain by limiting blood flow to affected regions (Koenig, 2002).

Keefe and his colleagues have explored how individuals who experience chronic pain with rheumatoid arthritis used R/S coping techniques (Keefe *et al*, 2004). They have used a 30-day diary method with 35 participants; the researchers performed a daily assessment of the interactions between pain, R/S coping, social support, mood,

and spiritual experiences. A significant correlation emerged between participants' ability to control pain and the use of positive R/S coping techniques. "On days that participants highly endorsed their ability to control and decrease pain using spiritual/religious coping methods, they were much less likely to have joint pain" (Keefe *et al*, 2001). Coping efficacy also correlated with more positive mood and higher levels of emotional and social support.

Another aspect is the effect of prayer in mental health. Prayer is an ancient and widely used intervention for alleviating illness and promoting good health. Whilst the outcomes of trials of prayer cannot be interpreted as 'proof/disproof' of God's response to those praying, there may be an effect of prayer not dependent on divine intervention and this is quantifiable. A review in the Cochrane database includes ten studies (n=7646) (L Roberts *et al*, 2007). They found a slight difference between groups, favouring prayer for averting death (6 RCTs), but no differences between groups for clinical state, complications or leaving the study early. Individual studies did find some effects. One trial separated death data into 'high' and 'low' risk and found prayer had a positive effect on those at 'high' risk of death. A second study found a positive effect of prayer on women undergoing IVF treatment with significantly more successful implantations in the prayer group compared with standard care. A larger study assessed the effect of awareness of prayer and found those aware of receiving prayer had significantly more post operative complications than those not receiving prayer (1 RCT, n=1198) and those uncertain if they were receiving prayer. However, in conclusion the author says that, there is no robust evidence of the supposed benefit that derives from God's response to prayer.

Some feel that there should be more dialogue and mutual understanding between psychiatrist and faith healers as well as clergy (Gerald levy & Michael king,

2007). Clergy continues to have a central role in many communities. However, the biomedical conceptualisation of the psychiatrist and supernatural conceptualisation of clergy regarding mental illness may be at odds with each other and this can create difficulties. Some of the members of faith-based organisations have a reluctance to accept psychiatry and psychotherapy - the so called “religious gap “.

A Qualitative Study of Religious Practices by Chronic Mentally Ill and their Caregivers has been done in South India (Thara R *et al*, 2005). They looked into socio-cultural explanatory factors for mental health problems determine help seeking behaviours. The study aimed to understand the reasons by which, mentally ill patients and their families in India, choose to seek help from a religious site. Persons with mental illness and their families were interviewed at religious sites using a guideline questionnaire. Issues such as significant life events, explanations for perceived abnormal behaviour and reasons for choosing a specific religious site for ‘treatment’ were explored. They found that seeking religious help for mental disorders is often a first step in the management of mental disorders as a result of cultural explanations for the illness. This behaviour also has social sanction.

Literature search revealed no studies examining the relationship between chronic pain and religious beliefs. Although hundreds of studies report relationships between religious involvement and mental health, they rarely investigated the potential mediators of this relationship. Several mechanisms have been proposed to explain the influence of religion on human health.

1. Healthy behaviours and lifestyle

Several illnesses are related to behaviour and lifestyle. The way we eat, drink, drive our automobiles, have sex, smoke, use drugs, follow medical prescriptions, examine ourselves for prevention have important influences in our health. Most religions prescribe or prohibit behaviours that may impact health (Jarvis GK *et al*, 1987). The biblical teachings, 3000 years ago, about diet, ways to handle food, cleaning and purity, circumcision, sexual behaviour were important for preventing disease. Today other illnesses are more relevant. Prescriptions about keeping a day of rest, the body as a sacred temple, monogamous sex, moderation on eating and drinking, peaceful relationships are doctrines that might be also helpful for contemporary health problems. A good clinical example trying to apply those teachings was the research of Thoresen *et al*. who successfully tried to modify Type A behaviour in coronary patients through a program that included spiritual practices (Thorensen *et al*, 1985). Certain religious practices are responsible for health hazards and risks. Visits to a holy shrine on specific times can enhance the risk of accidents. Prohibition of vaccines, medication or blood transfusion, endogamous marriages, violence against unbelievers, handling of poisonous snakes, the way dead bodies are handled are other examples of behaviours that can affect health.

2. Social support

Belonging to a group brings psychosocial support that can promote health. Religion might provide social cohesion, the sense of belonging to a caring group, continuity in relationships with friends and family and other support groups. Social support can influence health by facilitating adherence to health promotion programs, offering fellowship in times of stress, suffering and sorrow, diminishing the impact of anxiety and other emotions and anomie. Social support, although important, is not the

only mechanism by which religion influences health. Religion still has beneficial effects even when social support is a controlled variable (Levin JS *et al*, 1996).

3. Belief systems, cognitive framework

Beliefs and cognitive processes influence how people deal with stress, suffering and life problems. Religious beliefs can provide support through the following ways: enhancing acceptance, endurance and resilience (Argyl M *et al*, 1975). They generate peace, self confidence, purpose, forgiveness to the individual's own failures, self giving and positive self image. On the other hand, they can bring guilt, doubts, anxiety and depression through an enhanced self-criticism (Moberg DO *et al*, 1979). Locus of control is an expression that arises from the social learning theory and tries to understand why people behave in different ways even when facing the same problem. Some actively act while others stay in despondency. An internal locus of control is usually associated with well-being, and an external one with depression and anxiety. A religious belief can favour an internal locus of control with impact on mental health (Levin JS *et al*, 1987). Many patients use religion to cope with medical and non medical problems. The study of religious coping, which can be positive or negative, has emerged as a promising research field. Positive religious coping has been associated with good health outcomes, and negative religious coping with the opposite. Religious patients tend to use more positive than negative religious coping. Positive religious coping involves behaviours such as: trying to find a lesson from God in the stressful event doing "what one can do and leaving the rest in gods hands", seeking support from clergy/church members, thinking about how one's life is part of a larger spiritual force, looking to religion for assistance to find a new direction for living and attempting to provide spiritual support and comfort to others. Negative religious coping includes passive waiting for God to control the situation, redefining the stressor as a punishment

from God or as an act of the devil and, questioning God's love (Pargament KL *et al*, 2001).

4. Religious practices

Public and private religious practices can help to maintain mental health and prevent mental diseases. They help to cope with anxiety, fears, frustration, anger, anomie, inferiority feelings, despondency and isolation. The most commonly studied religious practice is meditation (Benson H *et al*, 1975). It has been reported that it can produce changes in personality, reduce tension and anxiety, diminish self blame, stabilize emotional ups and downs, and improve self knowledge. Improvement in panic attacks, generalized anxiety disorder, depression, insomnia, drug use, stress, chronic pain and other health problems have been reported. Follow-up studies have documented the effectiveness of these techniques (Sharpio DH *et al*, 1994). Other religious practices (such as personal prayer, confession, forgiveness, exorcism, liturgy, blessings and altered states of consciousness) may also be effective, but more studies are necessary.

5. Spiritual direction

This is described as a special relationship between two human beings, to help the development of the spiritual self. Its aims are to develop a relationship with God, to find meaning in life, and to promote personal growth (Julien R *et al*, 1992). Several religious and psychological techniques may be used, and great similarities with psychotherapy can be found, as the same themes are discussed (Ganje *et al*, 1991).

6. Idiom to express stress

In times of stress and social disorganization certain religious rituals by means of techniques that elicit altered states of consciousness, can produce catharsis, dissociate

states and provide a special milieu to express problems and suffering (Mariz CL *et al*, 1996).

7. Multifactor explanation

Religion is a multidimensional phenomenon and no single fact can explain its actions and consequences. The combination of beliefs, behaviours and environment promoted by the religious involvement probably act altogether to determine the religious effects on health (Schiller PS *et al*, 1988). However, empirical studies have had limited success in accounting the psychosocial mechanisms described above for the health-promoting effects of the religious involvement. The explanation of the mechanisms by which religion affects health has been an intellectually and methodologically challenging enterprise (George LK *et al*, 2002).

METHODOLOGY

Aims and Objectives

- To identify psychiatric co morbidity in patients with chronic pain syndrome and to assess the religious and spiritual beliefs of these people
- To examine the correlates between severity of pain, psychological morbidity and religious and spiritual beliefs.

METHODS

This study was conducted at the pain clinic of Christian Medical College, Vellore, where patients with chronic pain were recruited. Two screening scales were administered. The first one was the General Health Questionnaire (GHQ) to measure the degree of mental distress. The second scale used was the Hospital Anxiety and Depression Scale (HADS) to detect anxiety and depression and also to measure their severity. The Revised Clinical Interview Schedule CIS-R) was carried out to identify minor psychiatric disorders. Royal Free Interview for religious and spiritual belief was administered to assess the religious and spiritual aspect of patients with chronic pain syndrome.

Settings

The pain clinic of Christian Medical College, Vellore is a multidisciplinary referral clinic that sees patients with chronic pain. The team of physiotherapists and doctors from physical medicine and rehabilitation (PMR) and psychiatry meets weekly. Patients referred attend the outpatient section of the PMR department for an initial work up and are brought to the pain clinic for detailed evaluation. 5 to 10 cases are seen each week; of which approximately half are new cases and the remaining is for follow-up.

Inclusion criteria

1. Patients with chronic pain (pain more than 6 months).
2. Age above 16 years
3. Able to speak English or Hindi or Tamil

Exclusion criteria

1. Patients with cognitive deficit or psychotic symptoms.
2. Suffering from terminal illness or awaiting surgery.
3. Unable to give informed consent or unwilling to participate

Measures:**1. General Health Questionnaire (GHQ)**

The General Health Questionnaire (Goldberg & Williams, 1978) is widely used to assist in the detection of non psychotic psychiatric illnesses. The original version contains 60 items. The GHQ 12 is the shortest version of the GHQ. The Tamil version of GHQ version 12 has been validated for use in the rural population of Tamilnadu (S John *et al*, 2006). Each question contains 4 answers with scores 0, 0, 1, 1 and makes the GHQ an efficient tool for screening for common mental disorders with a threshold of 2/3. Two bilingual persons carried out the translation of GHQ into Hindi. The process included translation and back translation. A consensus was reached by discussing semantic, content, and technical equivalence. The English, Hindi and Tamil versions of GHQ were used for this study.

2. Hospital Anxiety and Depression Scale (HAD)

HAD is a self-screening questionnaire for depression and anxiety (Zigmont AS & Snaith RP, 1983). Although it was designed for hospital general medical outpatients, it has been extensively used in primary care. It consists of 14 questions, 7 for anxiety and 7 for depression. Each questions contains 4 answers with scores 0,1,2,3 respectively. Total scores 0-7 in respective subscale are considered normal, with 8-10, borderline and 11 or more indicate clinical case ness. Two bilingual persons carried out the translation of HAD scale into Hindi and Tamil. The process included translation and back translation. A consensus was reached by discussing semantic, content, and technical equivalence. The English, Hindi and Tamil versions of HAD scale were used for this study.

3. Royal Free Interview for Religious and Spiritual Belief

The Royal Free Interview for Religious and Spiritual Belief was developed and validated by King et al (1995). The interview contains a spiritual scale that sums answers to visual analogue questions on the strength with which a spiritual belief is held. High scores indicate that respondents hold strongly to their belief and that these beliefs have a major role in their life. The spiritual scale has a high validity (high score correlates with frequent religious observants) and internal and test-retest reliability (alpha 0.81, intra class correlation of 0.95). Two bilingual persons carried out the translation of Royal Free Interview for Religious and Spiritual Belief into Hindi and Tamil. The process included translation and back translation. A consensus was reached by discussing semantic, content, and technical equivalence. The English, Hindi and Tamil versions of Royal Free Interview for Religious and Spiritual Belief scale were used for this study.

4. Visual Analogue Scale (VAS) (Wewers & Lowe, 1990)

A Visual Analogue Scale (VAS) is a measurement instrument that tries to measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured. For example, the amount of pain that a patient feels ranges across a continuum from none to an extreme amount of pain. From the patient's perspective this spectrum appears continuous, their pain does not take discrete jumps, as a categorization of none, mild, moderate and severe would suggest. It was to capture this idea of an underlying continuum that the VAS was devised. Operationally a VAS is usually a horizontal line, 100 mm in length, anchored by word descriptors at each end. The patient marks on the line the point that they feel represents their perception of their current state. The VAS score is determined by measuring in from the left hand end of the line to the point that the patient marks.

5. Socio demographic Proforma

The following information was collected from patients - age, gender, education, literacy, residence, religion, and employment status. Score on the visual analogue scale (VAS) – was collected after the interview from the patient chart notes. The pain clinic members administered the VAS and the score was unknown to the primary investigator when he collected the study data.

6. Clinical interview schedule – revised (CIS –R)

Clinical interview schedule (Goldberg *et al*, 1970) is for the assessment of minor psychiatric disorders. The first part (entitled reported symptoms) has 10 items and the second (manifest abnormalities) has 12. Each of the 22 parts is scored on a 0-4 scale. The CIS-R asks about the symptoms during the week immediately preceding the interview and assigns a score according to their frequency and severity. The score

obtained from each of the reported symptoms and manifest abnormalities are combined to yield a “total weighted score “(Shepherd & Clare, 1981). The CIS-R consists of 14 domains, such as anxiety, depression, irritability, obsessions, compulsions, and panic. Each domain includes mandatory and scoring questions. The sum of the scoring questions generates a total score (range, 0-57) that is a measure of non-psychotic psychiatric morbidity; scores of 12 or more indicate case-level morbidity.

Procedure

Charts of all patients attending the Pain Clinic were screened. Those fulfilling inclusion and exclusion criteria were invited to participate. Informed consent was taken. Those willing to participate were interviewed using the study instruments. Confidentiality was assured and maintained. 62 subjects were included in the study. None of those screened refused consent.

Consent procedure

“I am Dr. X and I am studying the experience of people who suffer from pain for a long time. We hope that this will help us to understand the needs of people like yourself, and to know how to help you better. To do this I need to ask you some question about your illness and how it has affected you. I will be also asking questions about your beliefs. This is not connected to your treatment at this clinic. You may choose not to participate and it will not affect your treatment in any way. If you are willing to help me in this study I will be taking about an hour of your time. Even if you say yes, you can stop at any time. Whatever you tell me will be kept anonymous and confidential.”

This was translated into Hindi and Tamil.

Ethical considerations

The project was presented to the Institutional Review Board of the Christian Medical College Hospital for ethical clearance before any data was collected. Interview was at a routine clinical visit without any extra cost to the patient. Appropriate referral was done, whenever significant psychiatric co morbidity was detected. Informed consent was obtained.

Determination of sample size

EpiInfo (ver 5.0, 1990) was employed to calculate the sample. A sample size of 62 was obtained based on the following assumptions; estimated prevalence of psychiatric morbidity in patients with chronic pain 40%; estimate of error 10%; confidence limits 95%.

Data analysis

The data was entered in MS EXCEL and the following analysis was done.

1. The prevalence of psychological co morbidity, religious and spiritual beliefs in patients with chronic pain syndrome.
2. Correlation between pain, psychological co morbidity and spiritual and religious beliefs.

Mean, standard deviation and range was employed to describe continuous variables, while frequency distributions were obtained for di/polychotomous variables. The chi-square was used to assess the significant of association for categorical data. Student's t test was used to test the association of continuous variables. Spearman's Rank correlation was used to assess the relationship between continuous variables

The statistical software SPSS for Windows Release 12 was employed for the analysis of the data.

RESULTS

The total sample of patients with chronic pain syndrome was 62

Table 1: Gender distribution of sample

Sex	Frequency	Percentage
Male	24	38.7
Female	38	61.3
Total	62	100.0

In the sample 38.7% were males and 61.3% were females

Table 2: Educational status

Education	Frequency	Percentage
Primary	6	9.7
Secondary	34	54
Higher	9	14
Graduation	8	12
Post graduation	2	3.2
Others	3	4.8
Total	62	100

In the sample about 54.8% had secondary education, 14.5% had higher secondary education, 12.9% were graduates, 9.7% had primary education, 3.2% were postgraduates, and 4.8% were illiterate.

Table 2a: Literacy status

Frequency	Literacy	Percent
4	Illiterate	6.5
2	Read only	3.2
56	Read and write	90.3
62	Total	100.0

In the sample 90.3% were able to read and write, 3.2% could read only and 6.5% were illiterate.

Table 3: Residential status

Residence	Frequency	Percentage
Urban	45	72.6
Rural	17	27.4
Total	62	100.0

In the sample 72.6% were urban and 27.4% were rural.

Table 4: Marital status

Marital status	Frequency	Percentage
Single	8	12.9
Married	54	87.1
Total	62	100.0

12.9% were married and 87.1 % were unmarried.

Table 5: Age status

Age Category	Frequency	Percentage
18-30	13	21.0
31-45	26	41.9
46-60	20	32.3
>60	3	4.8
Total	62	100.0

41.9% were in the 31-45 years age category, 32.3% were in the 46-60 years category, 21% in the 18-30years category and 4.8% in the more than 60 years category

Table 6: Religion status

Religion	Frequency	Percentage
Hindu	56	90.3
Muslim	2	3.2
Christian	4	6.5
Total	62	100.0

Among the sample 90.3% were Hindu, 6.5% were Christian, and 3.2 % were Muslims.

Table 7: Employment status

	Frequency	Percentage
Student	1	1.6
Employed	24	38.7
Unemployed	9	14.4
House wives	28	44.4
Total	62	100

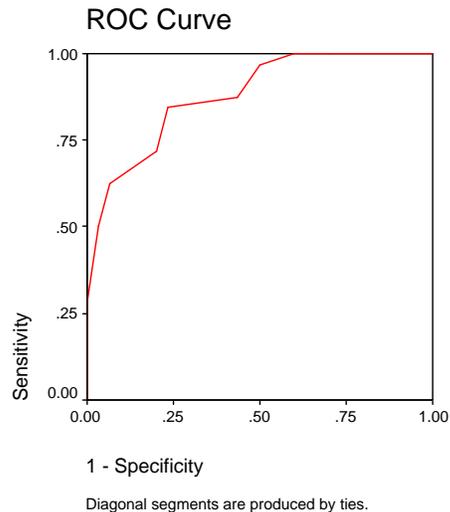
38.7% were employed, 44.4% were housewives, 14.4% were unemployed and 1.6% were students.

Table 8: Prevalence of psychiatric disorders

CIS-R score	Frequency	Percentage
< 12	30	48.4
12 and above	32	51.6
Total	62	100

CIS-R cut of 12 and above was considered for case ness. There were 51.6% cases and 48.4% noncases.

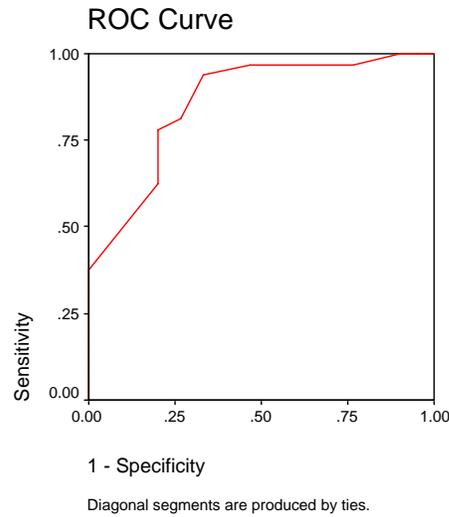
Table 9: Best cut off value for GHQ



Area under the curve is 0.879

Receiver operating characteristic curve (ROC) was done to find the best cut off for General Health Questionnaire to distinguish cases and non cases as detected by the CIS-R. A cut off of 5/6 was found to be best with a sensitivity of 84% and specificity of 77%.

Table 10: Best cut off value for HADS



Area under the Curve is .860

Receiver operating characteristic curve (ROC) was done to find the best cut off for Hospital Anxiety Depression Scale to distinguish cases and non cases as detected by the CIS-R. A cut off of 11 was found to be best with a sensitivity of 81% and specificity of 74%.

Table 11: Relationship between VAS score in cases and non cases (CISR)

	Number	Median	Range	P value
Cases CISR>11	30	6.0	3-10	0.41
Control CISR<12	32	6.5	3- 9	

Median VAS scores for cases and noncases were compared using chi square test. It was found that there was no significant difference in the VAS scores between cases and non cases

The Royal Free Questionnaire for Spiritual and religious Belief

Of the sample 71% described themselves as religious, 24.2% as religious and spiritual, and 4.8% as neither religious nor spiritual.

Of the people who said they were either religious, or religious and spiritual, the major expression of their faith was through visiting a place of worship, either occasionally, or everyday.

Of this group 30.6% said they did some pooja, 24.2% read or studied religious texts, 4.8% had contact with religious leaders, and 3.2% did meditation.

One person experienced the sense of communication with a spiritual power or god during meditation and 11 people experienced it during prayer.

Only 4 people responded to the question regarding the belief in existence after birth. Three believed in rebirth. One said, laughingly, that it would be as dust after death.

Two people had intense experiences, one had experienced it during prayer “as if I am with God”, and another described it as a sense of blissfulness or a sense of infinity which occurred suddenly and lasted for a few seconds

There was a range of affective responses seen when the investigator began administering the RFQ.

Most, after initial surprise, appeared enthusiastic about discussing their religious and spiritual beliefs. Indeed, they appeared more animated than when giving information related to their problem.

A few seemed surprised and wary. They commented that these were unusual or strange questions. They asked the investigator why these were being asked.

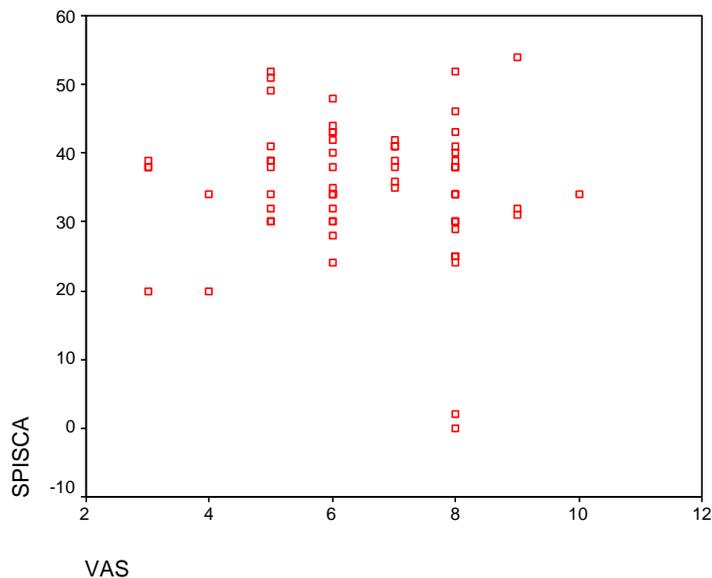
Some asked about the investigator's religion and views, after the RFQ was completed. It was as if the discussion on this topic had removed the social restraint in the doctor patient interaction, and they felt free to interact at a personal level.

A few of the non-Christians claimed a belief in Christianity too; it was as if they feared a discrepancy in the care for Christians and non-Christians. This aspect was clarified and the investigator reassured them that this was not so.

None refused to answer, nor did any express any sense of offence at being asked about such matters.

Some expressed satisfaction about their spiritual and religious beliefs being assessed. Some said that this was the first time any doctor had explored this aspect and that the experience was pleasant.

Table 12: Relationship between VAS score and spiritual score



Spearman's rank correlation coefficient was used to assess the relationship between Visual Analogue Scale score and Spiritual score. No significant relationship was found between the two.

Table 13: Relationship of spirituality and caseness on CIS-R

CISR	Number	Mean	Standard deviation	P value
CISR case	32	38.21	7.06	0.01
CISR Non case	30	32.43	11.45	

Independent sample T – test was used to assess whether mean scores for spirituality differed between cases and controls. A Mean difference of 5.7 was found to be statistically significant ($p = 0.01$)

DISCUSSION

Sociodemographic profile

The socio demographic profile of this group with chronic pain is in some ways similar to a general population; but in some variables it is different. Our sample contains 61.3% of females and 38.7% of the males; which is not comparable with Indian census data 2001(number of females for 1000 males is less than 1000). The reason for this discrepancy could be the high prevalence of chronic pain syndrome in females (Jeffery Dersh *et al*, 2002).

Our sample represents 72.6% of urban and 27.4% of rural population, which is the reverse of general population data (70% rural and 30% urban). This could be a reflection of the fact that hospital facilities are more used by the urban population (WHO, World Health Statistics 2007).

Hindus were predominant in the sample (90.3%) with 6.5% of the Christians and 3.2% Of Muslims; but our general population data is, 80% Hindu, 13% Muslims, and 1.8% Christians. The higher proportion of Christians in our data may be due to this being a Christian institution.

The literacy rate (the ability to read and write) of the sample was 90.3%; which is more than the National literacy rate (65.38%), this may be because literate people use hospital facilities more (WHO, World Health Statistics 2007).

The total unemployment in the sample was 9%, which is similar to national data (7.8%).

In conclusion our sample is not fully representative of the general population; but is a mostly urban, more literate, and predominantly female population. This is possibly more representative of a population in a specialty clinic of a hospital.

Psychological morbidity

After screening with CIS-R we found that 51.6% of the sample reaches the level of psychiatric “caseness”. A population based study (Benjamin *et al*, 2000) reported 16.9% of psychiatric diagnosis in chronic pain patients. Another naturalistic study in lower back ache pain patients (Atkinson *et al*, 1991) reported a life time and 6 month prevalence of major depression 32% and 22% respectively. Rickie *et al*, 1983 has reported 98% of axis I diagnosis in patients with chronic pain; this included alcohol dependence. Our sample has not included alcohol dependence, as we have used CIS-R for screening. 70% of axis I diagnosis is reported by Edward *et al*, 2002. The levels of psychological morbidity in this sample are similar to other published data.

The question of wrongly labeling distress associated with significant chronic pain as psychiatric caseness is relevant in this situation. None of the identified cases were viewed by the pain clinic team that included a psychiatrist, to be suffering from a definite depressive illness or anxiety disorder, which undeniably fell into conventional conceptions of psychiatric “illness”; all were seen to be showing an “understandable” or “normal” response to their pain. It may not always be accurate, and might sometimes be harmful to assume that all of them are cases. It is important to be clear about this differentiation. In the case of patients disabled by the psychological consequences of adversity, a relatively brief period of legitimate social space may well facilitate the solution of problems, which might otherwise have resulted in the breakdown of family or work relationships. This is an important role for the doctor (Roth A & Fonagy P, 1996). People with personal and social difficulties who might benefit from counselling

are ill served if they are misunderstood and encouraged to view their difficulties as disease meriting treatment. Ill directed treatment is a potent cause of costly and disabling abnormal illness behavior and may contribute to long term morbidity (Woodward *et al*, 1995).

However, there is increasing evidence that many of the clearly defined neurotic syndromes panic attacks, social phobia, obsessive compulsive disorder, and agoraphobia—are best construed as discrete disorders and treated accordingly, with appropriate medication or cognitive behavioral psychotherapy. (Clark DM & Fairburn CG, 1996). Patients with ill defined psychiatric problems can have a poor prognosis. (Lloyd KR *et al*, 1996). Appropriate treatment can happen only if the neurotic syndrome is identified as a primary cause of distress and disability, rather than a consequence of adversities like chronic pain and personal difficulties. In this situation there is a need to consider their problems in greater detail and to identify specific disorders where they exist, and where they don't, to respect the roles of social, economic, occupational, and physical health problems in determining and shaping psychological disability. Only then can empathy, social support, and understanding be provided when they are appropriate and a more medical approach, whether drug treatment or psychological therapy, be made available where it might be most effective.

Screening tools

We have used 2 screening instruments for detecting cases (GHQ and HADS), and found that General Health Questionnaire is a better tool in screening due to following reasons

GHQ, in administration was simple, less confusing and less time consuming than HADS. At a cut off of 5/6GHQ had high specificity (77%) and sensitivity (84%)

to detect psychiatric cases against the gold standard (CIS-R). In comparison the HADS sensitivity (81%) and specificity (71%) was lower at the best cut off score of 11.

John et al (2006) report that the predictive value of the GHQ as a tool for screening was found to differ depending on the setting in which it is used. Screening instruments need to be validated in specific types of populations before being employed.

Pain and psychological morbidity

There was no correlation between the severity of pain and being a case using the CIS-R. In the presence of over 50% of case positive in the group, this may suggest that it is the experience of continuous pain, rather than its severity that causes psychological symptoms. This hypothesis needs to be confirmed.

Spirituality and Religiosity

The Spirituality Questionnaire evoked mixed feelings in people. Prayer is the mostly used mode of religious expression along with visiting temples, churches or mosques. Available literature on religiosity and spirituality in chronic pain populations showed that prayer was either the primary or second most frequently used coping strategy used to deal with physical pain (Koenig, 2001; Rippentrop, 2005).

Whether religiosity or spirituality is helpful in coping is beyond the scope of this study; but we found that less than 5% of the group described themselves as neither religious, nor spiritual. This is similar to the surveys done in the US and Brazil. (Alexander Moreida-Almeida *et al*, 2006). This implies that religion and spirituality is an integral aspect of people's lives, and must be acknowledged in holistic care. Indeed, there is growing awareness and debate in literature about the need for and methods to bring about integration. (Leavey G, 2007).

The spiritual score is significantly more in cases rather than in non cases. However, severity of pain is not related with spirituality scores.

The cross sectional nature of the study makes it impossible to comment on the directionality of effect, if any. It is possible that the experience of pain results in an increased tendency to shift to religion and spirituality. Conversely, having a deeper spiritual and religious sense makes people vulnerable to pain. The possible mechanisms of these have been discussed in the review of literature.

Limitations of the study

1. The cross sectional design of the study does not allow us to trace the sequence and pattern of changes in belief systems, pain, and development of psychiatric symptoms.
2. CIS-R uses an atheoretical construct to detect psychological distress. It is not possible to differentiate disorders from understandable or normal reactions to stress.
3. Although the study shows that religiosity and spirituality are important aspects of cognitive framework, how they impact on the experience of illness and treatment response are unclear, because of the single point assessment.

CONCLUSION

Chronic pain causes significant psychological distress. Over 50% of the study group had significant psychological symptoms as measured by the CIS-R.

The caseness by CIS-R did not correlate with severity of pain as recorded on the VAS. This could imply that it is the experience of chronic pain that is significant, rather than its severity.

This study suggests that the General Health Questionnaire could be a good screening tool compared to Hospital Anxiety Depression Scale. In a speciality clinic setting, the cut off scores may be higher than community screening cut offs for common mental disorders.

The majority of the study group has a religious and/or a spiritual orientation. None objected to the nature of questions being asked, and many felt pleased that this aspect was being explored. The scores on the RFQ are significantly higher in those identified as cases by the CIS-R. The directionality of cause effect relationship, if any, is unclear.

Further research is needed in the area of pain, its effects on psychological function, and the role of religious beliefs and spirituality, in order to provide holistic medical care.

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INFORMED CONSENT PROCEDURE

I am Dr; (...) and I am studying the experience of people who suffer from pain for a long time. We hope that this will help us to understand the needs of people like yourself, and to know how to help you better. To do this I need to ask you some question about your illness and how it has affected you. I will be also asking questions about your beliefs. This is not connected to your treatment at this clinic. You may choose not to participate and it will not affect your treatment in any way. If you are willing to help me in this study I will be taking about an hour of your time. Even if you say yes, you can stop at any time. Whatever you tell me will be kept anonymous and confidential.

CONSENT FORM

I am aware of the study. I have been adequately explained the purpose of the study. I am aware that I can withdraw from the study at any time without it being held against me. I am here by giving my full consent for the same.

Date;

Name and Signature;

(Patient/guardian)

Witness;

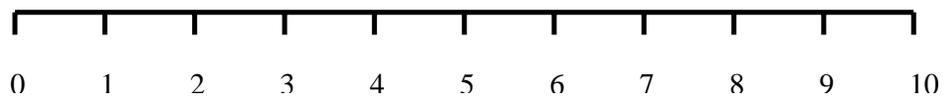
Researcher

Socio demographic Performa

1. Serial No:
2. Hospital No:
3. Name:
4. Age:
5. Sex: Male / Female
6. Marital Status: Single / Married / Divorced / Separated / Widowed
7. Number of Children:
8. Formal Education:
9. Literacy: Illiterate / Read only / Read and Write
10. Residence: Urban / Rural
11. Religion: Hindu / Muslim / Christian / Others
12. Employment:
13. Pain History:

14. Diagnosis:

15. VAS Score:



Hospital Anxiety and Depression Scale (HADS)

Patients are asked to choose one response from the four given for each interview. They should give an immediate response and be dissuaded from thinking too long about their answers. The questions relating to anxiety are marked "A", and to depression "D". The score for each answer is given in the right column. Instruct the patient to answer how it currently describes their feelings

A I feel tens. Or 'wound up':

	Most of the time	
3	A lot of the time	
2	From time to time, occasionally	1
	Not at all	0

D I still enjoy the things I used to enjoy:

	Definitely as much	
0	Not quite so much	
1	Only a little	
2	Hardly at all	
3		

A I get a sort of frightened feeling as if something awful is about to happen:

	Very definitely and quite badly	3
	Yes, but not too badly	2
	A little, but it doesn't worry me	1
	Not at all	0

D I can laugh and see the funny side of things:

	As much as I always could	0
	Not quite so much now	1
	Definitely not so much now	2
	Not at all	3

- A. Worrying thoughts go through my mind:
- A great deal of the time 3
 - A lot of the time 2
 - From time to time, but not too often 1
 - Only occasionally 0

- D I feel cheerful:
- Not at all 3
 - Not often 2
 - sometimes 1
 - Most of the time 0

- A. I can sit at ease and feel relaxed:
- Definitely 0
 - Usually 1
 - Not often 2
 - Not at all 3

- D. I am feeling as if I am slowed down:
- Nearly all the time 0
 - Very often 1
 - Sometimes 2
 - Not at all 3

- A. I get a frightened feeling like butter flies
In the stomach:
- Not at all 0
 - Occasionally 1
 - Quite often 2
 - Very often 3

- D. I have lost interest in my appearance:
- Definitely 3
 - I don't take as much care as I should 2
 - I may not take quite as much care 1
 - I just take as much care as ever 0

A. I feel restless as I have to be on the move:

Very much indeed	3
Quite a lot	2
Not very much	1
Not at all	0

D. I look forward with enjoyment to things:

As much as I ever did	0
Rather less than I used to	1
Definitely less than I used to	2
Hardly at all	3

A. I get sudden feeling of panic:

Very often indeed	3
Quite often	2
Not very often	1
Not at all	0

D. I can enjoy a good book or radio or TV program;

Often	0
Some times	1
Not often	2
Very seldom	3

Serial No.

The Revised Clinical Interview Schedule (CIS-R)

	Section	Score
A	Somatic symptoms.....	
B	Fatigue.....	
C	Concentration and forgetfulness.....	
D	Sleep problems.....	
E	Irritability.....	
F	Worry about physical health.....	
G	Depression.....	
H	Depressive ideas.....	
I	Worry.....	
J	Anxiety.....	
K	Phobias.....	
L	Panic.....	
M	Compulsions.....	
N	Obsessions.....	
	Total score: Sections A to N.....	

Introduction

(Ask name. Do not record on form.)

I would like to explain a few things about this interview.

- Firstly, it has been designed to assess your general health and well being for research purposes.
- It mainly asks about the PAST WEEK, by that I mean the SEVEN DAYS since last -----.
- The questions have already been written out and so it will not sound like a normal interview and some questions may be somewhat inappropriate for you.
- Finally, all answers will be kept confidentially.

1. Have you noticed a marked loss in your appetite in the past month ?

Yes **Mk;** **1**

No **,y;iy** **2**

2. Have you lost any weight in the past month?

Yes..... **Mk;** **1** Go to 2a

No/DK..... **,y;iy | njupahJ 2** Go to 3

2a. Were you trying to lose weight or on a diet ?

Yes..... **Mk;** **1** **Go to Section A**

No..... **,y;iy** **2** Go to 2b

2b. Did you lose 3 Kgs or more, or did you lose less than this?

cq;fs; vil vt;tsT Fiwe;Js;sJ?

lost 3 Kgs or more..... **3 fpNyhf;F Nky;** **1** **Go to Section A**

lost less than 3 Kgs... **3 fpNyhf;F fPo;** **2** **Go to**

Section A

3. Have you noticed a marked increase in your appetite in the past month ?

fle;j khjj;jpy; cq;fs; grp kpfTk; mjpfkhr;rh?

Yes..... **Mk;** **1**

No..... **,y;iy** **2**

4. Have you gained weight in the past month ?

fle;j khjj;jpy; cq;fs; vil \$bAs;sjh?

Yes..... Mk; 1

No/DK..... ,y;iy / njupahJ 2

A . Somatic symptoms

A1 Have you had any sort of ache or pain in the past month ?

fle;j khjj;jpy; vjhtJ typ my;yJ Neh;T ,Ue;jjh?

Yes..... Mk; 1 **Go to A3**

No..... ,y;iy 2 **Go to A2**

A2 During the past month have you been troubled by any sort of discomfort, for example, headache or indigestion ?

fle;j khjj;jpy; jiytp> m[Puzk; Nghd;w njhe;juT ,Ue;jjh?

Yes..... Mk; 1 **Go to A3**

No..... ,y;iy 2 **Go to Section B**

A3 Was this ache or pain/discomfort brought on or made worse because you were feeling low, anxious or stressed ?

ePq;f Jf;fkh ftiyah ,Ue;jdhy ,e;j typ mjpfkhr;rh?

Yes..... Mk; 1 **Go to A4**

No..... ,y;iy 2 **Go to Section B**

A4 In the past seven days, including last (DAY OF WEEK), on how many days have you noticed the ache or pain/discomfort ?

fle;j thuj;jpy vj;jd ehs; typ te;jJ > ftdpr;rPq;f?

4 days or more 4 ehl;fSf;F Nky; 1* **Go to A5**

1 to 3 days 1-3 eh;lfs; 2 **Go to A5**

None..... ,y;iy 3 **Go to A9**

A5 In total, did the ache or pain/discomfort last for more than 3 hours on any day in the past week/on that day ?

nkhj;jj;jpy; ,e;j typ fle;j thuj;jpy; VjhtJ ehs; %d;W kzp Neuj;jpw;F Nky; ePbj;jjh?

Yes..... Mk; 1* No.....

,y;iy 2

A6 In the past week, has the ache or pain/discomfort been

fle;j thuj;jpy; typ vg;gb ,Ue;jJ?
 very unpleasant..... kpfTk; mjpfkh 1*
 a little unpleasant..... XusT mjpfkh 2
 or not unpleasant?.....Rj;jkh ,y;iyah1 3

A7 Has the ache or pain/discomfort bothered you when you were doing something interesting in the past week ?
 nuhk;gMirah vjhtJ (,;lkhd Ntiy) nrQ;rpl;L ,Uf;Fk; NghJ ,e;j typ njhe;juT jUkh?

Yes.....Mk 1*

No/has not done anything interesting.....
 ,y;iy ,;lkhd vijAk; nra;ay 2

A8 How long have you been feeling this ache or pain/discomfort as you have just described?

,g;g ePq;f nrhd;d ,e;j typ vt;ttsT ehs; ,Uf;FJ?
 less than 2 weeks..... ,uz;L thuj;Jf;Fk; fk;kpah 1
 2 weeks but less than 6 months ,uz;L thuj;Jf;FNky;; 2
 6 months but less than 1 year..... 6 khrij;Jf;FNky; 3
 1 year but less than 2 years..... 1 tU\j;Jf;F Nky; 4
 2 years or more..... 2 tU\j;Jf;F Nky 5

9 Interviewer check: Sum codes which you ringed at A4, A5, A6 and A7. -----

--
Go to Section B.

B. Fatigue

B1 Have you noticed that you've been getting tired in the past month?
 fle;j khjj;jpy; ,Ue;J nuhk;g Nrhu;th ,Uf;fwPq;fsh? Rhjhud Ntiyf;F \$l nuhk;g Nrhu;e;J NghuPq;fsh?

Yes..... Mk; 1 **Go to B3**
 No..... ,y;iy 2 **Go to B2**

B2 During the past month, have you felt you've been lacking in energy ?
 fle;j khjj;jpy; rf;jp fk;kpahd khjpup NjhZjh?

Yes..... Mk; 1 **Go to B3**
 No..... ,y;iy 2 **Go to Section C**

B3 Do you know why you have been feeling tired/lacking in energy?
 Vd; ,e;j khjpup Nrhu;e;J NghuPq;fD njupAjh?

Yes..... Mk; 1 **Go to (a)**
 No..... ,y;iy 2 **Go to B4**

- (a) What is the main reason ? (**Mention items from list**)
- | | | | |
|--|-----------------------|---|------------------------|
| Kf;fpa fhuzk; vd;d? | | | |
| Problems with sleep..... | J}f;fk; gpur;ridah? | 1 | Go to B4 |
| Medication..... | kUe;J rhg;gplwjdhy; | 2 | Go to B4 |
| Physical illness..... | clk;G Rfk;kpy;yhjdhy; | 3 | Go to B4 |
| Working too hard (inc. housework, looking after baby)..... | [h];jp Ntiydhy; | 4 | Go to B4 |
| Stress, worry or other psychological reason..... | kdR ftiydhy; | 5 | Go to B4 |
| Physical exercise..... | clw; gapw;r;rpdy; | 6 | Go to Section C |
| Other..... | Ntu | 7 | Go to B4 |
-

- B4** In the past seven days,including last (DAY OF WEEK) on how many days have you felt tired/lacking in energy ?
- fle;j thuj;jpy; vj;jid ehl;fs; Nrhu;thf ,Ue;jPq;fs;?
- | | | | |
|----------------------|------------------|----|------------------|
| 4 days or more | 4 ehl;fSf;F Nky; | 1* | Go to B5 |
| 1 to 3 days | 1-3 ehl;fs; | 2 | Go to B5 |
| None..... | ,y;iy | 3 | Go to B10 |

- B5** Have you felt tired/lacking in energy for more than 3 hours in total on any day in the past week? (**Exclude time spent sleeping.**)
- fle;j thuj;jpy; ve;j ehshtJ %d;W kzp Neu;jpw;Fnky; Nrhu;thf ,Ue;jPq;fshh?
- | | | | |
|----------|-------|----|--|
| Yes..... | Mk; | 1* | |
| No..... | ,y;iy | 2 | |

- B6** Have you felt so tired/lacking in energy that you had to push yourself to get things done in the past week ?
- fle;j thuj;jpy; nuhk;g Kau;r;rp nrQ;rhjhd; Ntiy Kbawkhjpup Nrhu;thf ,Ue;jjh?
- | | | | |
|-------------------------|-------------------|---|--|
| Yes, at least once..... | Mk; xU jlitaHJ 1* | | |
| No..... | ,y;iy | 2 | |

- B7** Have you felt tired/lacking in energy when doing things that you enjoy during the past week?
- tpUg;gkhd Ntiy nra;Ak; NghJ \$l ,t;tsT Nrhu;thf ,Uf;Fkh?
- | | | | |
|-------------------------|----------------|----|-----------------|
| Yes, at least once..... | Mk; xU jlitaHJ | 1* | Go to B9 |
| No..... | ,y;iy | 2 | Go to B8 |
- (Spontaneous)Does not enjoy anything..... **Go to B8**

- B8** Have you in the past week felt tired/lacking in energy when doing things that you used to enjoy?
- Ke;jp ,;lkh nra;aw Ntiyia ,g;Ngh nrQ;rh Nrhu;th ,Uf;Fjh?
- | | | | |
|----------|-------|----|--|
| Yes..... | Mk; | 1* | |
| No..... | ,y;iy | 2 | |

- B9** How long have you been feeling tired/lacking in energy in the way you have just described? (**Mention items from list**)

,g;g nrhd;d khjpup vj;jid ehs; Nrhu;thf ,Uf;fwPq;f?		
less than 2 weeks.....	,uz;L thuj;Jf;Fk; fk;kpah	1
2 weeks but less than 6 months..	,uz;L thuj;Jf;FNky; - 6 khrj;Jf;Fs;	2
6 months but less than 1 year....	.6 khrj;Jf;FNky; - 1 tU\j;Jf;Fs;	3
1 year but less than 2 years..	1 tU\j;Jf;FNky; - 2 tU\j;Jf;Fs;	4
2 years or more.....	2 tU\j;Jf;FNky;	5

B10 Have you felt dizzy when you been anxious/nervous/tense ?
ePq;fs; ,jak; glglg;G kw;Wk; if eLq;fp Ntu;j;j NghJ cq;fSf;F jiy Rj;ujh?

Yes.....	Mk;	1
No.....	,y;iy	2

**B11 Interviewer check: Sum codes which you have ringed at B4, B5, B6, B7 and B8. -----
Go to Section C.**

C . Concentration and forgetfulness

C1 In the past month, have you had any problems in concentrating on what you are doing?
fle;j khjj;jpy; Ntiya ftdpr;R nra;a f;lkh ,Ue;jjh?

Yes, problems concentrating....	Mk;	1
No.....	,y;iy	2

C2 Have you noticed any problems with forgetting things in the past month?
fle;j khjj;jpy; kwjp mjpfk; ,Ue;jjh?

Yes.....	Mk;	1
No.....	,y;iy	2

**C3 Interviewer code: Informant has problems concentrating or forgets things (coded 1 at C1 or C2)..... Go to C4
Others..... Go to Section D**

C4 Since last (DAY OF WEEK), on how many days have you noticed problems with your concentration/memory ?
fle;j thuj;jpy; vj;jid ehs; ,e;j kwjp - ftdf;FiwT ,Ue;jJ

4 days or more.....	4 ehl;fSf;F Nky;	1*	Go to C5
1 to 3 days	1-3 ehl;fs;	2	Go to C5
None	,y;iy	3	Go to C9

**C5 Informants who had concentration problems
DNA: others (coded 2 at C1)..... Go to C7**

In the past week could you concentrate on a TV program,
read a newspaper article or talk to someone without your mind wandering?
T.V. ghf;Fk; NghJ> Ngg;gu; gbf;Fk;NghJ> ahNuhLk; NgRk;NghJ ftdk;
rpjwhky; nra;a KbQ;rjh?

Yes.....	Mk;	2
----------	-----	---

No/not always..... ,y;iy 1*

C6 In the past week, have these problems with your concentration actually **stopped** you from getting on with things you used to do or would like to do?

,e;j ftdg; gpur;riddhy ePq;f vg;gTk; nra;Aw Ntiyf;F my;yJ nra;a tpUg;gg;gLk; Ntiyf;F jil tUkh?

Yes..... Mk; 1*
No..... ,y;iy 2

C7 Informants who had memory problems

DNA:others (coded 2 at C2)..... 1 Go to C8

(Earlier you said you have been forgetting things)

Have you forgotten anything important in the past seven days?

Nghd thuj;jpy; Kf;fpakhd vijAk; kwe;Jtpl;Bu;fsh?

Yes..... Mk; 1*
No..... ,y;iy 2

C8 How long have you been having the problems with your concentration/memory as you have described?

,e;j ftdf;FiwT - kwjp vj;jid ehl;fs; cs;sd?

Less than 2 weeks..... ,uz;L thuj;Jf;Fk; fk;kpah 1

2 weeks but less than 6 months....,uz;L thuj;Jf;FNky; - 6 khrij;Jf;Fs; 2

6 months but less than 1 year.....6 khrij;Jf;FNky; - 1 tUj;Jf;Fs; 3

1 year but less than 2 years..... 1 tUj;Jf;FNky; - 2 tUj;Jf;Fs;4

2 years or more..... 2 tUj;Jf;FNk 5

C9 Interviewer check: Sum codes which you have ringed at C4, C5, C6 and C7.----

Go to Section D.

D. Sleep problems

D1 In the past month, have you been having problems with trying to get to sleep or with getting back to sleep if you woke up or were woken up?

Fle;j khjj;jpy; ghjp J}f;fj;y Kopr;rpl;lh ,y;ydh vOg;gptpl;lh - mJf;fg;guk; J}f;fk; tUkh?

Yes.... Mk; 1 **Go to D3**
No..... ,y;iy 2 **Go to D2**

D2 Has sleeping more than you usually do been a problem for you in the past month?

tHf;jjtpl [h];jp J}q;fujpdhNy gpur;rid ,Uf;fpwjh?

Yes..... Mk; 1 **Go to D3**
No..... ,y;iy 2 **Go to Section E**

D3 On how many of the past seven nights did you have problems with your sleep ?

fle;j thuj;jpy; vj;jid ehs; J}q;f f\;l;k; ,Ue;jJ?

4 nights or more.....	4 ehl;fSf;F Nky;	1*	Go to D4
1 to 3 nights....	1-3 ehl;fs;	2	Go to D4
None.....	,y;iy	3	Go to D11

D4 Do you know why you are having problems with your sleep?
cq;fSf;F Vd; J}f;fk; f;l;lk; ,Uf;FJD njupAkh?
Yes..... Mk; 1 **Go to D4a**
No..... ,y;iy 2 **Go to D5**

(a) Can you tell me the main reason for these problems? (**Mention items on list.**)
Kf;fpa fhuzk; vd;d?

- | | | | |
|---|---|-----------------------------|---|
| 1 | Noise..... | rj;jk; [h];jp | |
| | Shift work/too busy to sleep..... | nuhk;g Ntiy | |
| 2 | | | |
| 3 | Illness/discomfort..... | tpahjpdhy | |
| | Worry/thinking..... | ftiy - rpe;jidfs; | 4 |
| | Needing to go to the toilet..... | xz;Zf;F - ntspf;F Nghwjpdhy | 5 |
| | Having to do something (e.g. look after baby) | Ntu VjhtJ Ntiydhy | 6 |
| 7 | Tired..... | Nrhu;T | |
| 8 | Medication..... | kUe;jpdhy; | |
| 9 | Other..... | Ntu | |

D5 Informants who had problems trying to get (back) to sleep
DNA: Others (coded 2 at D1)... 1 **Go to D8**

Thinking about the night you had the least sleep in the past week, how long did you spend trying to get to sleep? (If you woke up or were woken up I want you to allow a quarter of an hour to get back to sleep).

J}f;fk; tuitf;f vt;tsT Neuk; Kaw;rp nrQ;rPq;f

code'0'
Less than 1/4 hr..... fhy; kzp Neuj;Jf;Fs 3 **Go to D11 and**

At least 1/4 hr but less than 1 hrxU kzp Neuj;Jf;Fs; 1* **Go to D7**

At least 1 hr but less than 3 hrs.....

xU kzp Neuj;Jf;Fnky; - 3 kzp Neuj;Jf;Fs; 2* **Go to D7**

3 hrs of more.....3 kzp Neuj;Jf;Fnky; 2* **Go to D6**

D6 In the past week, on how many nights did you spend 3 or more hours trying to get to sleep?

fle;j thuj;jpy; vj;d ehs; %Z kzpNeu J}f;fk; tuitf;f Kaw;rp nrQ;rPq;f?

4 nights or more..... 4 ehl;fSf;F Nky; 1*

1 to 3 nights..... 1-3 ehl;fs; 2

None..... ,y;iy 3

D7 Do you wake more than two hours earlier than you need to and then find you can't get back to sleep?

tof;fj;Jf;Fk; ,uz;L kzpNeuk; Kd;dhb Kopr;R mJ gpwF J}f;fk; tuhk
 f\;l;lg;glwPq;f?
 Yes..... Mk; 1 **Go to D10**
 No..... ,y;iy 2 **Go to D10**

D8 Informants who slept more than usual

Thinking about the night you slept the longest in the past week, how much longer did you sleep compared with how long you normally sleep for?

vg;gTk; J}q;fuJf;F Nky vt;tsT Neuk; mjpfkhf J}q;fdPq;f?
 Less than 1/4 hr.....fhy; kzp Neuj;jpw;F Fiwthf 3 **Go to D11**

and code '0'

At least 1/4 hr but less than 1 hr
 fhy; kzp Neuj;Jf;F Nky; xU kzp Neuj;Jf;F
 Fiwthf 1* **Go to D10**

At least 1 hr but less than 3 hrs.....
 xU kzp Neuj;Jf;F Nky; 3 kzp Neuj;Jf;Fs; 2* **Go to D10**
 3 hrs of more.....3 kzp Neuj;Jf;Fny ; 2* **Go to D9**

D9 In the past week, on how many nights did you sleep for more than 3 hours longer than you usually do?

,e;j khjpup vj;jid ehs; %ZkzpNeuj;Jf;F Nky J}q;fpdPq;f?
 4 nights or more..... 4 ehl;fSf;F Nky ; 1*
 1 to 3 nights..... 1-3 ehl;fs; 2
 None..... ,y;iy 3

D10 How long have you had these problems with your sleep as you have described?

,e;j J}f;f \;l;lk; vj;jid ehsh ,Uf;FwJ?
 less than 2 weeks 2 thuj;Jf;Fs;
 1
 2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs;
 2
 6 months but less than 1 year..... 6 khrj;Jf;FNky; 1 tU\j;Jf;Fs; 3
 1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs ;4
 2 years or more..... 2 tU\j;Jf;FNky; 5

D11 Interviewer check: Sum codes which you have ringed at D3, D5, D6, D8 and D9. -----

Go to Section E.

E. Irritability

E1 Many people become irritable or short tempered at times, though they may not show it.

Have you felt irritable or short tempered with those around you in the past month?

fle;j khjj;jpy; cq;fis Rj;jp cs;stq;f Nky Nfhgk; vupr;ry;g;gl;lJz;lh?

Yes/no more than usual.... Mk; 1 **Go to E3**

No..... ,y;iy 2 **Go to E2**

E2 During the past month did you get short tempered or angry over things which now seem trivial when you look back on them?

Nghd khjk; Nfhgg;gl;l tp\ak;nky;yhk; ,g;g ghj;jh rpd;d tp\ak; khjpup NjhZjh?

Yes..... Mk; 1 **Go to E3**

No..... ,y;iy 2 **Go to Section F**

E3 Since last (DAY OF WEEK), on how many days have you felt irritable or short tempered/angry?

Nghd thuj;jpy vj;jid ehs; vupr;ry; gl;Uf;fPq;f?

4 days or more.... 4 ehl;fSf;F Nky; 1* **Go to E4**

1 to 3 days.... 1-3 ehl;fs; 2 **Go to E4**

None..... ,y;iy 3 **Go to E11**

E4 What sort of things made you irritable or short tempered/angry in the past week?
ve;j khjpup tp\aq;fs; cq;fis Nfhgg;gLj;jpaJ?

E5 In total, have you felt irritable or short tempered/angry for more than one hour (on any day in the past week)?

nkhj;jkh xU kzp Neuj;Jf;F Nky; Nfhgg;gl;lJz;lh?

Yes..... Mk; 1*

No..... ,y;iy 2

E6 During the past week, have you felt so irritable or short tempered/angry that you have wanted to shout at someone, even if you haven't actually shouted?

Nghd thuj;y vupr;ry; my;yJ Nfhg;gj;dhy ahiahtJ fj;jDk; Nghy Njhzpr;rh?

Yes..... Mk; 1*

No..... ,y;iy 2

E7 In the past seven days, have you had arguments, rows or quarrels or lost your temper with anyone?

Nghd thuj;y ahu;fpl;lshJ Nfhr;rpl;L rz;l Nghl;Bq;;fsh?

Yes..... Mk; 1* **Go to (a)**
 No..... ,y;iy 2 **Go to E10**

(a) Did this happen one or more than once (in the past week)?

XU jukh ,y;y NkNyah?

Once..... xUKiw 1 **Go to E8**
 More than once..... xUKiwf;F Nky; 2 **Go to E9**

E8 Do you think this was justified?

,J epahak;D epidf;wPu;fsh?

Yes, justified..... Mk; 2 **Go to E10**
 No, not justified..... ,y;iy 1* **Go to E10**

E9 Do you think this was justified on every occasion?

vy;yh jlitAk; epahak;D NjhDjh?

Yes..... Mk; 2 **Go to E10**
 No, at least one was unjustified..... ,y;iy 1* **Go to E10**

E10 How long have you been feeling irritable or short tempered/angry as you have described?

vj;jid ehl;fs; cq;fSf;F Nfhgk; vupr;ry; ,Ug;gjhf epidf;wPq;f?

less than 2 weeks..... 2 thuj;Jf;Fs;

1
 two weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs; 2
 6 months but less than 1 year..... 6 khrj;Jf;FNky; 1 tUj;Jf;Fs;
 3
 1 year but less than 2 years..... 1 tUj;Jf;FNky; 2 tUj;Jf;Fs ;4
 2 years or more..... 2 tUj;Jf;FNky; 5

E11 Interviewer check: Some codes which you have ringed at E3, E5, E6, E8 and E9,-----

Go to Section F.

F. Worry about physical health

F1 Many people get concerned about their physical health. In the past month, have you been at all worried about your physical health?

fle;j khjk; vg;gthJ cq;fs; cly; eyk; gw;wp ftiyg; gl;Bq;fsh?

Yes, worried..... Mk; 1 **Go to F3**
 No/concerned..... ,y;iy 2 **Go to F2**

F2 Informants who have no problems with physical health

DNA: has a physical health problem 1 Go to Section G

During the past month, did you find yourself worrying that you might have a serious physical illness?

VjhtJ gaq;fukhd Neha; ,Uf;Fk;D ftiy gl;Bu;fsh?
 Yes..... Mk; 1 **Go to F3**
 No..... ,y;iy 2 **Go to Section G**

F3 Thinking about the past seven days, including last (DAY OF WEEK), on how many days have you found yourself worrying about your physical health/that you might have a serious physical illness?
 Nghd thuk; vj;jid ehs; ,e;j khjpup cly; eyk; gw;wp ftiygl;Bfs;?
 4 days or more..... 4 ehl;fSf;F Nky; 1* **Go to F4**
 1 to 3 days..... 1-3 ehl;fs; 2 **Go to F4**
 None..... ,y;iy 3 **Go to F8**

F4 In your opinion, have you been worrying too much in view of your actual health ?
 cq;f ghu;ity Njit ,y;yhk cly; eyk; gw;wp ftiyglwPq;fsh?
 Yes..... Mk; 1*
 No..... ,y;iy 2

F5 In the past week, has this worrying been (**Running prompt**)
 fle;j thuj;jpy; ,e;j ftiy
 very unpleasant..... kpfTk; mjpgk; 1*
 a little unpleasant.... nfhQ;rk; mjpgk; 2
 or not unpleasant..... fl;lkhf ,y;iy 3

F6 In the past week, have you been able to take your mind off your health worries at least once, by doing something else ?
 Ntu vjhtJ nrQ;rh ,e;j ftiyapy; ,Ue;J kdR khw;w KbAjh?
 Yes..... Mk; 2
 No, could not be distracted once..... ,y;iy 1*

F7 How long have you been worrying about your physical health in the way you have described ?
 ,e;j khjpup vj;d ehs; ftiygl;Bu;fs;?
 less than 2 weeks..... 2 thuj;Jf;Fs; 1
 2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrij;Jf;Fs; 2
 6 months but less than 1 year..... 6 khrij;Jf;FNky; 1 tUj;Jf;Fs; 3
 1 year but less than 2 years..... 1 tUj;Jf;FNky; 2 tUj;Jf;Fs; 4
 2 years or more..... 2 tUj;Jf;FNky; 5

F8 Interviewer check: Sum codes which you have ringed at F3, F4, F5 and F6. --

Go to Section G.

G. Depression

G1 Almost everyone becomes sad, miserable or depressed at times.
 Have you had a spell of feeling sad, miserable or depressed in the past month?
 fle;j khjj;y ehs; fzf;fh Nrhfkf> ftiyah> nehe;J Ngha; ,Ue;jPq;fsh?
 Yes..... Mk; 1
 No..... ,y;iy 2

G2 During the past month, have you been able to enjoy or take an interest in things as much as you usually do?
 fle;j khjj;y vg;NghJk; Nghy cw;rhfkf MirNahL fhupaq;fis nra;a KbAjh?
 Yes..... Mk; 1
 No/no enjoyment or interest..... ,y;iy 2

G3 Interviewer check: Code first that applies.
Informant felt sad, miserable or depressed (coded 1 at G1)...
.1 Go to G4
Informant unable to enjoy or take an interest (coded 2 at G2). .2
Go to G5
Others..... 3 Go
to Section I

G4 In the past week have you had a spell of feeling sad, miserable or depressed? (Use informants own words)
 fle;j thuj;y ehs; fzf;fh Nrhfkf> ftiyah nehe;J Ngha; ,Ue;jPq;fsh?
 Yes..... Mk; 1 **Go to G5**
 No..... ,y;iy 2 **Go to G5**

G5 Informants who were unable to enjoy or take an interest in things
DNA:coded 1 at G2..... 1 Go to G6
 In the past week have you been able to enjoy or take an interest in things as much as usual?
 fle;j thuj;y vg;NghJk; Nghy cw;rhfkf MirNahL fhupaq;fis nra;a KbAjh?
 Yes..... Mk; 2
 No/no enjoyment or interest..... ,y;iy 1*

G6 Informants who felt sad, miserable or depressed or unable to enjoy or take an interest in things in the past week (coded 1 at G4 or G5)
DNA:others..... 1 Go to G11
 Since last (DAY OF WEEK) on how many days have you felt sad, miserable or depressed/unable to enjoy or take an interest in things?
 Nghd thuj;y vj;d ehs; rq;flkhf> Nrhfkf> vJNkNyAk; Mirapy;yhky; ,Ue;jJ?
 4 days or more..... 4 ehl;fSf;F Nky ;1*
 2 to 3 days..... 1-3 ehl;fs;
 1 day..... ,y;iy 3

G7 Have you felt sad, miserable or depressed/unable to enjoy or take an interest in things for more than 3 hours in total (on any day in the past week)?
fle;j thuj;y ve;j ehshtJ 3 kzp Neuj;Jf;FNky; Nrhfkhf> rq;flkhf ,Ue;jPh;fsh?
Yes..... Mk; 1*
No..... ,y;iy 2

G8 (a) What sorts of things made you feel sad, miserable or depressed/unable to enjoy or take an interest in things in the past week? (**Mention items on list.**)
ve;j khjpup tp\aj;jpdhy rq;flkh ,Ue;jJ?

Members of the family.....	FLk;gj;jpdh;fs;shy;	1
Relationship with spouse/partner....	tPl;Lfhuu;-tPl;Lfhuk;khdhy	2
Relationships with friends.....	ez;gu;fdhy	3
Housing.....	jq;fw ,lj;jpdhy	4
Money/bills.....	gzk;	5
Own physical health (inc. pregnancy)....	nrhe;j cly; epiy	
6 Own mental health.....	nrhe;j kd epyik	7
Work or lack of work (inc. student)....	Ntiy gpur;rid	8
Legal difficulties.....	Nfhl;L> tf;fpy; gpur;rid	9
Political issues/the news.....	murpay; tptfhuk;	10
Other.....	Ntu	11
Don't know/no main thing.....	njupahJ	12

(b) **DNA: Only one item coded at (a) 1 Go to G9**

What was the main thing? (**List code on G8a**)
Kf;fpakhd fhuzk; vJ?

G9 In the past week when you felt sad, miserable or depressed/unable to enjoy or take an interest in things, did you ever become happier when something nice happened, or when you were in company?

Nghd thuj;y ePq;f Nrhfkhf ,Ue;jNghJ> VjhtJ ey;yJ ele;jh> ahh; \$lthJ
Ngrpl;bUe;jh nfhQrk; re;Njh\khf ,Ue;jjh?

Yes, at least once..... Mk; 2
No..... ,y;iy 1*

G10 How long have you been feeling sad, miserable or depressed/unable to enjoy or take an interest in things as you had described?

,g;g nrhd;dkhjup vj;d ehs; Nrhfkh> cw;rhfkh ,y;yhky; ,Ue;jPq;f?
less than 2 weeks..... 2 thuj;Jf;Fs; 1
2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs;
2
6 months but less than 1 year..... 6 khrj;Jf;FNky; 1 tU\j;Jf;Fs; 3
1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs ;4
2 years or more..... 2 tU\j;Jf;FNky; 5

G11 Interviewer check: Sum codes which you have ringed at G5, G6, G7 and G9. -

--
Go to Section H.

H. Depressive Ideas

H1 Informants who scored 1 or more at Section G, Depression

DNA:Others (coded 0 or blank at G11)..... Go to Section I

I would now like to ask you about when you have been feeling sad, miserable or depressed/unable to enjoy or take an interest in things. In the past week, was this worse in the morning or in the evening, or did this make no difference? (Prompt as necessary)

Nghd thuj;y Nrhfkx ,Ue;jpr;nrd;W nrhd;dPq;f, mJ vg;Ngh mjpfkh ,Ue;jJ?
in the morning..... fhiyapyh 1
in the evening..... rhaq;fhykh 2
no difference/other..... tpj;ahrNk ,y;iyah 3

H2 Many people find that feeling sad, miserable or depressed/unable to enjoy or take an interest in things can affect their interest in sex. Over the past month, do you think your interest in sex has

(Running prompt)

Nghd khjj;y cq;f tPl;Lf;fhuNuhl - tPl;Lf;fhuk;khNthl NrUk;NghJ vg;gTk; Nghy Mir ,Ue;jjh?

increased..... [h];jpahr;R 1
decreased..... FiwQ;rpr;rh 2
or has it stayed the same?..... mNj khjpup 3
not applicable..... xd;Wk; ,y;iy 4

H3 When you have felt sad, miserable or depressed/unable to enjoy or take an interest in things in the past seven days,
ePq;fs; Nrhu;thf> Jaukhf ,Uf;Fk; NghJ cq;fshy; Mu;tk; fh;l Kbfpwjh?

(a) have you been so restless that you couldn't sit still?

xU ,lj;y mikpah cf;fhu Kbahky; ,Ue;jjh?

Yes.....Mk; 1; No..... ,y;iy 2

(b) have you been doing things more slowly, for example, walking more slowly?.....

vy;yhj;ijAk; nkJth nra;AuPq;fsh? elf;fuJ>

Yes.....Mk; 1; No..... ,y;iy 2

(c) have you been less talkative than normal?

vg;igAk; tpl Ngr;R fk;kpahr;rh?

Yes.....Mk; 1; No..... ,y;iy 2

H4 Now, thinking about the past seven days have you on at least one occasion felt guilty or blamed yourself when things went wrong when it hasn't been your fault?

Nghd thuj;y vg;gthJ ePq;f nra;ahj Fw;wj;Jf;F ePq;f jhd; fhuzk;D nedr;R tUjg;gl;Bq;fsh?

	Yes, at least once.....	Mk;	1*	
	No.....	,y;iy	2.	
H5	During the past week, have you been feeling you are not as good as other people? Nghd thuj;y ePq;f kj;jtq;f msTf;F x]j;papy;yd;D epidf;uPq;fsh?			
	Yes.....	Mk;	1*	
	No.....	,y;iy	2	
H6	Have you felt hopeless at all during the past seven days, for instance about your future? fle;j VO ehl;fs;y vg;gthJ ek;gpf;ifNa ,y;yhj khjpup ,Ue;jjh (cq;f vjpu;fhyk; gw;wp)			
	Yes.....	Mk;	1*	
	No.....	,y;iy	2	
H7	Interviewer Check			
	Informant felt guilty, not as good as others or hopeless (coded 1 at H4 or H5 or H6).....			1 Go to H8
	Others (coded 2 at H4, H5 and H6).....			2 Read H10
H8	In the past week have you felt that life isn't worth living? fle;j thuj;y tho;f;ifa tho;ujpy mu;j;jk; ,y;yd;D NjhZjh?			
	Yes.....	Mk;	1	Go to H9
	Yes, but not in the past week... Mk;> Mdh; fle;jthuj;jpy; ,y;iy			2 Read H10
	No.....	,y;iy	3	Read H10
H9	In the past week, have you thought of killing yourself? fle;j thuj;y jw;nfh;ij gj;jp cq;fs; lhf;lu;fpl;l nrhd;dPq;fsh?			
	Yes.....	Mk;	1	Go to H9a
	Yes, but not in the past week.... Mk;> Mdh; fle;jthuj;jpy; ,y;iy			2 Read H10
	No.....	,y;iy	3	Read H10
	(a) Have you talked to your doctor about these thoughts (of killing yourself)? ,e;j Nahridfs; gj;jp cq;fs; lhf;lu;fpl;l nrhd;dPq;fsh?			
	Yes.....	Mk;	1	Read H10
	No, but has talked to other people..... NtU ahh;fpl;lahtJ			2 Read H9b
	No.....	,y;iy	3	Read H9b

(b) (You have said that you are thinking about committing suicide)
Since this is a very serious matter it is important that you talk to your doctor about these thoughts.

H10 (Thank you for answering those questions on how you have been feeling. I would now like to ask you a few questions about worrying)

H11 **Interviewer check: Sum codes which you have ringed at H4, H5, H6, H8 and H9. -----**
Go to Section I

For the next few questions, I want you to think about the worries you have had other than those about your physical health.

cq;f cly;epiy jtpu kj;j fhuzq;fisg; gw;wp Nahrpr;R nrhy;Yq;f.

-
- I6** On how many of the past seven days have you been worrying about things (other than your physical health)?
fle;j VO ehl;fs;y vj;d ehl;fs; ftiyg;gl;bUe;jPq;f?
4 days of more..... 4 ehl;fSf;F Nky ; 1* **Go to I7**
1 to 3 days..... 1-3 ehl;fs; 2 **Go to I7**
None..... ,y;iy 3 **Go to I11**
- I7** In your opinion, have you been worrying too much in view of your circumstances?
(Refer to worries other than those about physical health)
cq;f ghh;ity ,g;g ,Uf;fpw #o;epiyf;F Njitapy;yhk ftiygluPq;fsh?
Yes..... Mk; 1*
No..... ,y;iy 2
- I8** In the past week, has this worrying been: **(Running prompt)**
(Refer to worries other than those about physical health)
fle;j thuj;y ,e;j ftiy
very unpleasant.....jhq;f Kbahky; ,Ue;jjh 1*
a little unpleasant.....jhq;fu khjpup ,Ue;jjh 2
or not unpleasant.....guthy;yhk ,Ue;jjh 3
- I9** Have you worried for more than 3 hours in total on any one of the past seven days?
(Refer to worries other than those about physical health)
fle;j VO ehl;fspy; xU ehspyhtJ 3 kzp Neuj;jpw;F Nky; ftiyahf ,Ue;jPq;fsh?
Yes..... Mk; 1*
No..... ,y;iy 2
- I10** How long have you been worrying about things in the way that you have described?
,g;g nrhd;d khjpup vj;d ehs; ftiyNahL ,Uf;fPq;f?

less than 2 weeks.....	2 thuj;Jf;Fs;	1
2 weeks but less than 6 months.....	2 thuj;Jf;FNky; 6 khrij;Jf;Fs;	2
6 months but less than 1 year....	6 khrij;Jf;FNky; 1 tU\j;Jf;Fs;	3
1 year but less than 2 years.....	1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs;	4
2 years or more.....	2 tU\j;Jf;FNky;	5

I11 Interviewer check: Sum codes which you have ringed at I6, I7, I8 and I9. -----

-

Go to Section J.

J. Anxiety

J1 Have you been feeling anxious or nervous in the past month?

fle;j khjj;y gjl;lkhf - glgklg;NghL ,Ue;jPq;fsh?

Yes, anxious or nervous..... Mk; 1 **Go to J3**

No..... ,y;iy 2 **Go to J2**

J2 In the past month, did you ever find your muscles felt tense or that you couldn't relax?

fle;j khjj;y vg;gthJ cq;f clk;G nuhk;g ,Uf;fpdkhj pup Y}Jh tpl Kbahj khj pup ,Uj;Jr;rh?

Yes..... Mk; 1

No..... ,y;iy 2

J3 Some people have phobias; they get nervous or uncomfortable about specific things or situations when there is no real danger. For instance they may get nervous when speaking or eating in front of strangers, when they are far from home or in crowded rooms, or they may have a fear of heights. Others become nervous at the sight of things like blood or spiders.

In the past month have you felt anxious, nervous or tense about any specific things or situations when there was no real danger ?

fle;j khjj;y vjhtJ Fwpg;gpl;l fhupaj;Jf;F Njitapy;yhk gae;jPq;fsh?

Yes..... Mk; 1

No..... ,y;iy 2

J4 Interviewer check:

Informant reports anxiety and also a phobia (coded 1 at J1 or J2, and coded 1 at J3)..... 1 Go to J5

Informant reports only general anxiety (coded 1 at J1 or J2, and coded 2 at J3).... 2 Go to J7

Others..... 3 Go to Section K

J5 In the past month, when you felt anxious/nervous/tense, was this always brought on by the phobia about some specific situation or thing or did you sometimes feel generally anxious/nervous/tense ?

fle;j khjj;y ePq;f gag;gl;lNghJ mJ vjtJ xU Fwpg;gpl;l #o;epiyahyNah my;yJ nghJthfNt gaKk; eLf;ffKk; ,Ue;jjh?

Always brought on by phobia..... Fwpg;gpl;l #o;epiyshy 1 **Go**

to Section K

Sometimes felt generally anxious.....nghJthfNt gak; 2 **Go to J6**

J6 The next questions are concerned with general anxiety/nervousness/tension only. I will ask you about the anxiety which is brought on by the phobia about specific things or situations later.

On how many of the past seven days have you felt generally anxious/nervous/tense ?

fle;j VO ehl;fs;y vj;d ehl;fs; nghJthf gakhf - eLf;fkhf ,Ue;jJ?

4 days or more..... 1* **Go to J8**

1 to 3 days..... 2 **Go to J8**

None..... 3 **Go to J12**

J7 On how many of the past seven days have you felt generally anxious/nervous/tense ?

fle;j VO ehl;fs;y vj;d ehl;fs; cq;fSf;F gaKk; eLf;fKk; ,Ue;jJ?

4 days or more..... 4 ehl;fSf;F Nky; 1* **Go to J8**

1 to 3 days..... 1-3 ehl;fs; 2 **Go to J8**

None..... ,y;iy 3 **Go to J12**

J8 In the past week, has your anxiety/nervousness/tension been: **(Running prompt)**

fle;j VO ehl;fs;y cq;f gaKk; eLf;fKk; vg;gb ,Ue;jJ?

very unpleasant..... jhq;f Kbahky; ,Ue;jjh 1*

a little unpleasant..... jhq;fu khjpup ,Ue;jjh 2

or not unpleasant..... guthy;yhk ,Ue;jjh 3

J9 In the past week, when you've been anxious/nervous/tense, have you had any of physical symptoms? **(Mention symptoms on list)**

,e;j gak; te;j NghJ fPo; fhDk; vit khjpup ,Ue;jJ?

Yes..... Mk; 1* **Go to (a)**

No..... ,y;iy 2 **Go to J10**

- (a) Which of these symptoms did you have when you felt anxious/nervous/tense ?
- | | | |
|---|--|---|
| | fPo; fhDk; ,ifspy; Fwpg;gpL | |
| 1 | Heart racing or pounding.... ,jak; glglg;G | 1 |
| 2 | Hands sweating or shaking..... if eLq;fp Ntu;j;J NghuJ | 2 |
| 3 | Feeling dizzy..... jiy Rj;uJ | |
| 4 | Difficulty getting your breath..... %r;R jpzuy; | |
| 5 | Butterflies in stomach..... taW fyf;wJ | |
| 6 | Dry mouth..... tha; fhQ;R NghuJ | 6 |
| 7 | Nausea or feeling as though you wanted to vomit.... Fkl;ly;-the;jp tuNghu khjpup | |

- J10** Have you felt anxious/nervous/tense for more than 3 hours in total on any one of the past seven days ?
- Nghd thuj;y vjhtJ ehs; 3 kzp Neuj;Jf;Fk; Nky; gak; my;yJ gjl;lk; mile;jPu;fsh?
- | | | |
|----------|-------|----|
| Yes..... | Mk; | 1* |
| No..... | ,y;iy | 2 |

- J11** How long have you had these feelings of general anxiety/nervousness/tension as you described?
- ,e;j nrhd;d khjpup gak; gjl;lk; vj;d ehshf ,Uf;FJ?
- | | | |
|-------------------------------------|---------------------------------|---|
| less than 2 weeks..... | 2 thuj;Jf;Fs; | 1 |
| 2 weeks but less than 6 months..... | 2 thuj;Jf;FNky; 6 khrj;Jf;Fs ; | 2 |
| 6 months but less than 1 year..... | 6 khrj;Jf;FNky; 1 tU\j;Jf;Fs; | |
| 1 year but less than 2 years..... | 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs; 4 | |
| 2 years or more..... | 2 tU\j;Jf;FNky; | 5 |

- J12** Interviewer check: Sum codes which you have ringed at J6, J7, J8, J9 and J10.-----
Go to Section K.

K. Phobias

- K1** Interviewer check: Informants who had phobic anxiety in the past month (coded at 1 at J3)..... 1 Go to K3(a)
Others..... 2 Go to K2

- K2** Sometimes people avoid a specific situation or thing because they have a phobia about it. For instance, some people avoid eating in public or avoid going to busy places because it would make them feel nervous or anxious. In the past month, have you avoided any situation or thing because it would have made you feel nervous or anxious, even though there was no real danger?
- fle;j khjj;jpy vjhtJ #o;epiy-nghUs;-;lk; Nghf Kbahk jtpu;gPq;fsh?
- | | | | |
|----------|-------|---|-----------------|
| Yes..... | Mk; | 1 | Go to K3(b) |
| No..... | ,y;iy | 2 | Go to Section L |
- -----

K3(a) Can tell me which of the situations or things listed made you the most anxious/nervous/tense in the past month? **Ring code at (b), then go to K4**
 ve;j #o;epiy-nghUs; cq;fis nuhk;g gjl;lg;gLj;Jfpd;wJ?

(b) Can you tell me, which of these situations or things did you avoid the most in the past month? **(Code only one)**

Nghd khjj;y vij nuhk;g jtph;j;jPh;fs;?

Crowds or public places, including travelling alone or being far from home

\$l;lk;> neupryhd ,lq;fs;> jdpahf gazk;> tPl;iltpl;L J}ukhf NghuJ 1

Enclosed spaces..... ,Uf;fkhd ,lk; 2

Social situations, including eating or speaking in public, being watched or stared at

nghJ ,lq;fspy; rhgpLjy;> NgRjy; vy;NyhUila fz;Zk; cq;f NkyNa ,Uf;fpwJ

3

The sight of blood or injury..... ,uj;jk; fhaj;jjf; fz;L 4

Any specific single cause including insects, spiders and heights.....

G+r;rpfs;> caukhd ,lk;

5

Other (specify)..... kw;wit

6

K4 Informants who had phobic anxiety in past month

DNA: others (coded 2 at K1).....

1 Go to K7

In the past seven days, how many times have you felt nervous or anxious about (SITUATION/THING)?

fle;j VO ehl;fs;y vj;d thl;b ,e;j khjpup gae;jPq;f?

4 times or more..... 4 ehl;fSf;F Nky; 1* **Go to K5**

1 to 3 times..... 1-3 ehl;fs; tiu 2 **Go to K5**

None..... ,y;iy 3 **Go to K6**

K5 In the past week, on those occasions when you felt anxious/nervous/tense did you have any of the symptoms?

gak; ,Ue;j Neu;j;y ,e;j khjpup vy;yhk; ,Ue;jjh?

Yes..... Mk; 1* **Go to (a)**

No.....	,y;iy	2	Go to K6
(a)1	Which of these symptoms did you have when you felt anxious/nervous/tense ?		
	fPo; fhZk; ,itfsy; vJ ,Ue;jJ?		
	Heart racing or pounding....	,jak; ggl;gG	1
	Hands sweating or shaking.....	if eLq;fp Ntu;j;J NghuJ	2
	Feeling dizzy.....	jy Rj;uJ	3
	Difficulty getting your breath....	%r;R jpzuy;	4
	Butterflies in stomach.....	taW fyf;wJ	5
	Dry mouth.....	tha; fhQ;RNghuJ	6
	Nausea or feeling as though you wanted to vomit.....	the;jp tuNghu khjpup	7

K6 In the past week, have you avoided any situation or thing because it would have made you feel anxious/nervous/tense even though there was no real danger?
fle;j thuj;jpy; gajdhy vjhtJ #o;epiy-nghUs;-;lk; NghfKbahk jtpu;gPq;fsh?
Yes..... Mk; 1 **Go to K7**
No..... ,y;iy 2 **Go to K8**

K7 How many times have you avoided such situations or things in the past seven days?
vj;d thl;b ,e;jkhjpup rpy #o;epiyfis jtpu;j;jPq;f?
1 to 3 times..... 1-3 jlif; 1*
4 times or more.... 4 jlif;F Nky; 2*
None..... ,y;iy 3

K8 Informants who had phobic anxiety/avoidance in the past week (coded 1 or 2 at K4 or K7)

DNA: others..... 1 Go to K9
How long have you been having these feelings about these situations/things as you have just described ?
,g;g nrhd;d khjpup vj;d ehshf ,e;j khjpup rpy fhupaq;fs; gw;wp gak; ,Uf;F?
less than 2 weeks..... 2 thuj;jf;Fs; 1
2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs; 2
6 months but less than 1 year..... 6 khr;jJf;FNky; 1 tU\j;Jf;Fs; 3
1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs;4
2 years or more..... 2 tU\j;Jf;FNky; 5

K9 Interviewer check: Sum codes which you have ringed at K4, K5 and K7.----

Go to Section L.

L. Panic

L1 Informants who felt anxious in the past month

DNA:others (coded 3 at J4, page 31)..... 1 Go to Section M

.....
Thinking about the past month, did your anxiety or tension ever get so bad that you got in a panic, for instance make you feel that you might collapse or lose control unless you did something about it?

Nghd khjj;y vg;thJ gak; [h];jpahFk; NghJ kz;ila gpr;Rf;fyhk;Nghy> igj;jpak; gpbf;wkhjpup> ,g;gNt nrj;J Nghukhjup ,Ue;Jr;rh?
Yes..... Mk; 1 **Go to L2**
No..... ,y;iy 2 **Go to Section M**

.....

L2 How often has this happened in the past week?

fle;j thuj;y ,e;j khjpup vj;d thl;b ele;jJ?
Once..... xU Kiw 1* **Go to L3**
More than once..... xU Kiwf;F Nky; 2* **Go to L3**
Not at all..... VJk; ,y;iy 3 **Go to L8**

L3 In the past week, have these feelings of panic been: (Running prompt)

fle;j thuj;y ,e;j khjpup gjl;lk;-gPjp -
a little uncomfortable or unpleasant..... jhq;fukhjup ,Ue;jjh? 2
or have they been very unpleasant or unbearable ?..... nfhQ;rk; \$l jhq;f
Kbay 1*

L4 Did this panic/the worst of these panics last for longer than 10 minutes ?

,e;j glglg;G vg;gthJ 10 epkp\j;Jf;F Nky; ,Ue;jjh?
Yes..... Mk; 1*
No..... ,y;iy 2

L5 Are you relatively free of anxiety between these panics?

gak; gpbf;fwJf;F eLeLtpy; epk;kjpah ,Uf;fjh?
Yes..... Mk; 1
No..... ,y;iy 2

- L6 Informants who had phobic anxiety**
DNA:others (coded 2 at K1)..... 1 Go to L7
Refer to situation/thing at K3.
 Is this panic always brought on by (SITUATION/THING)?
 vg;gTNk ,e;j glgl;gG vjhtJ Fwpg;gpl;l fhuzj;jpdhy; Muk;gpf;Fjh?
 Yes..... Mk; 1
 No..... ,y;iy 2
- L7 How long have you been having these feelings of panic as you have described?**
 ,g;g nrhd;d khjpup gak; gjl;lk; vy;yhk; vj;d ehshf ,Uf;FJ?
 less than 2 weeks..... 2 thuj;jf;Fs; 1
 2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs; 2
 6 months but less than 1 year..... 6 khr;jJf;FNky; 1 tU\j;Jf; 3
 1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs; 4
 2 years or more..... 2 tU\j;Jf;FNky; 5
- L8 Interviewer check: Sum codes which you have ringed at L2, L3, and L4.-----**

Go to Section M.

M.Compulsions

- M1** In the past month, did you find that you kept on doing things over and over again when you knew you had already done them, for instance checking things like taps or washing yourself when you had already done so?
 fle;j khjj;y nrQ;rijNa njupQ;Rk; jpUg;gpj; jpUg;gpj; nrQ;rPq;fsh? cjhuzk; ifia jpUg;gp jpUg;gp fotpdPq;fsh?
 Yes..... Mk; 1 **Go to M2**
 No..... ,y;iy 2 **Go to Section N**

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- M2** On how many days in the past week did you find yourself doing things over again that you had already done?
 fle;j thuj;y vj;d ehl;fs; ePq;fs; Vw;fdNt nra;j fhupaq;fis jpUk;gp jpUk;gp nra;jPu;fs;?
 4 days or more.... 4 ehl;fSf;F Nky ; 1* **Go to M3**
 1 to 3 days..... 1-3 ehl;fs; tiu 2 **Go to M3**
 None..... ,y;iy 3 **Go to M9**

- M3** Since last (DAY OF WEEK) what sorts of things have you done over and over again ?
 fle;j thuj;y ve;j khjpupahd fhupaq;fis jpUk;gp jpUk;gp nra;jPq;f?

M4 During the past week, have you tried to stop yourself repeating (BEHAVIOUR)/doing any of these things over again?
 fle;j thuj;y ,e;j khjpup nra;auj ePq;fNs epUj;j Kaw;rp nrQ;rPq;fsh?
 Yes..... Mk; 1*
 No..... ` ,y;iy 2

M5 Has repeating (BEHAVIOUR)/doing any of these things over again made you upset or annoyed with yourself in the past week?
 ,e;jdhy cq;fSf;F cq;f NkNyNa Nfhgk; vupr;rYk; te;jjh?
 Yes, upset or annoyed..... Mk; 1*
 No, not at all..... ,y;iy 2

M6 **If more than one thing is repeated at M3**
DNA:others..... 1 Go to M7
 Thinking about the past week, which of the things you mentioned did you repeat the most times?
 Nghd thuj;y ve;j fhupaj;ij mbf;fb nrQ;rPq;f?

Describe here..... **Go to M7**
M7 Since last (DAY OF WEEK), how many time did you repeat (BEHAVIOUR) when you had already done it?
 nrQ;rijNa vj;dthl;b jpUg;gp jpUg;gp nrQ;rPq;f?
 3 or more repeats..... 3 jlit> mjw;F mjpfk; 1*
 2 repeats..... 2 jlit 2
 1 repeat..... xU jlit 3

M8 How long have you been repeating (BEHAVIOUR)/any of the things you mentioned in the way which you have described?
 ,g;g nrhd;d khjpup vj;d ehshf nrQ;rpl;bUf;fPq;f?
 less than 2 weeks..... 2 thuj;jf;Fs; 1
 2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrij;Jf;Fs; 2
 6 months but less than 1 year..... 6 khr;jJf;FNky; 1 tU\j;Jf;Fs; 3
 1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs ;4
 2 years or more..... 2 tU\j;Jf;FNky; 5

M9 **Interviewer check: Sum codes which you have ringed at M2, M4, M5 and M7.**
Go to Section N.

N.Obsessions

N1 In the past month did you have any thoughts or ideas over and over again that you found unpleasant and would prefer not to think about, that still kept on coming into your mind?
 fle;j thuj;y cq;fSf;F Ntzlhj rpe;jid jpUk;gj; jpUk;g te;J f\l;lg;gLj;Jr;rh?

Yes..... Mk; 1 **Go to N2**
 No..... ,y;iy 2 **Go to Section O**

N2 Can I check, is this the same, thought or idea over and over again or are you worrying about something in general?
 xNu vz;zk; kl;Lk; jpUk;gj; jpUk;g tUjh ,y;ydh nghJthf Nahrid gz;zPq;fsh?
 Same thought..... xNu vz;zk; 1 **Go to N3**
 Worrying in general..... nghJthf Nahrid 2 **Go to Section O**
Make a note on check flap to go to section I to record this worry, if not already recorded.

N3 What are these unpleasant thoughts or ideas that keep coming into your mind?
(Do not probe, Do not press for answer.)
 ve;j khjpup Njit ,y;yhj rpe;jidfs; kdRf;Fs;s tUJ?

N4 Since last (DAY OF WEEK), on how many days have you had these unpleasant thoughts ?
 fle;j thuj;y vj;d ehl;fs; ,e;j Njitapy;yhj Nahridfs; te;jJ?
 4 days or more..... 4 ehl;fSf;F Nky; 1* **Go to N5**
 1 to 3 days..... 1-3 ehl;fs; tiu 2 **Go to N5**
 None..... ,y;iy 3 **Go to N9**

N5 During the past week, have you tried to stop yourself thinking any of these thoughts?
 fle;j thuj;y ,e;j khjpup vz;zq;fis ePq;fNs epg;ghl;l Kaw;rp nrQ;rPq;fsh?
 Yes..... Mk; 1*
 No..... ,y;iy 2

N6 Have you become upset or annoyed with yourself when you have had these thoughts in the past week?
 ,e;j khjpup vz;zq;fshy; ,e;j thuk; cq;f Nky cq;fSf;F vupr;ry;-Nfhgk; te;jjh?
 Yes, upset or annoyed..... Mk; 1*
 Not at all..... ,y;iy 2

N7 In the past week, was the longest episode of having such thoughts: **(Running prompt)**
 fle;j thuj;y ,e;j khjpup vz;zq;fs;
 a quarter of an hour or longer... fhy; kzp Neuj;Jf;FNky; ,Ue;jh
 1*
 or was it less than this?..... mjw;F Fiwthf ,Ue;jh 2

- N8** How long have you been having these thoughts in the way which you have just described?
 ,g;g nrhd;d khjpup vj;d ehs; ,e;j vz;zq;fs; te;jpl;bUf;F?
 less than 2 weeks..... 2 thuj;jf;Fs; 1
 2 weeks but less than 6 months..... 2 thuj;Jf;FNky; 6 khrj;Jf;Fs;
 2 6 months but less than 1 year..... 6 khr;jJf;FNky; 1 tU\j;Jf;Fs;
 3 1 year but less than 2 years..... 1 tU\j;Jf;FNky; 2 tU\j;Jf;Fs ;4
 2 years or more..... 2 tU\j;Jf;FNky; 5
- N9** Interviewer check: Sum codes which you have ringed at N4, N5, N6 and N7.--
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Go to Section O.

O.Overall effects

Informants who scored 2 or more on any section, A to N.

DNA:Others (All section scores 9 or 1 on check card).... 1

Now I would like to ask you how all of these things that you have told me about have affected you overall.

,njy;yhk; cq;fis vg;gb ghjpr;rpUf;F?

In the past week, has the way you have been feeling ever actually stopped you from getting on with things you used to do or would like to do?

,e;j f\;l;j;jpdhy vg;gthJ ePq;f nrQ;rpI;bUf;fpw my;yJ nra;ag; NghFk; NtiyapNyh jil te;jpUf;fpwjh?

Yes..... Mk; 1 **Go to (a)**

No..... ,y;iy 2 **Go to (b)**

- (a)** In the past week, has the way you have been feeling stopped you doing things once or more than once?

,e;j khjpup jil-jlq;fs; xU Kiw xU Kiwf;F Nky; te;jjh?

Once..... xU Kiw 1

More than once....xU Kiwf;F Nky; 2

- (b)** Has the way you have been feeling made things more difficult even though you have got everything done?

cq;f kdf;f\;l;j;jpdhy; vy;yh NtiyAk; nrQ;rhYk; nra;awJ f\;l;lkhf ,Ue;jjh?

Yes..... Mk ; 1

No..... ,y;iy 2