

Abuse Experienced by Persons with Severe Mental Illness: Risk and Protective Factors

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ABSTRACT

Background: Abuse among person with severe mental illness is a serious public health concern and over the several decades researchers have focused on violence perpetrated by person with mental illness giving little consideration to the fact that severity and chronicity of mental disorder makes a person susceptible to all kinds of abuse. The current study attempts to identify three types of abuse-physical, sexual and psychological by using socio-ecological framework which takes into consideration individual, family and socio-cultural factors which acts as a risk or protective factors against abuse.

Methods/Design: The study will screen severity of mental illness and abuse among men and women by using standardized screening tools. The first phase of the study focuses on developing risk and protective factors checklist through in-depth interviews and focused group discussions. The second phase of the study is identifying risk and protective factors of abuse by administering the checklist on 257 persons with severe mental illness. Qualitative data will be analyzed by using thematic analysis and quantitative data will be analyzed by testing for normality and accordingly using parametric and non-parametric test. Logistic regression model will be used to identify risk and protective factors for the abuse.

Discussion: This study would help to understand abuse from ecological perspective and develop a framework for risk management by capitalizing on what people know, what they can do, where they can go and how they can utilize indigenous resources to buffer the effect of abuse.

Keywords: Severe mental illness, abuse, risk and protective factors

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1. Background

Severe Mental Illness (SMI) is defined based on diagnosis, duration of illness and its impact on person's life (Parabiaghi, Bonetto, Ruggeri, Lasalvia & Leese, 2006). Psychotic Spectrum disorder such as, schizophrenia, bipolar disorder, schizoaffective disorder is considered as Severe Mental Illness (SMI) with duration of illness of minimum two years resulting into severe impairment in a person's functionality. The widespread stigma related to mental illness has increased the vulnerability of person with SMI towards abuse. Over the several decades researchers have focused on violence perpetrated by person with mental illness giving little consideration to the fact that severity and chronicity of mental disorder makes a person susceptible to all kinds of abuse. One of the studies stated that one in four persons with mental illness has experienced physical abuse with four times increased risk of mental illness compared to those without mental illness (Hughes et al., 2012). The result further shows that 6 per cent had experienced recent sexual abuse and overall, 40 per cent had experienced recent domestic violence (Hughes et al., 2012).

Heise's Socioecological framework to identify risk and protective factors at multiple levels: individual, microsystem, exosystem and macrosystem (Heise, 1998). The macrosystem level factors which can act as a risk or protective factors can be cultural views, societal attitude towards violence (Heise, 1998; Sabri, 2014). The exosystem are formal or informal social structures such as social network, extended family, neighborhood, the state and other social institutions (Pinnewala, 2009). The microsystem comprises of inter-personal relationship with family members including intimate partner (Patel, 2007; Pinnewala, 2009). The individual level factors includes socio-demographic characteristics, personality factors like coping skills, outlook towards life and functionality (Berkman & Glass, 2000; Silver, 2002; Xie, 2012). Risk or protective factors are dynamic which changes over time and several studies have shown that risk factors increase vulnerability whereas protective factors increase resiliency which helps to withstand risk (Sampson & Lauritsen, 1994). The various forms of abuse to which persons with SMI is exposed to and various factors which increases or lessen the likelihood of abuse is discussed in the next section of literature review.

2. Literature Review

2.1 Abuse of persons with SMI

Many studies have examined abuse in persons with SMI but rate of prevalence varies because of differences in: (i) sample size; (ii) time frames (recall periods); and (iii) types of abuse (e.g., physical vs. sexual).

(i) Sample size: Some studies had too small sample size ($N=50$) to generate reliable rates of abuse (Goodman et al., 2001). Studies which had larger sample size ($N \geq 100$) found that prevalence rate varied from 15.2% to 35.0% (in the past one year) (Goodman et al. 2001; Silver, 2002).

(ii) Time Frame: It varied from the past one month (Goodman et al., 2001) to the past 3 years (Brekke, Prindle, Bae & Long, 2001). Studies that assessed abuse occurring within past one year have reported prevalence rates of abuse among person with psychiatric illness ranging from 19.8% (Drake, Mueser, Brunette & McHugo, 2004) to 35.0% (Goodman et al., 2001) compared to 2.8% in general population (Teplin, McClelland, Abram & Weiner, 2005). Another study has reported 38% prevalence of abuse among psychiatric patients in past 3 years but the author states

that one of the reasons for higher prevalence rate could be infrequent events of abuse and longer recall periods (Brekke et al., 2001).

(iii) *Types of abuse:* Silver (2002) found that 15.2% of 270 acute psychiatric inpatients had been hit, forced to have sex, or threatened or attacked with a weapon within the preceding 10 weeks. One of the studies reported that one-third out of 146 female in-patients with severe mental illness have experienced sexual coercion and most common experience was sexual intercourse related threat or actual physical force (14%), most commonly identified perpetrator was intimate partner (15%) (Chandra, Carey, Carey, Shalinianant & Thomas, 2003). One of the studies have estimated that male patients reported more verbal (75% vs. 64%) and physical abuse (53% vs. 46%) as compared to female patients (Kaur & Kaur, 2009). Female patients reported more of sexual abuse and social discrimination (77% vs. 51%) as compared to male patients. Poor shelter and food were common aspects of social neglect among patients (Kaur & Kaur, 2009).

2.2 Risk factors

Severe Mental Illness. It leads to poor judgement, impaired reality testing, disorganized thought process, poor planning and problem-solving which make them vulnerable to abuse (Ventura, Nuechterlein, Lukoff, & Hardesty, 1989; Fetter & Larson, 1990; Meade & Sikkema, 2005).

Socio-demographic factors. Factors like being young, male, single, an urban resident, being female, lower socio-economic status, unemployment or unsupportive working conditions like lack of empathy in employers, high workload, lower remuneration given to persons with SMI. Other factors like transient living condition/homelessness makes persons with SMI vulnerable to structural and situational stress (Amaya-Jackson et al., 1999; Hiday, Swartz, Swanson, Borum, & Wagner, 2002; Corrigan, 2004; Bamba, 2010; Sharma, 2015; Genet & Siemer, 2011).

Coping Skills. When persons with SMI faced with stressful situations, males were more likely to give up in such situations and effect of coping failure was stronger in male compared to women who seek support during stressors (Berkman & Glass, 2000).

Inter-personal conflict. Persons with SMI has difficulty in communication and understanding, apathy, asociality which leads to inter-personal conflict and psychological abuse by relatives (Silver, 2002; Labrum, 2017).

Expressed Emotion. SMI when becomes chronic in nature can lead to high expressed emotion in the form of criticality in relatives which is associated with 1st and 2nd readmission and longer hospital stay. In such cases there are higher risk or relapse even if medication adherence is good. Personality traits of caregivers like being less emphatic, rigid, impatient, controlling behavior and caregiver's attribution about the causes of patient's illness can be associated with high expressed emotion (Butzlaff & Hooley, 1998; Thompson & Meyer, 2007; Marom, Munitz, Jones, Weizman & Hermesh, 2005; Amaresha & Venkatasubramanian, 2012).

Low levels of community participation. Individuals with SMI shows low levels of participation in civic activities such as voting, self-advocacy and neighborliness thus limiting meaningful integration into their local and extended communities (Lemay, 2006).

Socio-cultural factors. Gender & social inequalities, negative stereotypy like persons with mental illness are violent and irresponsible which leads to social avoidance and exploitation (Amaya-Jackson et al., 1999; Krug, Mercy, Dahlberg & Zwi, 2002; Silver, 2002; Oram, Khalifeh & Howard, 2017).

2.3 Protective factors

Socio-demographic factors. Higher family income and education level. Employment and better working condition like consistent reinforcement and reward system. These factors acted as protective factors especially if psychiatric patients are male (Silver, 2002; Bamba, 2010).

Personal Strengths. A person with SMI ability to use their personal strength (strength self-efficacy) and ability to carry out daily activities (resourcefulness) act as an intrinsic motivation to bring positive change in life (Xie, 2013).

Resilience. An individual ability to adopt a healthy response while enduring trauma can act as a protective factor. Active coping, cognitive flexibility and social support can maintain and uphold resilience. Religious coping like praying or meeting with a spiritual leader as one of the ways of coping with difficulties in life (Genet & Siemer 2011; Tepper, Rogers, Coleman & Malony, 2001).

Social Support. Perceived emotional support improves mental health and coping skills whereas perceived instrumental support protects a person with SMI from abuse (Schutte, Malouff, Simunek, McKenley & Hollander, 2002; Berkman & Glass, 2000; Kawachi & Berkman, 2001; Cornman, Goldman, Gleit, Weinstein & Chang, 2003).

2.4 Summarizing review

In summary, review showed that research is dominated by high-income countries, with most studies done in the USA and the UK as these countries increased awareness towards mental health care needs has led to providing quality care through social security and community-based service delivery model. In India there is widespread stigma related to mental illness leading to poor help-seeking behavior and social isolation (Kawachi & Berkman, 2001). The existing studies have applied a variety of different research strategies, different definition of abuse, their focus is to study abuse retrospectively through childhood experiences or adulthood. Standardized scales have been used to study abuse within family context or intimate partner though study had shown that abuse can occur not only within family but in the community as well (Chandra et al., 2003; de Oliveira, Machado & Guimarães, 2012). Majority of these studies used convenience sampling as the focus of research has been on understanding abuse in greater detail rather than worry about the generalizability of the results. Although risk and protection are closely connected, previous studies have focused almost exclusively on risk factors (Hunter-Kirton, 2004). Little is known about protective factors where focused is on personal and environmental strengths which lessen the effects of abuse.

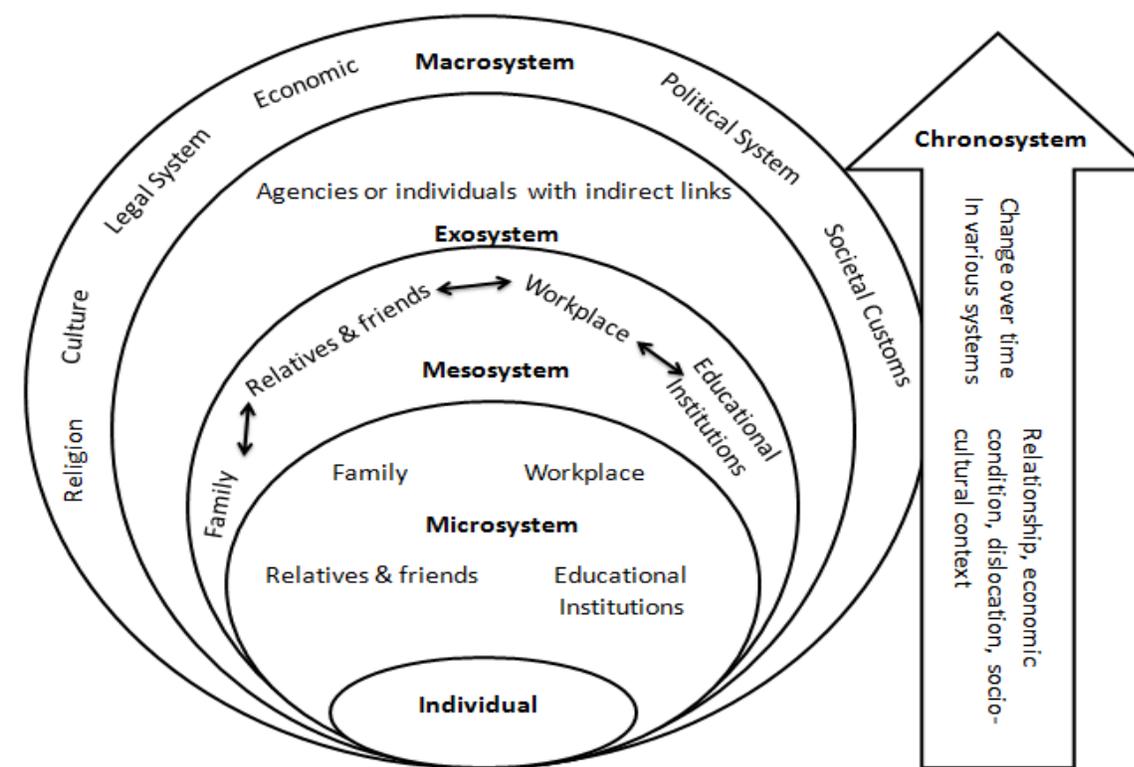
3. Theoretical Framework

This study will mostly focus on exploring risk and protective factors related to abuse from ecological perspective.

3.1 Ecological theory

Heise's Socio-ecological framework (1998) is adapted from Bronfenbrenner's ecological theory (Bronfenbrenner, 1994). Bronfenbrenner postulated ecological theory which can be used to understand the complexities of abuse from multiple perspectives by outlining the influence of different environmental systems on the individual (Figure 1).

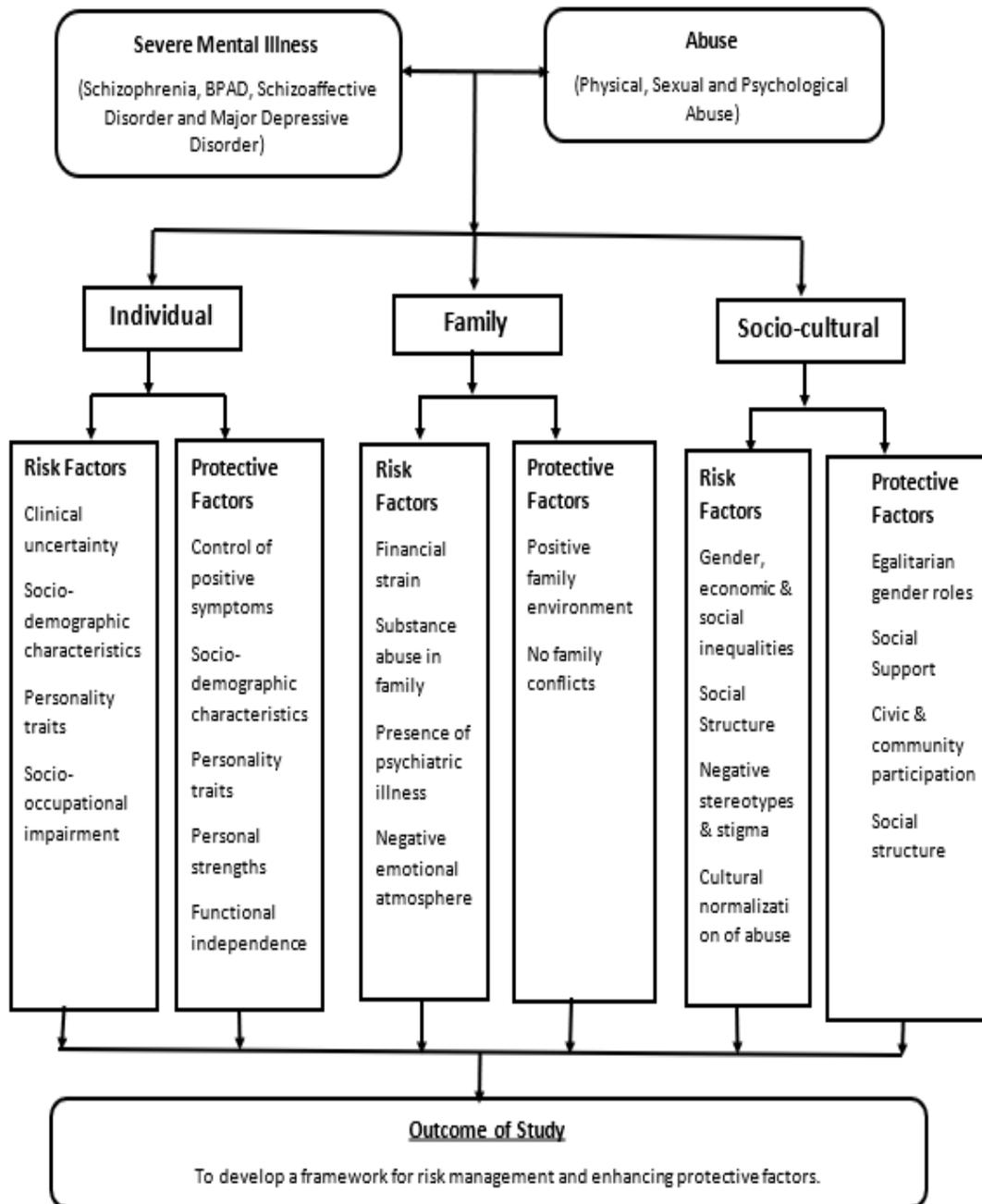
Figure 1. Socio-ecological framework.



The various subsystem affects each other but the micro system is thought to have greater impact than other subsystems (Fraser, Galinsky & Richman, 1999). This perspective helps to identify multiple factors which can act as a risk and protective factors stating from an individual’s own experience of abuse, their characteristics which is defined by their level of education, job status, income, disposition and their psychological well-being after being exposed to abuse.

The current study’s conceptual framework (figure 2) has been adapted from Heise’s socio-ecological framework which tries to understand abuse by recognizing risk and protective factors at multiple levels-individual, family and socio-cultural level.

Figure 2. Conceptual framework of the study.



4. Methods/Design

The overall methodology of the study is diagrammatically represented through figure 4.

4.1 Need for the study

Studies on abuse among persons with SMI are very less in developing countries including India. The person with SMI experience significant trauma, loss and humiliation because of stigma and discrimination meted out to them which make them vulnerable to re-victimization. Prior studies had mostly focused on violent behaviour perpetrated by persons with SMI because of common perception that person with mental illness are dangerous and prone to violence. Mostly clinic-based studies have been done by making use of reviewing medical records, patients' chart or case file reviews but history of abuse would be probable underestimated by this method as it is important to look at persons with SMI experience from various perspective by using qualitative interviews and standardized tools.

Shrivastava and Shrivastava (2013) has highlighted need for multilevel conceptual model which shows association between individual level risk and protective factors with community factors and explore how physical and social aspects of the environment related the abuse experienced by persons with SMI. The current study is designed to fill this gap in literature and attempts to study abuse from socio-ecological framework. This framework will describe person's dynamic interaction with environment and it would also help to identify risk and protective factors at multiple levels: individual, microsystem, exosystem and macrosystem.

4.2 Scope of the study

Identifying abuse and exploring risk and protective factors which has led to abuse will be the first step towards screening persons with severe mental illness for abuse and providing them interventions. Based on the results of the study framework would be develop for risk management and enhancing protective factors by capitalizing on what people know, what they can do, where they can go and how they can utilize indigenous resources to buffer the effect of abuse. This framework can be used not only by social workers but by any professionals working in the clinical settings or with any agencies/NGOs providing trauma informed care.

4.3 Aim

To study Risk and Protective factors for abuse experienced by Persons with Severe Mental Illness.

4.4 Objectives

1. To estimate proportion of individuals subjected to abuse among persons with SMI;
2. To study pattern and severity of abuse
3. To identify socio-demographic profile, risk and protective factors for abuse among persons with SMI;
4. To develop framework for risk management and enhancing protective factors.

4.5 Key outcomes: Operational definition

(i) Severe mental illness (exposure/ independent variable)

Severe Mental illness (SMI) refers to major mental illnesses such as schizophrenia, schizoaffective disorder, bipolar affective disorder and Recurrent Depressive Disorder which is characterized by recurrent or persistent features and leads to bio-psycho-social dysfunction.

(ii) Abuse (Outcome / dependent variable)

Current study defines abuse as maltreatment of a person with severe mental illness in the form of physical, psychological and sexual abuse which occurs at least once in the past year perpetrated by family members, relatives, friends, neighbours or any known person in the community.

(iii) Risk and protective factors (predictors of abuse)

Present study defines risks and protective factors as an interplay of individual, family or socio-cultural factors that increases or decreases the likelihood of abuse. At individual level, personality traits or functionality whereas at family level, inter-personal relationships or family atmosphere and at socio-cultural level, societal attitude or social support can act as a risk or protective factors.

4.6 Research design

Cross-sectional descriptive study.

4.7 Study Procedure

Persons with SMI will be screened for abuse and if they are identified being abuse then risk and protective factors for abuse will be explored by applying checklist which will be developed by the researcher. Checklist will be developed through qualitative interviews and focused group discussions and it will be tested quantitatively along with other standardized tools.

4.8 Setting

Person with Severe Mental Illness who comes to outpatient psychiatry department of NIMHANS, Bangalore for follow ups will be recruited for the study. Recruitment of the participants will be done between December 2019 to December 2020.

4.9 Study population

Persons who have been diagnosed with Schizophrenia, Bipolar Affective Disorder, Schizoaffective disorder, Recurrent Depressive Disorder seeking treatment on outpatient basis, reporting any form of abuse on screening and gives consent to participate.

4.10 Sampling technique

The study subjects satisfying the inclusion and exclusion criteria will be approached to participate in the study through consecutive sampling.

4.11 Sample Size

Minimum sample size for quantitative part approximately 257 persons with SMI (Khalifeh et al., 2015 has reported prevalence of physical, sexual and psychological abuse among persons with SMI to be 40%).

The sample size formula is used, which is

$$n = \frac{Z^2 P (1-P)}{d^2}$$

Where

- n: Sample size
- Z: Standard normal table value for Level of confidence. (For the level of confidence of 95%, which is conventional, Z value is 1.96).
- P: expected prevalence or proportion. (P is considered 0.4)
- d: precision. (In this study d is considered 0.06 to produce good precision and smaller error of estimate)

Sample size for the **qualitative part**, a subsample from the main sample will be selected through purposive sampling for qualitative interviews during checklist construction. Participants, caregivers and experts would be interviewed followed by focused group discussions till saturation point is reached with no new findings emerging.

4.12 Inclusion criteria

- Person with diagnosis of Schizophrenia, Bipolar Affective Disorder, Schizoaffective Disorder and Recurrent Depressive Disorder according to ICD-10 criteria;
- Those persons with SMI who are maintaining well based on CGI score (≤ 4) and receiving adult psychiatric services from NIMHANS on outpatient basis;
- Persons who are 18 years or above and any of the gender;
- Person who can speak English, Hindi & Kannada and give written consent.

4.13 Exclusion criteria

- Persons who have been clinically assessed with co-morbid condition of Intellectual Developmental Disorder;
- Persons having severe formal thought disorder;
- Persons who are unable to give written consent to participate in the study;
- Persons with history of substance dependence syndrome other than nicotine;
- Persons with reported history of Epilepsy and neurodegenerative disease like Parkinson, Alzheimer and Dementia.

4.14 First phase of the study: Checklist Development (see Figure 3)

Following tools would be used for development of checklist on risk and protective factors:

Key Informant Interview/Focused Group Discussion Guide: It will be prepared by the researcher for key informant interviews and focused group discussions during the process of checklist development which will be based on literature review and experts' opinion. Content validation of interview guides will be done by the experts.

Key Informant Interview (KII): Key informant interviews will be conducted among persons with severe mental illness, caregivers and experts working in the field of mental health till data saturation is reached.

Focused Group Discussions (FGD): Focused group discussions would be conducted in the areas identified through key informant interviews for checklist development. The group will comprise of family members of persons with SMI, organizations/NGOs and legal advisor working to advocate the rights of persons with mental illness.

Some of the areas which was identified through literature review and which will be explored in KII & FGD:

- Circumstances under which abuse occur
- Positive and negative factors impacting Persons with SMI life
- Family & neighbourhood environment

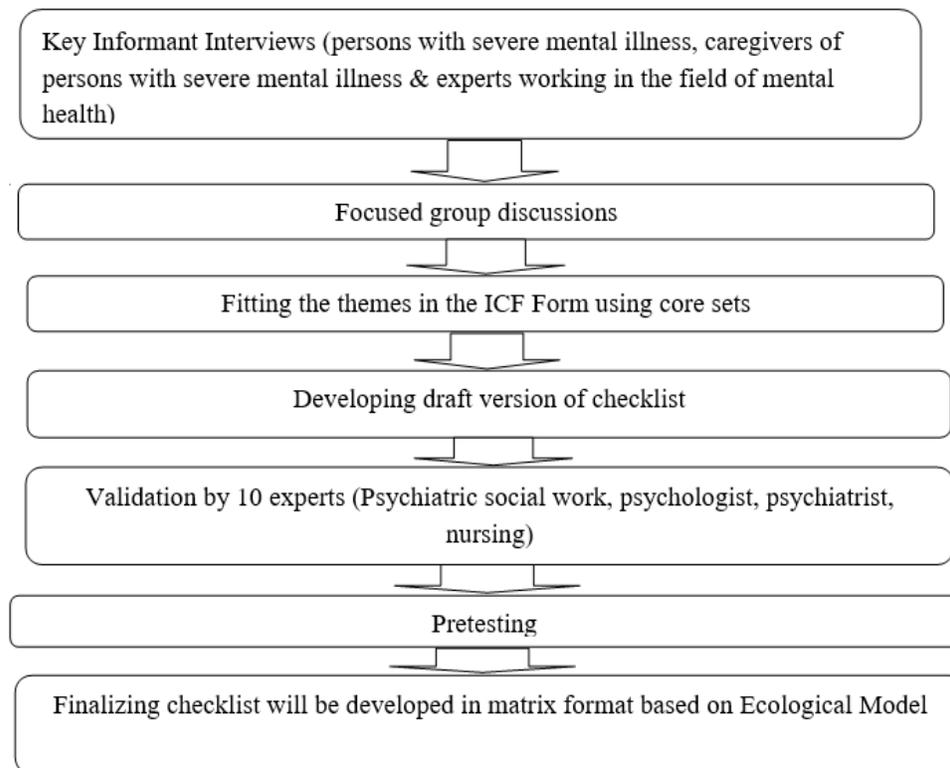
- Personal & community strengths
- Community resources and its accessibility
- Persons with SMI needs for services
- Barriers to seeking services

International Classification of Functioning (ICF) Research Branch comprehensive core sets developed for Schizophrenia, Bipolar Affective Disorder and Depression would be reviewed. The ICF Checklist is a practical tool to elicit and record information on the functioning and disability of an individual (Cieza et al., 2004). It structures around following broad components:

- Body functions and structure;
- Activities (related to tasks and actions by an individual) and participation (involvement in a life situation);
- Additional information on severity and environmental factors.

Based on the outcome of key informant interviews and FGDs the themes would be compared with ICF components such as functioning, activities & participation and environmental factors to develop checklist to assess risk and protective factors at micro, meso and macro level from ecological perspective and it will be validated by the experts.

Figure 3. Flow chart of checklist development.



4.14 Second Phase of the study:

In the second phase of the study following tools will be applied:

The Composite Abuse Scale (CAS). The scale was developed by K Hegarty in 2005. It is self-report measure that provides sub scale score on four dimensions of intimate partner

violence- severe combined abuse, emotional abuse, physical abuse and harassment. It has 30 items scale measured on six-point Likert scale which gives lifetime prevalence and past 12 months prevalence of abuse with abuse frequency. The scale can be used to assess intimate partner violence in both men and women as it has standardized male and female version of the scale. The internal consistency coefficient (Cronbach's alpha) for the questionnaire was 0.85 or greater and item total correlation was high (greater than 0.5).

Semi-Structured Interview Schedule (SSIS). The semi-structured interview schedule will be divided into following part.

Part A: Socio-demographic Data Sheet

It will have details such as age, education, gender, socio-economic status, marital status, genogram, details about family of origin and if married then details about family of procreation.

Part B: Clinical Profile

In this section details about illness like onset, duration of illness, precipitating factor, course, brief history, current symptoms, premorbid personality, number of admission and number of relapses.

Part C: Legal Profile

In this section details about any history of police complaints/lodged FIR, ongoing court case- inheritance, divorce, domestic violence, child custody or maintenance, awareness about legal rights, information and awareness about available resources.

Symptoms severity: Clinical Global Impression Scale (CGI) (Guy, 1976). It is a 3item observer-rated scale that measures illness severity (CGIS), global impression or change (CGIC) and therapeutic response. The CGI is rated on a 7-point scale, with the severity of illness scale using a range of responses from 1 (normal) through to 7 (amongst the most severely ill patients). The scale is in public domain.

Risk and Protective Factors Checklist. The checklist which is developed in the first phase of the study will be tested quantitatively on the given sample size (approximately 257 persons with SMI). The checklist will assess risk or protective factors at micro, meso and macro level from ecological perspective.

4.14 Third phase of the study: Framework development

Tentative framework for the Mental Health Professionals which is an outline developed through review of literature. The final framework will be developed from review of literature, discussion with the experts and study findings. The developed framework will be validated by the experts working in the mental health field.

5. Data Analysis

Qualitative Data: Checklist would be constructed by transcribing data from key informant interviews and focused group discussions which will be analysed using ATLAS.ti.v.7. Thematic Analysis will be carried out to search for patterns and connections as well as contradictions between ideas (Braun & Clarke, 2006). Themes which occur frequently will be identified and grouped into micro, meso and macro categories to reflect participants' shared experience. The socio ecological framework would guide the analysis to identify risks and protective factors at each level of the ecological model and participants perceived needs for resources.

Quantitative Data: Statistical analysis should be carried out using R software. Descriptive statistics (mean, standard deviation or median, quartile) will be reported for *Social Science Protocols*, June 2020, 1-16.

quantitative variables according to the skewness of variables. Frequency and percentage will be reported for categorical variables. Proportion of abuse with the 95% correspondence confidence interval will be estimated. Data would be tested for normality by using Kolmogorov-Smirnov Test. Based on normality assumption data would be further analysed by using parametric or non-parametric test to identify relationship between continuous and categorical variables. Continuous variables will be compared through independent t test or Mann Whitney U test and categorical variables will be compared by using chi-square test or Fisher's exact test. Logistic regression model will be used to identify risk and protective factors for abuse among persons with SMI. Both adjusted and unadjusted odd ratio with corresponding 95% confidence interval will be used. For all the analysis p value less than 0.05 will be considered significant.

6. Ethical Consideration

Institute Review Board (IRB) clearance was sought for the study [No. NIMH/DO/BEH.Sc.Div./2019-20]. Written informed consent will be obtained from the caregivers and participants. The study procedure will be clearly explained to the participants and the voluntary nature of participation. The participants' confidentiality will be ensured and maintained in all stages of the study. There would be no financial benefits, traveling allowances or gifts for the participation in the study. The participants will be ascertained freedom to withdraw from the study at any point of time that withdrawal will not affect their treatment in any ways.

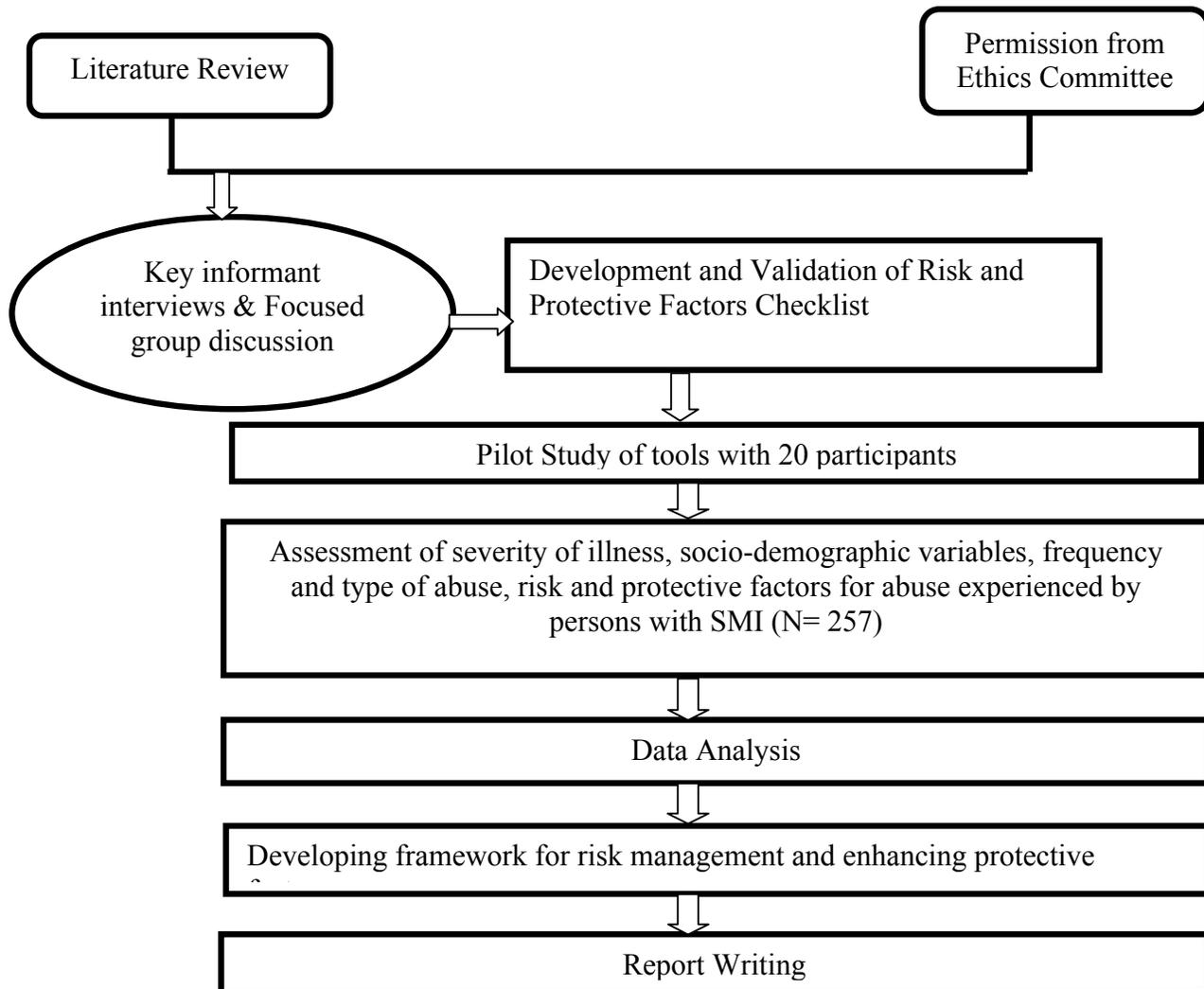
If there is any risk of abuse and threat to participants' safety then referrals will be provided after discussing with the treating doctor. If participant become psychologically quite distressed during the interview it will be addressed accordingly during or after the interview. Referrals will be based on participant's needs (e.g. if abuse has been identified and participants or their family are in crisis during any of the phases of the study). There are different types of services which can be provided through referrals like individual counseling for emotional support, family counseling for relationship problems, information through legal aid clinic regarding legal options available to participants' or list of organizations which can help them by providing psychological, social or legal support they require. Incidental cost (e.g. coming for subsequent session post referrals) will be borne by the participants.

7. Implication of this research for Psychiatric Social Work Practice

This study would help social worker to understand abuse from ecological perspective which helps to see abuse from multi-systemic perspective. Multi-systemic barriers and resources available would requires social worker to adopt integrated practice model which includes adopting micro and macro practices- grassroots advocacy and awareness programs, assertive case management, exploring and linking survivors with community resources.

When working with vulnerable population like persons with SMI, psychiatric social worker needs to adopt social justice perspective by highlighting unequal treatment meted out to them and giving voices to those who have been marginalized by making them research partner. This study would use principles of indigenous social work by developing framework for risk management by utilizing indigenous resources to buffer the effect of abuse.

Figure 4. Diagrammatic representation of the methodology.



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