REVIEW ARTICLE

A Public Health Perspective on Violent Offenses among Persons with Mental Illness: Some Recent Developments

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Abstract : *Inadequate attention has been paid to public health issues related to violence and mental illness in most developing societies.* ***The burden:*** *Mentally ill patients have a slightly higher propensity for violence compared to people in general. On the other hand, violent victimization of mentally ill patients is also common.* ***The resources:*** *Most countries do not have in place the system required to reduce the impact of violence by and on mentally ill.* ***Suggestions:*** *For effective management of violence in relation to mental illness there is a need to focus on mental health services (including training and collaborative mechanisms) in both criminal justice system and community treatment. Some innovations in the field like police-based specialized mental health response, mental health courts, involuntary out-patient commitment, and psychiatric security review boards are described. Finally, there is a need for considerable public education to increase informed opinion and reduce stigma in relation to violence and mental illness.*

INTRODUCTION

The word "violence" commonly comes to the mind of people when they talk about "mental illness." How far is this association real?

The 'raison de etre' of this review is the inadequate attention that has been paid to public health issues related to violence and mental illness in most developing societies. There is scarcity of Indian data on violence and mental illness. A few studies address the association of alcohol abuse and violence.[1-3] A few Indian studies also report data on violence as a determinant of mental health[4-7] and suicide; [8-9] and on the association of alcohol abuse and inter-partner violence/ domestic violence/ physical abuse of children.[10-12] But these do not form the subject matter of this review as these issues require broader societal and service measures that may include but are not limited to forensic psychiatric services.

Though there is paucity of data, there is no reason to believe that violence in serious mental illness, or victimisation and criminalisation of the mentally ill would be less of an issue in India.

Methodological issues in studies on violence and mental illnesses

In interpreting the following literature, it should be kept in mind that most studies on violence and mental illnesses have methodological inadequacies and the differences in methodologies make meaningful comparisons across studies difficult.[13] The most important methodological challenges facing public health researchers of violence and mental illness are in terms of the evaluation of exposure and outcome i.e. diagnosis and assessment of mental disorder; and definition and measurement of violence. It is virtually impossible to find violence defined in the same way in studies by different researchers. Measurement of violence in studies has relied upon different single (self-report, informant-report, case notes, and official records) or combined

JMHHB 2008 13(1) : 8 -17

sources of information. Moreover, location of recruitment (hospitalised/discharged patients, those in jail, community setting, treated/untreated mental disorders) and control group (other mental illnesses, general population, other offenders) also vary extensively in various studies. Selection bias, interviewer and recall bias along with other confounding variables are other important inadequacies noticed in studies. There is definite need for the development of some order in methodology and use of standardised, validated, reliable and acceptable tools to make comparisons across studies meaningful.

THE BURDEN

Violence by the mentally ill

Prevalence

Using data from the Epidemiologic Catchment Area study, Wessely estimated that only 3% of all violent incidents that occurred in the community could be attributed to persons with mental illness.[14] Data from a representative sample of 1,151 remanded offenders also showed that only one in ten violent crimes could be attributed to persons with a mental illness (3%) or substance use disorder (7%) in relation to their 1month prevalence.[15] It is clear that in reporting the association between violence and mental illness, a shift of focus from the relative risk to the absolute risk posed to the community should reduce stigma.

In the public mind, schizophrenia often raises the specter of violence. The estimated prevalence of community violence in a group of discharged patients in the first 20 weeks was only 9% for schizophrenia in comparison to the violence prevalence of 19% for depression, 15% for bipolar disorder, 17.2% for other psychotic disorders, 29% for substance misuse disorders and 25% for personality disorders.[16] However, a study done on a birth cohort followed to age 44 years[17] suggested that schizophrenia was the only major mental disorder associated with increased risk of violent crime in both males and females, when adjustments were made for socio-economic status, marital status and substance abuse. One example of a balanced report found that men with serious mental illness were up to 4-6 times more likely to be convicted of serious violence than the general population.[18] But, results also indicated that 99.97% of those with schizophrenia would not be convicted of serious violence in a given year and that the probability that any given patient with schizophrenia will commit homicide is tiny (approximate annual risk is 1:3000 for men and 1:33,000 for women).

In studies carried out in India, Varma et al reported on the tendency of alcohol dependent patients to display aggression, violence, and general disinhibition when drinking.[2] Adityanjee et al found that alcohol-related problems made up 17.6% of the case load of psychiatric emergencies in an Indian general hospital.[1] The police brought three-quarters of them, 45% for quarrels, street-fights under the influence of alcohol and 20% for minor offences like abusing in public. A psychiatric illness was present in 40% of these cases. Only 10% of the patients with alcohol-related problems were referred for outpatient treatment. A study in Goa reported that the population attributable fraction of harmful drinking in the perpetration of any physical violence by men over 12 months was 0.36. The population attributable fraction of moderate drinking (vs abstention) in the perpetration of any physical violence by women over 12 months was 0.27.[3]

In conclusion, it must be stated that mentally-ill patients have a definite propensity for violence compared to people in general, but the risk is not very high, specifically for serious violence.

Risk factors for violence by the mentally ill

The landmark MacArthur Violence Risk Assessment Study, which used the "classification

tree" method in an attempt to overcome many methodological pitfalls in earlier studies on risk estimation found that past history of violence, substance abuse (especially early onset of substance abuse), and antisocial personality disorders were risk factors for violence as well as recidivism among the mentally ill.[19] Homelessness; demographic factors like gender, age, unemployment, low socioeconomic status, low education; poor attachment and adverse childhood experiences; and the presence of conduct disorder, attention deficit hyperactivity disorder and learning disabilities were the other important factors that predisposed to violence. Measures taken to lessen the impact of these risk factors were shown to decrease the association of violence with mental disorder. A meta-analysis of risk factors of persistent violence and criminal conduct in mentally ill showed that criminal history variables were the best predictors of recidivism, which included antisocial personality, past history of criminal offence, juvenile delinquency, criminal companions and use of weapons, Substance misuse, family issues (e.g. weak bonding, poor supervision), absence of non-criminal rewards (e.g. education, employment). Homelessness and Victimisation were also associated with the persistence of violence and recidivism.[20]

Victimization of the mentally ill

Since the beginning of the era of deinstitutionalisation, much has been written about the risk posed to members of the public by those with severe mental illness.[21] Conversely, little attention has been paid to the risk of violence faced by this vulnerable group of people. Most persons with mental illnesses live in the community, and many are homeless.[22-23] Most of the factors associated with victimization in the general population like substance abuse, conflicted social relationships, poverty, and homelessness; are common among psychiatric patients.[24-25] In a prospective study with a sample of 331 mentally ill patients with a community stay of over 4-month duration, it was found that the rate of violent criminal victimization was two and a half times greater than in the general population.[25] Previous studies reported wide variation in prevalence of victimization in mentally ill (15%-60%) because of differences in recall periods (2 months to 3 years), definitions of victimization, and sample characteristics. A large-scale epidemiologic study of prevalence, incidence, and patterns of victimization among persons with severe mental illness concluded that greater than 25% of these people become the victims of a violent crime in the past year (more than 11 times higher than the general population rate) and the annual incidence of victimization episodes (168.2 incidents per 1000 persons) was more than 4 times higher than the general population rates (39.9 incidents per 1000 persons).[26] The authors suggested that symptoms associated with mental illness, such as impaired reality testing, disorganized thought process, impulsivity, and poor planning and problem solving, could compromise one's ability to perceive risks and protect oneself.

Chandra et al screened consecutive female admissions (n = 146) to the inpatient unit of a psychiatric hospital in southern India regarding coercive sexual experiences.[27] One third of these women reported coercion. Most experiences occurred in the women's homes. Thirty of the 50 coerced women (60%) reported that they had not disclosed their experience to anyone, and that they had not sought help. They revealed a sense of helplessness, fear, and secrecy related to their experiences.

In short, violent victimization of mentally ill patients is at least as significant as violent crime done by them.

Criminalization of the mentally ill

This is another aspect of the relation between

violence and mental illnesses that requires the attention of public health specialists as it directly relates to improper management of violent mentally ill patients. Torrey conducted a survey of American jails and concluded that "quietly but steadily, jails and prisons are replacing public mental hospitals as the primary purveyors of public psychiatric services for individuals with serious mental illnesses in the United States."[28] A similar situation exists in other countries also and those detained include many psychiatric ill patients who have committed minor offences.

While incarcerated, such individuals are vulnerable to manipulation, intimidation, and assault by other inmates.[29] Mental health treatment while in jail is frequently suboptimal, especially when compared with the therapeutic milieu of a hospital or services available in a community setting. Individuals with mental illness are also likely to be incarcerated for a longer period than those without mental illness.[30] In addition, from a societal perspective, the arrest, booking, and incarceration of such individuals divert attention and resources from more serious offenders and does less to prevent recidivism than would properly addressing and treating their mental illnesses.[31] Its apparent that criminalisation of mentally-ill patients is a fact and needs attention.

The sobering issue in better management of 'gaol diversion,' however, is the assumption that there are public psychiatric services to which the mentally ill individual (who has committed minor offences) can be diverted. This, as many law enforcement officials have learnt, frequently is not the case. The factors that militate against proper management of such patients in the community are the absence of a range of community services, undue emphasis on dehospitalization, inadequate training of mental health professionals in managing mentally ill offenders, inadequate training of police and judiciary for dealing with mental disorders, insufficient and inappropriate access to community based treatment, and attitudes of society towards offence committed by person with mental-illness.[32-33] The modification of these factors is necessary for reducing criminalisation.

SERVICES

There is evidence that proper management can reduce its impact of violence by and on mentally ill significantly. To be able to do this there is a need to focus on mental health services in both criminal justice system and community treatment. Such services are inadequate even in developed countries. Hodgins & Muller-Isberner surveyed patients discharged from forensic psychiatric hospitals in four countries – Canada, Finland, Germany and Sweden. They found that 39.8% of the forensic patients had committed offences before their first admission to general psychiatry units and 78% of the patients had been admitted to general psychiatric services at least once prior to forensic hospitalization. The study shows that general psychiatric services do not seem to be effective in prevention of offending.[34]

CRIMINAL JUSTICE SYSTEM

Police: training and liaison

The police play a central role in determining whether the mentally ill offender is diverted to mental health or the criminal justice system. If this role is not performed appropriately, it may result to criminalisation and recidivism. Studies suggest that current system fails in stabilizing individuals with mental disorders and that they cycle between the streets and jail[35], usually because the police use informal tactics, such as trying to "calm" the person or taking the person home. In situations that cannot be handled informally, the police may have to take persons with mental illness to jails even if he was involved in minor offences. This can be prevented if adequate training is given to them.

It is said that training led by both law enforcement and mental health professionals is more effective in making police personnel familiar with mental disorders and in upgrading their skills in managing persons with mental illnesses, even during crisis situation.[36] In addition to knowledge and skills, the police also needs to be provided with information on how to access meaningful resources that are less restrictive than hospitalization. It should be kept in mind that training efforts may improve officers' knowledge of mental health issues and ability to apply it but attitudes and performance are more resistant to change. To further promote collaboration between community mental health departments and police departments, there should be regular and ongoing liaison meetings of representatives from the two agencies.

It has become increasingly clear that when persons with mental illness in the community are in crisis, neither the police nor the emergency mental health system alone can serve them effectively and that it is essential for the two systems to work in close liasion.[37] Consequently, a second generation of specialized response approaches have evolved. Three of these approaches are better described in the literature[38-39]

- Police-based specialized police response (Memphis Model, Crisis Intervention Team): Here, police officers who have special mental health training serve as the first-line police response to mental health crises in the community. This model places a heavy reliance on psychiatric emergency services that have agreed to a no-refusal policy for persons brought to them by the police.
- Police-based specialized mental health response: Mental health professionals (not police officers) are employed by the police department to provide on-site and telephone consultations to officers in the field. Another widely accepted strategy uses psychiatric emergency teams of mental health professionals who are part of the local community mental health service system, but have developed a special arrangement with the police department to respond to special needs at the site of incident.
- Mental-health-based specialized mental health response: In this more traditional model, partnerships or cooperative agreements are developed between police and mobile mental health crisis teams.

Studies done in United States of America that have evaluated such specialized services have found that they had arrest rates ranging from 2 to 13 percent (average: <7%), in contrast to an arrest rate of 21% for contacts between nonspecialized police officers and persons who were apparently mentally ill.[40-41]

Mental health courts

In USA, establishment of specialized mental health courts has become an increasingly common approach for the diversion of mentally ill misdemeanants to mental health services.[29] Most of these courts deal only with cases related to nonviolent crimes and only to defendants with mental illness. This is an attempt to obtain quick access to community treatment services as an alternative to usual criminal sanctions. In different jurisdictions, these courts vary in terms of types of offenses covered; amount of charges removed; ability of the defendant to withdraw from the mental health court program without prejudice; as well as the scope and length of judicial supervision. Approximately half the courts require a plea of guilty or no contest as a condition of participation, and some utilize a preadjudication model such that charges are suspended while the individual participates in treatment. Approximately one-third of mental health courts allow for dismissal of charges or expunging of guilt after successful completion of treatment.[42]

Sanctions for non-compliance do occur and include more frequent court appearances, increased judicial persuasion, lectures, jail time, and dismissal from the program.[43]

Involuntary out-patient commitment

It is a kind of legal intervention designed to benefit individuals with severe mental illness who need ongoing psychiatric care to prevent dangerous relapse, but are reluctant or unable to follow through with community-based treatment. This system is in place in United Kingdom and a few European countries. It has been is shown to be efficacious in some randomised controlled trials in significantly reducing violent behaviour by improving compliance with medications, managing substance misuse treatment for persons with dual diagnoses, increasing clinical surveillance, and augmenting case management intensity.[44-45] The outpatient commitment can be extended beyond six months and can be combined with regular out-patient services utilization to decrease the possibility of further violence.

Psychiatric security review boards

The state of Oregon in the United States of America has followed a different approach to deal with mentally ill offenders. Insanity acquittees who are dangerous and mentally ill are placed under the jurisdiction of the Psychiatric Security Review Board (PSRB). The period of jurisdiction is equal to the maximum sentence provided by statute for the crime for which the person was found guilty except for insanity.

The jurisdictional limit creates a closer tie between the traditional punishment for the crime and the recognition that instead of punishment; mentally ill individuals need treatment for their illnesses. In addition, once the trial court judge places the individual under PSRB jurisdiction, the person is no longer supervised by the court but instead by the PSRB board, which has a psychologist, a psychiatrist, a lawyer, a person experienced in parole and probation, and a lay person as members. During this period, persons with mental disease receive treatment on an inpatient and/or outpatient basis (an individual may be conditionally released, with the possibility of revocation and rehospitalisation).[46]

Civilly committed individuals are spared the additional stigma of criminal justice sanctions, whether it is through a mental health court or a successful insanity defence (under PSRB). These systems also provide better opportunities for the treatment of mental illness as it includes the benefits of community treatment without the harm of being a prisoner. It may very well be that the planners of programs in the future will recognize an important place for each of the three mechanisms described: civil commitment for less serious misdemeanour charges (under jurisdiction of usual courts), the insanity defence for dangerous mentally ill misdemeanants (under jurisdiction of usual courts and PSRB), and mental health courts in larger governance regions with complex needs and adequate resources, where specialized courts make the most sense.

Community mental health treatment

The ultimate aim of services for the mentally ill offender is to rehabilitate him/her successfully in the community with minimal stigmatisation related to crime. This is best possible with civil commitment which can be initialised during many phases of patient's trial for offence. As discussed above, it can be done at the time of first contact with criminal justice system in the form of police or during proceedings in the court. Further care can be provided under the supervision of criminal justice (e.g. PSRB) or mental health system.[47]

In non-forensic psychiatric treatment, the primary focus is usually on alleviation of symptoms. In contrast, clinicians who treat mentally ill offenders need to recognize that they are responsible not only to the patient but also to

the society in terms of ensuring the patient's and the community's safety. Some other areas also need to be considered before starting treatment, including limits to confidentiality with respect to past and present treatment and criminal history. It should be clear to the patient as well as the treating team that certain conditions and limitations will be imposed on patient, why they will be imposed, and what will happen if they do not comply. Involving patients in these discussions increases the chances of compliance. In addition, family is to be given support and helped in providing support to the patient.

The single most important skill required while treating these patients is the ability to assess dangerousness and to incorporate this assessment into an intervention strategy rather than only predicting the risk.[48] Both actuarial and clinical approaches should be used together to examine probability, imminence as well as severity of outcome with the help of effective communication with the patient.[49] Actuarial approach works by attaching specific statistical weighting to different variables which assess the risk. This is achieved by follow-up research on a particular group over set periods of time. Its utility is restricted by its limited generalizability and static nature. The approach is best suited for the populations that have characteristics similar to those on which they were originally validated and they refer to personal variables that change little, if at all, over time or in response to interventions. On the other hand, clinical approach uses narrative model of thought and clinicians take variables that will have some application to the assessment of risk in the case under consideration. They proceed by posing and testing clinical hypotheses derived. Clinical variables are defined as dynamic factors that can change or personal factors that require human judgment to measure including mental state attributes.

The major challenges in the community treatment of violent mentally-ill patients include: treatment resistance and non compliance with treatment; co-morbid substance abuse and/or antisocial personality; homelessness; inadequate or inappropriate community mental health resources; and lack of education and employment. These are also the risk factors for recidivism. If they are not handled properly, not much would be gained from forensic community treatment.

In a review of controlled studies examining community forensic treatment's impact on jail and arrest rates,[50] found that while 70% of studies showed no effect, only 10% showed worsening. Lamb et al suggested that adherence to the following principles would improve the chances of success of community strategies: (1) better balance between individual rights, the need for treatment, and public safety; (2) reality-based treatment philosophy that includes clear treatment goals (with attention paid to goals expressed by the patient); (3) close liaison with the court or other criminal justice agencies monitoring the patient; (4) emphasis on structure and supervision (patients may lack internal controls to organize them to cope with life's demands) and graduated release to lower levels of structure based on patients' coping skills and need for monitoring; (5) case management; (6) recognition of the role of family members and significant others in the treatment; (7) behavioral contracting; (8) ensuring that patients' understand that non compliance with terms and conditions may result in revocation of outpatient status; (9) comfort of treatment staff in using authority; (10) understanding that continuous rather than episodic care is needed (especially when symptoms are absent or at low ebb) to deal with individual and situational factors that may result in violence; (11) appropriate and supportive living arrangements; and (12) helping patients' attain a feeling of autonomy over their own life (this helps in improving compliance).[47]

It must be recognized that not all mentally ill offenders can be treated effectively in the community and the failures do exist. This is especially true for substance abusers and patients with antisocial personality disorders. Interventions that address specific criminogenic targets with personality-disordered offenders need to be developed.

CONLUSIONS

There is a small but definite risk of violence associated with mental disorders. But the view prevalent in society in relation to this matter is much exaggerated. This feeling of danger associated with mental illness creates dilemmas in the clinical realm by interrupting community tenure and continuity of care; in the legal realm by increasing concerns about professional liability; and in the public realm by heightening fear and stigma associated with mental illness. On the other hand, negligible efforts have been made towards the needs of mentally-ill victims of violence. Efforts are underway in some countries to decrease the unnecessary incarceration of mentally-ill patients.

No systematic thought has been given to development of public health approaches to management of violence in relation to mental health in India, though substance use has been shown to be and psychiatric disorders are likely to be involved in violence related events even in India. There is a need for close liaison between the psychiatric and criminal justice systems, in the disposal of all mentally ill offenders. A continuing study of violence in mentally ill in India is recommended, to bridge the gap in our present level of knowledge.

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