

Exploring psychosis and multidirectional violence

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Valorisation

In this thesis, the longitudinal associations between psychosis and multidirectional violence were examined in the general population. More specifically, the aim of the thesis was to gain insight into the associations between psychotic experiences on the one hand, and self-directed violence, interpersonal violence perpetration and interpersonal violence victimisation on the other. Many previous studies examined the associations between full-blown psychotic disorders and multidirectional violence, showing that individuals with psychotic disorders are at increased risk of interpersonal violence perpetration (Fazel et al. 2009), violence victimisation (de Mooij et al. 2015) and self-directed violence (Palmer et al. 2005). However, evidence has shown that psychotic experiences are not only prevalent in individuals with psychotic disorder, but also in general population individuals with non-psychotic mental disorders and in individuals without any mental disorders (Linscott and van Os 2013; Kelleher et al. 2012). Moreover, psychotic experiences are phenotypically and aetiologically continuous with full-blown psychotic disorder and represent the softest behavioural expression of distributed population risk of psychosis (Lataster et al. 2009; van Nierop et al. 2012; van Os and Reininghaus 2016). Therefore, subclinical psychotic experiences can be used to gain insight into the underlying mechanisms of the frequently reported association between psychotic disorders and violence. Increased insight into psychosis and violence is required, since the societal and economic impact of both phenomena is large.

Relevance

Scientific relevance:

The studies presented in this thesis provided evidence that individuals with psychotic experiences are at increased risk of self-directed violence, interpersonal violence perpetration and interpersonal violence victimisation. Thus, the present thesis contributed to the scientific knowledge on the associations between psychotic experiences and multidirectional violence. The results showed that the associations between psychotic experiences and multidirectional violence were analogous to the associations between full-blown psychosis and multidirectional violence. Therefore, the often reported increased risk of multidirectional violence in individuals with psychotic disorders can be extrapolated to subjects with less severe symptoms in the general population. This finding confirms that psychotic experiences are part of the extended psychosis phenotype and thus share demographic, pathophysiological and aetiological correlates with full-blown psychotic disorder. Because psychotic experiences are more prevalent than full-blown psychotic disorder, i.e. 7.2% (Linscott and van Os 2013) versus 3.1% (Perala et al. 2007), the epidemiological and statistical possibilities to study psychosis and multidirectional violence in future studies can be increased by using psychotic experiences in general population samples.

Socioeconomic relevance

The socioeconomic impact of violence is tremendous. In the United States, the national costs of suicide and suicide attempts were \$58.4 billion in 2013 (Shepard et al. 2016), while the costs associated with interpersonal violence were even higher (Waters et al. 2005). In addition, research has shown that victims of violence are at increased risk of various mental disorders, suicide and other health problems (Krug et al. 2002). Therefore, in order to decrease the socioeconomic burden of violence, it is important to gain insight into the risk factors associated with violence. Schizophrenia and other psychotic disorders have previously been associated with an increased risk of interpersonal violence (Fazel et al. 2009) and suicidal behaviour (Palmer et al. 2005). The studies presented in this thesis identified psychotic experiences as a risk factor for self-directed violence (Honings et al. 2016a; Honings et al. 2016c), interpersonal violence perpetration (Honings et al. 2016b) and interpersonal violence victimisation as well (Honings et al. 2017). Therefore, the incidence of multidirectional violence might be reduced by adequate treatment of psychotic experiences, for example by early intervention programs for psychosis. These early detection programs for psychotic disorders have been developed in the past decades (McGorry et al. 2007) and are proven to be cost-effective (Mihalopoulos et al. 2009). Based on the results presented in this study, it is likely that these programs will also decrease the incidence of multidirectional violence, even though psychotic experiences are of course only one of many risk factors on the pathway towards violence.

The socioeconomic burden related to schizophrenia and other psychotic disorders is enormous as well (World Health Organization 1998; Andlin-Sobocki and Rössler 2005). In order to reduce the incidence of psychosis, and thus reduce the socioeconomic impact of psychosis, insight into risk factors for psychosis is required. Many risk factors for psychosis have been identified, including cannabis use (Moore et al. 2007), urbanization (Marcelis et al. 1998) and childhood trauma (Morgan and Gayer-Anderson 2016). The present thesis identified adult victimisation as a new risk factor for psychosis, and showed that adult victimisation, childhood victimisation and psychosis were interrelated throughout the life course. Thus, the incidence of psychosis could be reduced by interventions aimed at reducing victimisation.

Target groups

Patients and their relatives

The results of this thesis are of interest to both patients and their relatives. For patients with non-psychotic mental disorders, such as depression or anxiety disorders, the results of this thesis are particularly important. The results of chapter 3 showed that indi-

viduals with non-psychotic mental disorders who experienced psychotic experiences, were more likely to display suicidal attempts than individuals with non-psychotic mental disorders in absence of psychotic experiences (Honings et al. 2016c). Similarly, individuals with hallucinations in the context of a non-psychotic mental disorder were more likely to perpetrate interpersonal violence than individuals without psychotic experiences (Honings et al. 2016b). Therefore, individuals with non-psychotic mental disorders and their relatives should receive psychoeducation including information on psychotic experiences and the risk of self-directed and interpersonal violence perpetration. Thereby, patients or their relatives can seek professional help early, thus decreasing the risk of self-directed or interpersonal violence.

Health care professionals

The results of this thesis underline the importance of knowledge of the extended psychosis phenotype in health care professionals. Even though the first studies about the continuous expression of psychosis were published several decades ago (van Os et al. 1999; Strauss 1969), the understanding of this concept is still limited in health care professionals. Clinical practice shows that health care professionals often consider patients to be either ‘psychotic’ or ‘non-psychotic’. However, evidence shows that this dichotomous view of psychosis is incorrect and that subclinical psychotic experiences are prevalent in the general population (Linscott and van Os 2013; van Os and Reininghaus 2016). The presence of these psychotic experiences in general population individuals has been associated with various poor mental health outcomes. The present thesis showed that individuals with psychotic experiences were at increased risk of self-directed and interpersonal violence perpetration. This increased risk of multidirectional violence perpetration was particularly present in individuals with non-psychotic mental disorders, in which psychotic experiences serve as an indicator of severity of mental distress. Therefore, a thorough assessment of these psychotic experiences should be included in every mental state examination in order to identify individuals at risk of multidirectional violence perpetration early and offer adequate support. In the studies published in this thesis, a list of twenty psychotic symptoms was used to identify individuals with psychotic experiences. This list could be incorporated into clinical practice and serve as a guideline for the assessment of psychotic experiences. Furthermore, the results presented in chapter 5 (Honings et al. 2017) showed that psychotic experiences and victimisation were intricately interconnected throughout the life course, resulting in a complex interplay in which psychotic experiences and victimisation were bidirectionally associated. Thus, prevention strategies against victimisation, both in childhood and adulthood, are needed in order to prevent individuals from entering a malignant spiral leading to mental illness and re-victimisation. The results of this chapter can be used to increase mental health care professionals’ knowledge of psychosis and victimisation, leading to an increased awareness of this complex interplay.

Society

Stigmas about mental illness are highly prevalent in society (Corrigan and Watson 2002). In popular media, for instance, individuals with psychotic disorder are often depicted as violent (Owen 2012). Similarly, a previous study showed that 70% of adult respondents rated people with schizophrenia as dangerous and unpredictable (Crisp et al. 2000). Stigma in individuals with mental illnesses is associated with various poor outcomes, including lower self-esteem, depressive symptoms and lower quality of life (van Zelst 2009). Thus, interventions to reduce public stigma associated with mental disorders are needed. The study presented in chapter 4 of this thesis reported that individuals with psychotic experiences were more likely to display interpersonal violence perpetration than individuals without these experiences (Honings et al. 2016b). This finding might increase the public stigma associated with psychosis at first sight. However, psychotic experiences are only one of many risk factors on the route to violence and the proportion of violence attributable to individuals with psychosis is small (Walsh et al. 2002). Moreover, the thesis reported that individuals with psychotic experiences were at risk of violent victimisation as well (Honings et al. 2017). This finding is consistent with previous research that showed that individuals with schizophrenia were 14 times more likely to be victims of violence than perpetrators (Brekke et al. 2001). Therefore, the results of this thesis could also contribute to a reduction of stigma associated with psychosis, since they showed that the often reported increased risk of violence perpetration in individuals with schizophrenia can be traced back to the general population. Thus, the common stereotype that individuals with schizophrenia are dangerous should be dismissed, since this increased risk of violence is present in a large part of the general population as well. In conclusion, the results of this thesis are relevant for society at large, since they increase the knowledge of society about the complex associations between psychosis and multidirectional violence, hopefully resulting in a decrease of negative stereotypes and stigmatization of individuals with severe mental disorders.

Summary and conclusion

The results presented in this thesis have several implications, both for science, clinical mental health care as well as for society at large. On a scientific level, this thesis presented evidence that individuals with psychotic experiences are at increased risk of self-directed violence, interpersonal violence perpetration and interpersonal violence victimisation. These findings are important for mental health care professionals, since they show that even subclinical psychotic experiences are clinically relevant. Thus, the results underline the importance of screening for psychotic experiences in all patients presenting to mental health care. By incorporating an extensive screening for psychotic experi-

ences into every mental state examination, individuals at risk of multidirectional violence can be identified and treated early, leading to a decrease of violence associated with mental disorders. This is necessary, since the socioeconomic impact of multidirectional violence is large. Furthermore, the public stigma associated with psychotic disorders could be reduced by informing the general public about the extended psychosis phenotype and its association with multidirectional violence.

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