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Reassessing “Praecox Feeling” in Diagnostic Decision-making in Schizophrenia. A Critical Review

Abstract:

The *Praecox Feeling* (PF) is a classical concept referring to a characteristic feeling of bizarreness experienced by a psychiatrist while encountering a person with schizophrenia. Although the PF used to be considered a core symptom of the schizophrenia spectrum, it fell into disuse since the spread of operationalized diagnostic methods (DSM/ICD systems). In contemporary research on schizophrenia, it remains largely unaddressed. This critical review investigates the evolution of the PF in historical and contemporary literature and presents an exhaustive overview of empirical evidence on its prevalence in clinical decision-making, its reliability and validity. The review demonstrates that the PF is a real determinant of medical decision-making in schizophrenia, although, without further research, there is not enough evidence to sustain its rehabilitation as a reliable and valid clinical criterion. PF-like experiences should not be opposed to any criteriological attitude in diagnosis and would be clinically useful if the conditions of descriptive precaution and rigorous epistemology are maintained. The aim of teaching clinical expertise is to transform this basic experience into a well-founded clinical judgment. Finally, the article discusses the possible relevance of the PF for basic science and clinical research according to a translational approach inspired by phenomenology.

Key words: Praecox Feeling, Schizophrenia, Diagnostic Judgment, Psychopathology, Phenomenology, Epistemology of Psychiatry

Introduction

The *Praecox Feeling* (PF) is a classical concept referring to a characteristic feeling of unease or bizarreness experienced by a psychiatrist while interviewing a person with schizophrenia. PF used to be considered a core symptom of the schizophrenia spectrum, with high diagnostic specificity¹. In contemporary research it remains largely unaddressed. Considered too subjective or for some arbitrary, it is no longer present in current psychiatric definitions, and viewed as inaccessible to psychopathological investigation and obsolete for pedagogy². This critical review investigates the evolution of the PF in historical and contemporary literature and presents an overview of empirical evidence on the prevalence of PF in clinical settings, its inter-rater reliability and validity. The paper also discusses the possible role of the PF for basic science and clinical research according to translational approaches inspired by phenomenology. Finally, it proposes ideas for further investigation.

Classical psychopathology and the history of PF

The notion of schizophrenia first occurred in Bleuler's *Dementia Praecox and the group of schizophrenias*³. Unlike Kraepelin, Bleuler grouped the disorders according to their common psychopathological determinant – their clinical core – and not their evolution. He spoke of the “intra-psychic *Spaltung*”, resulting in the release of the associations and detachment from reality (autism). This clinical core was more encompassing than the sum of independent clinical symptoms described by Kraepelin and was supposed to transpire through particular manifestations (*Gestalt*) of illness⁴. Minkowski clarified later the idea of the direct recognition of this clinical core. He coined the term “diagnostic by penetration”⁵. According to Minkowski, Bleuler did not go far enough in his conceptualization of schizophrenic autism⁶. Focusing on mental contents, he missed the key link between a person and his/her world. The clinical core of schizophrenia consists of a “loss of vital contact with reality”. The patient loses “resonance” with the world, but not (as is the case of Bleuler's autism) contact with the world. The diagnostic by penetration is precisely the ability to somehow passively recognize the clinical core in the motor behavior and contact with the patient.

We owe the expression the “Praecox Feeling” to Rümke, who defined it as a feeling of strangeness experienced by a clinician in the first minutes of the encounter with a patient. Rümke claimed that the diagnosis of schizophrenia is often reached through a passive and indescribable intuition. PF is less a symptom recognizable in the manner of object perception than a kind of atmospheric strangeness surrounding the encounter⁷. It is described as the “the inability to come into contact with his/her personality as a whole”⁸. It is sometimes experienced tacitly before the patient engages verbally. One “feels” it in his body posture, his facial expression, the tone of the voice, his motor behavior, and his attitude. An attentive clinician intuitively feels these changes. Taken individually the changes are insignificant, but as a whole they present the patient as “definitely un-understandable.” Rümke suggests that the PF could be explained by the fundamental inaccessibility of the patient to empathic understanding, no matter how well one comes to know his personal history and psychopathology.

Prior to Rümke, Jaspers has already emphasized the lack of empathic interaction and an inaccessibility to a first-person psychopathological understanding in schizophrenia^{9,10}. A similar idea was put forward later by Müller-Suur¹¹, according to whom the PF is primarily noticed by the clinician as an “*indefinite* un-understandability” initially experienced as the bizarreness of the affective exchange. Further on, the clinician searches for disconfirming evidence, which ultimately strengthens the validity of his initial impression. Through a process

of critical reflection, the incomprehensibility of the patient that initially struck the psychiatrist becomes *definite* and can serve as a reliable clinical manifestation.

Although the PF is the most referenced notion, other close concepts can be found in literature: Wyrsh¹² and Krauss¹³ have discussed “diagnosis through intuition”, and Tellenbach an “atmospheric diagnosis”¹⁴. These authors have emphasized a close link between *PF-like experience* and specificity of diagnostic decision-making in schizophrenia (see table 1).

Contemporary psychopathology

The project of diagnostic operationalization originated in late 1970s concerns about the reliability of psychiatric diagnosis that initially led to the formulation of DSM-III in 1980^{15,16}. The ambition of this program was to enhance inter-rater reliability by means of the operationalization of diagnosis judgment and was heavily based on fully structured and standardized interview methods grounded in symptom check-lists (i.e., SCID-DSM-IV). This "operational revolution" has profoundly modified the practice and teaching of psychiatric nosology world-wide. Collected third-person data was supposed to be context- and observer-independent^{17,18}. As a result, the PF fell into oblivion. It was now considered too “subjective” and incompatible with the project of scientific psychiatry. It was also stigmatized by the antipsychiatry movement as a symbol of the arbitrariness of psychiatric labeling¹.

The consequence of these changes is that the PF remains largely unaddressed in contemporary psychopathology. The only remaining diagnostic criterion indirectly related to the notion of PF is “bizarre delusion” in DSMs III to IV-TR. “Bizarre delusion,” however, was limited to delusional content and did not take into account the conditions of the intersubjective encounter^{19,20}. This criterion was removed from DSM 5²¹. Nevertheless, as Nordgaard et al. have shown, in the absence of universally accepted biomarkers, the validity of schizophrenia diagnosis is ultimately based on the accuracy of a psychiatric interview^{22,23}. This is why the epistemological exploration of the cognitive structure of diagnostic decision-making is a fundamental domain of psychiatric science.

The PF experiential dimension remains inexplicable through the classic categories of behavioral description. To understand the ecological ways in which psychiatrists classify and comprehend illness, Schwartz and Wiggins have proposed to comprehend initial psychiatric diagnosis as a process of typification²⁴. They have argued that it is possible for a trained psychiatrist to recognize in the first minutes of the encounter with a patient his/her personality and situation as an “ideal type”²⁵. Typification is neither arbitrary nor intuitive. It is a cognitive process pertaining to basic perceptual processing that allows the identification of an object under conditions of incomplete information (as such, it is not limited to a psychiatric interview). It reveals the ideal-typical connections and not a set of virtually independent signs²⁶, and it gives order and meaning to the psychic states. The initial typification evolves along the interviewing process from a mainly tacit and elusive feeling to a more nuanced and specific impression. The scientific use of typifications requires that psychiatrists also doubt and reflect on their typifications and repeatedly test their interpretations by looking for additional components to prove or correct them²⁷. Typification processes are scientific only to the extent that they are based upon this dynamic circle of recognition and verification by the evidence-based criteria. For example, psychiatrists do not investigate hallucinations with all out-patients. Only because they have PF-like experiences, they conduct interviews exploring psychotic and hallucinatory incidents.

In spite of the absence of any reference in current psychiatric classifications, two issues in contemporary schizophrenia research may be associated with the PF: self-disorders and intersubjectivity. First, growing phenomenologically-oriented literature on basic (or minimal) self-disorders (SDs)^{28,29} focuses on specific alterations of the structures of experiencing (such as comprehensively explored with EASE instrument³⁰). SDs exhibit trait status and have been considered the clinical core in schizophrenia spectrum conditions. As Parnas argues, “it is not the question of a pathognomonic symptom but rather of a characteristic *Gestalt*”³¹. Other authors have emphasized the clinical relevance of subtle psychopathological “pheno-phenotypes”³¹ such as SDs. Their neglect may lead to the oversimplification of clinical criteria, whereas research on biomarkers (e.g., endophenotypes) needs stable and characteristic phenotypes³². Another promising field of research relies on social cognition and intersubjectivity. Recent findings show disturbances among patients with schizophrenia regarding interpersonal sensory-motor synchronization³³, embodied cognition³⁴, intercorporeality³⁵, or enactivism³⁶. Fine intercorporeal adjustment and interaffectivity may constitute a basic background for intersubjectivity³⁷, and their disturbances in schizophrenia may lead to tacit interpersonal difficulties such as those involved in the PF.

Empirical research

Only a few empirical studies have explored the PF. Nevertheless, there is evidence that the PF plays a role in diagnostic decision making in schizophrenia. The first type of evidence concerns the prevalence of self-declarations of PF-like determinants in diagnostic decision making. The second type of evidence concerns empirical evaluation of reliability and validity in experimental design studies (see Table 2.).

Three studies were conducted successively based on the same empirical design to explore the prevalence of the PF in clinical judgment processes. The first was conducted in West-Germany in 1962, in the pre-DSM era³⁸, the second in the USA in 1989, in the DSM-III era³⁹ and the last in France, in the DSM 5 era⁴⁰. All have shown a high prevalence of the PF (85.9%, 82.8%, and 90.1% respectively), exhibiting stability of the PF determinant in diagnostic decision making over time, despite the popularization of operationalized diagnostic tools since the 1980s. Paradoxically, the teaching of criteriological methods as cardinal diagnostic skills did not lead to any significant relegation of the PF from diagnostic decision-making, contrary to what some have suggested^{2,32,41}.

Regarding the experimental evidence of the reliability of the PF, a seminal study has shown that a deficient relationship with a patient is the second most reliable discriminator (reliability 0.86) in the diagnosis of schizophrenia, and is thus a legitimate foundation of diagnosis⁴². A study on the specificity of schizophrenia symptoms (42 referenced symptoms) found a relatively low frequency of the PF (28%), while bizarreness was present in 43.3% in a population of patients with schizophrenia (n=120) defined according to the DSM-III⁴³. A more recent study including 67 patients with acute positive psychotic symptoms measured the intensity of the PF in an experienced clinician during a few minutes long interview. Subsequently, a diagnostic assessment was performed according to standardized diagnostic classifications (ICD 10 and DSM-IV) by an independent rater. The degree of correlation with the final diagnosis was high. The author found significantly higher PF intensity scores in subjects with a familial predisposition to schizophrenia⁴⁴. This is coherent with classic Gottesman and Shields' Twin Studies⁴⁵. These results have been nuanced by a study⁴⁶ exploring the reliability of the PF according to a different protocol: 102 admitted patients (37 with schizophrenia) were interviewed. This initial interview was observed by 5 psychiatrists who

had never seen the patients before. It lasted 2 minutes and consisted of standard and non-specific questions. Clinical observers independently assessed the intensity of the PF on the video record of the first interview. Then, a sixth psychiatrist examined the patients using the SCID-DSM-IV. This study found very inconsistent results between the 5 evaluators, all of which showed poor sensitivity and specificity. It is very likely that the contradictory results between the two studies can be related to experimental design: PF exhibited strong reliability when Grube encountered the enrolled patients face to face, whereas in Ungvary et al. the PF recognition was based on video watching, which could have led to crucial information being lost.

To date, there is no study investigating the validity of PF in schizophrenia according to validity criteria in DSM system⁴⁷, despite some indirect evidence based on empirical research on the clinical encounter^{48,49,50}.

Discussion

The review of literature shows that the PF is a real determinant of medical decision making in schizophrenia. While there is insufficient evidence to sustain the rehabilitation of the PF as a reliable and valid clinical criterion consistent with the operational approach, a broader scientific approach is called for. PF should not be trivialized, as is sometimes the case, into a quick diagnosis^{1,5}. As opposed to a narrowly criteriological attitude in diagnosis, it is much more likely that physicians' reasoning navigates constantly between i) empathic, non-declarative intuition and ii) criteriological verification of that intuition^{1,22,24}. Accordingly, we believe that the PF would be clinically useful if the conditions of descriptive precaution and rigorous epistemology are maintained. We, therefore, propose to distinguish the clinical manifestation of the PF from its underlying intersubjective phenomenon of common sense experience of bizarreness. The aim of teaching clinical expertise is to transform this basic and ubiquitous (not limited to healthcare situation) experience into critical and epistemologically well-founded clinical judgment.

Further investigation on the prevalence and reliability of PF must take into account the theoretical background of clinicians, professional clinical experience and the context of practice. Furthermore, qualitative data on clinician subjective experience⁵¹ is needed for a better comprehension of diagnostic processes. Additionally, attention must be paid to experimental design to better evaluate reliability by controlling the impact of the embodied dimension of interaction (direct clinical encounter vs. verbatim vs. video). Finally, there should be a strong emphasis on the multidimensional validity of the PF and its relation to symptomatic dimensions of schizophrenia (ultra-high risk, clinical subtypes, severity, cognitive impairment with specific emphasis on social cognition and embodied interaction); course of illness; recovery perspective; comorbidity; treatment response; altered neural functioning, and genetic risk factors.

In addition, novel experimental designs are called for to capture this nearly-ineffable phenomenon: in our view, regarding the phenomenological hypothesis, the use of specific dedicated clinical evaluation of SDs is promising³¹. Moreover, the PF can be investigated regarding recent neuroscientific research on social interaction with hyper-scanning methods (which demonstrate that the coordination of humans engaged in social interaction is accompanied by the coordination of their brain activities⁵²). Since the PF is related to social interaction impairment, it may be related to abnormal brain synchronization. Present-day psychiatric neuroscientific research is challenged to play close attention to the particular nature of subjective experience in mental disorders and to develop techniques and interviewing

methods adequate for this enterprise. The PF takes this ambition a step forward by addressing the complex problem of intersubjectivity as the epistemological basis of interview validity.

Supplementary Material

Table 1. concepts associated with the Praecox Feeling

<i>Historical</i>	Jaspers K., 1913 ⁹	Radical incomprehensibility
	Minkowski E., 1927 ⁵	Diagnostic by penetration
	Rümke HC., 1941 ⁷	Praecox Feeling
	Wyrsh J., 1946 ¹²	Diagnosis through intuition
	Müller-Suur H., 1961 ¹¹	indefinite un-understandability
	Tellenbach H., 1968 ¹⁴	Atmospheric diagnosis
<i>Contemporary</i>	Schwartz GA & Wiggins OP., 1987 ²⁴	Typification
	Fuchs T., 2010 ³⁵	Intercorporeality
	Parnas J., 2011 ¹	Gestalt recognition of the clinical core of schizophrenia (SDs)
	Varga S., 2013 ³⁶	Disturbed I-Thou intersubjectivity
	Stanghellini G., 2014 ³¹	Pheno-phenotypes
	Moskalewicz M, Schwartz GA, Gozé T., 2018 ²⁷	Aesthetic judgment

Table 2. Review of studies on prevalence and reliability of the PF

<i>Authors, date</i>	<i>Subjects and setting</i>	<i>Methods</i>	<i>Main results</i>
Irles G., 1962 ³⁸	Germany, pre-DSM III era, Population: 2324 psychiatrist surveyed response rate: 51%	Self-assessed questionnaire	Prevalence of the PF: 85.9%
Gottesman II & Shields J.,	UK, Maudsley schizophrenia twin study. Longitudinal follow	Longitudinal follow up of 57 twin pairs (n=114).	The study showed concordance rates among MZ- and DZ-co-twins of the

1972 ⁴⁵	up of 57 twin pairs.	Six judges, from USA, Japan and UK evaluated the status of each twin. Then a blind diagnostic assessment was performed by a Swedish expert clinician E. Essen-Möller asking for a binary classification: within or outside the schizophrenia spectrum.	schizophrenic probands to be around 50% and 10%, respectively. E. Essen-Möller found recognition pattern in the clinical encounter with asymptomatic MZ-co-twins (with 90% correspondence) of schizophrenic patients blinded to the genotypic status of their twins. The authors raised the idea that PF may be present throughout the schizophrenic spectrum without correlating it to the positive symptoms of the disease phase.
Sagi GA & Schwartz MA., 1989 ³⁹	USA, DSM-III era, Population : 502 psychiatrist surveyed Response rate : 51.2%	Self-assessed questionnaire (same questionnaire as Irlles G., 1962).	Prevalence of the PF: 82.8%
Landmark J et al., 1990 ⁴³	Canada, 120 patients with schizophrenia assessed for symptoms frequency (42 symptoms from 13 diagnostic systems). A sub-sample of 31 patients assessed for inter-reliability of each symptoms.	Direct face to face assessment of symptoms with an experienced psychiatrist. Sub-sample assessed by 4 psychiatrists for reliability procedure.	Prevalence of the PF: 28.3% inter-rater agreement: 0.951 Prevalence of bizarre mannerism: 43.3% inter-rater agreement: 0.719
Grube M., 2006 ⁴⁴	Germany, 67 first admitted patients with acute psychotic symptoms.	Direct face to face interview with the author quoting intensity of the PF compared to ICD-10 criteria quotation by blind rater at the end of inpatient period.	$\kappa = 0.93$ Sensitivity = 0.88 Specificity = 0.82 Positive predictive value = 0.94 Negative predictive value = 0.70
Ungvari GS et al., 2010 ⁴⁶	Hong Kong, 102 first admitted patients (37 with schizophrenia).	Initial interview (2min standard non-specific questions) video observed by 5 psychiatrist quoting PF. Results are compared to SCID-DSM-IV blind examination.	$\kappa = 0.169-0.344$ Sensitivity = 0.17-0.86 Specificity = 0.27-0.87 Positive predictive value = 0.35-0.40 Negative predictive value = 0.66-0.78
Gozé T et al., 2018 ⁴⁰	France, DSM 5 era, population : 1811 psychiatrist surveyed response rate : 25.6%	Self-assessed questionnaire (same questionnaire as Irlles G., 1962).	Prevalence of the PF: 90.1%

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