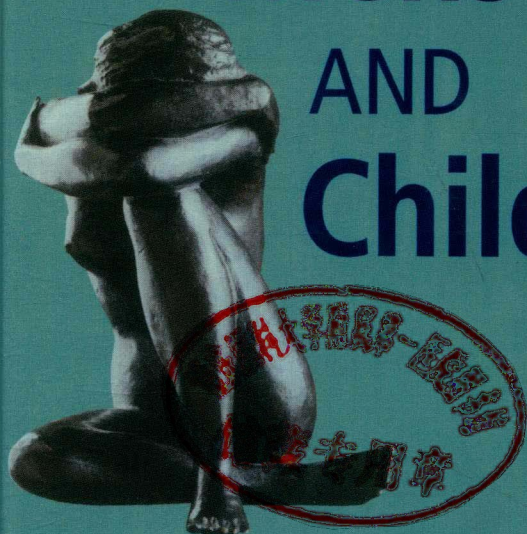


THE PSYCHOSES OF **Menstruation** AND **Childbearing**



Ian Brockington

Foreword by
Mario Maj



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Medicine

The Psychoses of Menstruation and Childbearing

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Every effort has been made in preparing this book to provide accurate and up-to-date information which is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the author, editors and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The author, editors and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

Dedication

To my wife, Diana, who has given me so much happiness.

Si nos pères n'avaient pas la science que nous possédons aujourd'hui, ils avaient du moins une puissance d'observation et d'intuition supérieure à la nôtre: nous le reconnaissons tous les jours en découvrant dans leurs ouvrages les germes des plus beaux fleurons scientifiques de notre siècle [Icard 1890, reference 87, page XI].

[If our fore-fathers lacked the scientific tools we now have at our disposal, they had superior powers of observation and intuition. We find in their works, time and again, the seeds of our century's finest flowers of scientific achievement].

Foreword

I first met Ian Brockington in 1985 in Umeå, Sweden. I had to discuss my PhD thesis on schizoaffective and cycloid psychoses, and he was my 'opponent' (i.e., an internationally renowned expert on that topic who was supposed to challenge what I had written in the thesis). I immediately noticed on that occasion a peculiarity that clearly emerges from this book and makes Ian a very uncommon figure in the current international panorama of our discipline: he is at the same time a scholar whose knowledge of a specific area goes well beyond the usual limits for a prominent scientist and academician (extending to literally hundreds of papers that for the language in which they were written or the journals in which they appeared had been virtually inaccessible until he traced them), and an old-fashioned extraordinarily skilled and experienced clinician, one of those, to cite the quotation appearing at the beginning of this book, who have 'superior powers of observation and intuition.'

The area in which Ian has applied these nowadays so rare talents – that of psychoses of pregnancy and puerperium and more in general of perinatal mental health – is itself peculiar for being of exceptional clinical, scientific, public health, service and educational interest, while being remarkably neglected in clinical practice, research, curricula of students in medicine and residents in psychiatry, as well as – with some exceptions – national public health programs. Hence, the usefulness and timeliness of this volume.

As Ian observes, there are no surveys of puerperal psychoses in the general population in any country of the world. Although organic psychoses of pregnancy and puerperium are still not uncommon in some low-income countries, no recent documentation is available of this incidence, mostly because of lack of systematic attention to the issue. Narrative descriptions, which allow the interpretation of clinical records written many years earlier, have become increasingly rare in ordinary practice and in research projects, so that the transfer of knowledge and expertise about conditions that require that level of detailed description has become increasingly difficult. Long-term follow-up studies, which would be essential in this area, are made almost impossible by the fragmentation of services dealing with these conditions and the extremely limited number of interested research groups. Indeed, as Ian points out, the opportunity offered by psychoses that can be precisely located in time, and that are causally linked to events whose physical and psychological impact is relatively well understood, is being widely neglected. Ideally this volume can contribute significantly to getting the ball rolling.

Will clinicians and researchers be discouraged from reading a book of almost 400 pages with several thousand references? I do not think so. The structure of the volume, with its subdivision into several brief sections with clear descriptive titles, should allow the reader either to focus on specific topics of interests or to build up his or her own pathway starting from one of the topics listed in the initial contents and then extending attention to others. Furthermore, this book is obviously very suitable for consultation by the clinician confronted with any psychopathological condition arising in relation to pregnancy, puerperium, or menstruation.

I particularly recommend the final chapters 'What Is Known', 'Obstacles to the Growth of Knowledge', and 'Research Suggestions'. These could ideally be made open access on the Web, so that a vast audience of clinicians, researchers and policy makers can be sensitized to this neglected clinical and research area, with the hope that hundreds of them may be stimulated to read the full book.

Mario Maj, Past President, World Psychiatric Association

Preface

Childbearing, from the standpoint of psychological medicine, is the most complex event in human experience. Of the dozens of disorders that affect the generative process, or are unleashed as complications, many fall under the heading of 'psychoses' – profound disturbances of thought, perception, cognition and behaviour. These are heterogeneous, with a wide range of organic and non-organic forms. Some are relatively common and some are rare, indeed all but extinct in nations with advanced obstetric and medical services. The aim of this monograph, however, is not to describe the disorders now seen in high-income nations, but to explore all the psychoses that have complicated the reproductive process, throughout history and throughout the world. Rare disorders may be less rare in countries with high birth and high maternal mortality rates, and apparent rarity may result from the lack of recent reports. Circumstances may change and extinct disorders return.

These psychoses disrupt personal and family life, often at a critical time. Starting at the dawn of medicine, knowledge has accumulated through the contributions of many disciplines, many nations and in many languages. Armed with this knowledge, and wielding a range of interventions, many women can be restored to health and their vital roles in the family and community. There is much to discover, and there are untapped research opportunities, but we can be confident that, in the fullness of time, when the risk factors are known, multidisciplinary preventive strategies will transform the lives of vulnerable women.

In 1996¹, *Motherhood and Mental Health* reviewed 4,000 works on the whole span of mother–infant psychiatry; it included a chapter on puerperal psychosis (Chapter 4), with a discussion of the role of menstruation. During the last ten years I have taken a closer look at this literature and published a trilogy of monographs, dealing with the organic and non-organic psychoses of childbearing, and menstrual psychosis:

Eileithyia's Mischief: The Organic Psychoses of Pregnancy, Parturition and the Puerperium (2006)², 100,000 words with 1,300 references

What Is Worth Knowing about 'Puerperal Psychosis' (2014)³, 90,000 words, reviewing 2,400 works with 800 selected references

Menstrual Psychosis and the Catamenial Process (2008)⁴, 85,000 words with 1,250 references

These are scarce, handcrafted monographs, available in a few libraries^a. In order to reach psychiatrists, obstetricians and gynaecologists, midwives, general practitioners, neuroscientists and other professionals worldwide, there is a need for an abridgement, at half the length, in a single volume. That is the purpose of the present work.

I thank my friend Professor Mario Maj for writing a Foreword. I admire his wise and inspired leadership of the World Psychiatric Association, and, indeed, of world psychiatry.

^a The British copyright libraries, the Barnes Library at the University of Birmingham, the Markland Library at the Royal College of Obstetricians and Gynaecologists, the Institute of Psychiatry, the Becker Library at Washington University in St Louis, the Vanderbilt Library in Louisville, Kentucky, l'Académie de Médecine in Paris, and the University of Ulm have all three volumes.

Acknowledgements

The North Western Regional Health Authority (under its locally organized projects) funded two studies of puerperal psychosis conducted in Manchester in 1975–1980. The Endowment Fund of the Queen Elizabeth Hospital funded the search for recurrent puerperal psychosis, conducted by Anne Roper. Graham Pye contributed generously to a long-term study. The Wellcome Trust gave £5,000 to obtain literature.

I thank the mothers for whom I had the privilege of care when they were suffering from 'puerperal psychosis', especially those who contributed to my catamnestic study. I also thank patients and parents from all over the world, who have corresponded with me about menstrual psychosis.

Abbreviations and Printing Conventions

I have used the following acronyms:

CAT	Computerized axial tomography
CSF	Cerebral spinal fluid
ECT	Electroconvulsive therapy
EEG	Electro-encephalogram
FSH	Follicle stimulating hormone
IQ	Intelligence quotient
LH	Luteinising hormone
MRI	Magnetic resonance imaging
RR	Relative risk

The term 'puerperal psychosis' is generally used by psychiatrists, but 'childbearing psychosis' is more precise because episodes erupt during all phases of the reproductive process and after abortion; I have used these terms interchangeably. The words *délire*, *folie* and *Tobsucht* are approximately equivalent to 'psychosis'. The word 'menses' here means menstrual bleeding. 'Day 1' is the first day of the puerperium.

Translations and comments are printed in MyriadPro-Regular font between square brackets. For statistical tests, Fisher's exact test has been used throughout.

Contents

Foreword ix
Preface xi
Acknowledgements xii
List of abbreviations and printing conventions xiii

Section 1 Introduction

1 **The Data** 2
2 **History** 7

Section 2 The Organic Psychoses of Pregnancy and the Puerperium

3 **Infective Delirium** 24
4 **Eclamptic and Donkin Psychoses** 28
5 **Wernicke–Korsakow Syndrome Complicating Pernicious Vomiting** 36
6 **Chorea Psychosis Complicating Chorea Gravidarum** 42
7 **Vascular Disorders** 48
8 **Other Specific Neuropsychiatric Disorders** 56
9 **Incidental Organic Psychoses** 68

Section 3 The Psychopathology of Parturition

10 **Introduction** 94
11 **Delirium during Labour** 96
12 **Unconscious Delivery** 101
13 **Acts of Desperation** 106
14 **Other Parturient Psychoses, Organic and Non-Organic** 115
15 **Postpartum Delirium and Stupor Immediately after the Birth** 117

Section 4 Non-Organic Psychoses of Childbearing

16 **The Literature** 132
17 **Symptoms** 158
18 **Classification** 163
19 **Clinical Forms** 167

Contents

Foreword ix
Preface xi
Acknowledgements xii
List of abbreviations and printing conventions xiii

Section 1 Introduction

1 **The Data** 2
2 **History** 7

Section 2 The Organic Psychoses of Pregnancy and the Puerperium

3 **Infective Delirium** 24
4 **Eclamptic and Donkin Psychoses** 28
5 **Wernicke–Korsakow Syndrome Complicating Pernicious Vomiting** 36
6 **Chorea Psychosis Complicating Chorea Gravidarum** 42
7 **Vascular Disorders** 48
8 **Other Specific Neuropsychiatric Disorders** 56
9 **Incidental Organic Psychoses** 68

Section 3 The Psychopathology of Parturition

10 **Introduction** 94
11 **Delirium during Labour** 96
12 **Unconscious Delivery** 101
13 **Acts of Desperation** 106
14 **Other Parturient Psychoses, Organic and Non-Organic** 115
15 **Postpartum Delirium and Stupor Immediately after the Birth** 117

Section 4 Non-Organic Psychoses of Childbearing

16 **The Literature** 132
17 **Symptoms** 158
18 **Classification** 163
19 **Clinical Forms** 167

20

Episode Onset

183

21

The Bipolar/Cycloid Group

212

22

Management

224

23

Risks

238

Section 5 Menstrual Psychosis

24

The Catamenial Process

280

25

Medicine and Menstruation

289

26

Definitions and Classification

300

27

Timing within the
Menstrual Cycle

304

28

Timing within the Life Cycle

310

29

Links between Menstrual Psychoses
and the Psychoses of
Childbearing

320

30

Investigations

331

31

Causes

339

32

Management

341

Section 6 The Challenge and
the Opportunity

33

What Is Known

358

34

Obstacles to the Growth of
Knowledge

365

35

Research Suggestions

369

*Appendix: The Anne Roper
Interview*

373

Index

378

Section

1

Introduction

Chapter 1 The Data 2

Chapter 2 History 7

References 18

The Data

The Literature

Over the course of 40 years I have accumulated literature on puerperal and menstrual psychoses. On puerperal psychoses, from a bibliography of more than 2,680 relevant publications, I obtained 2,451 (92 per cent of the literature known to me). On menstrual psychosis I collected 470 works (84 per cent of the literature known to me). These bibliographies are incomplete – there will be other unpublished theses, Russian articles and those in journals not listed in the indices. It was necessary to translate more than 70 per cent of these works. I am no linguist, so there will be errors, but this is better than not reading them at all.

This literature is surprisingly sparse, taking into account:

- Puerperal delirium was mentioned by Hippocrates⁵, who lived in the fifth century BC; the first reports of menstrual psychosis appeared in the eighteenth century.
- PubMed lists about 1,000 publications on puerperal psychosis and 150 on menstrual psychosis; this is less than those on disorders only recently identified, for example post-traumatic stress disorder (more than 24,000).
- These psychoses are not trivial – they result in hospitalization, recur, disrupt young families, and sometimes lead to suicide and filicide.
- ‘Puerperal psychosis’ is not one, but a score of distinct disorders, and menstrual psychosis is also complex.
- The most common form – puerperal bipolar/cycloid disorder – occurs after 1/1,000 births, so that there are more than 100,000 cases per year worldwide.
- In the only polydiagnostic study that has compared its incidence with other psychoses (the Camberwell 1st admission study^{6,7}), 5/119 cases were puerperal. This can be compared with 10 cases of schizophrenia (Feighner criteria⁸). Thus the ratio of schizophrenia (as now defined as a chronic disorder) to puerperal psychosis was 2:1; the respective numbers of publications, listed in PubMed at the time of writing, is 112,805 for schizophrenia and 1,012 for puerperal psychosis, a ratio of 111:1.

Puerperal Psychosis

Table 1.1 shows in each 25-year period the number of publications in different language groups:

This table shows that, before 1850, there were a little more than 250 case reports or brief annotations, half of which were in the German language and almost all the rest from France or Britain. Until 1975 the number of publications during each 25-year

Table 1.1 Publications on childbearing psychosis

Group	Before 1850	1851– 1875	1876– 1900	1901– 1925	1926– 1950	1951– 1975	After 1975	Total
British Commonwealth	58	60	55	33	39	50	272	567
German-speaking nations	125	50	71	127	38	35	61	507
USA	6	36	87	48	60	85	152	474
French-speaking nations	54	53	69	75	63	61	87	462
All others	20	6	29	51	39	115	181	441
Total	263	205	311	334	239	346	753	2,451

period remained in the range 200–350. In the twentieth century more than 100 German articles appeared before the First World War; the number then fell sharply and the English language began to predominate. Since 1975 there have been few major contributions in other languages. A high proportion of all publications have been from Germany, the United States, France and the British Commonwealth, and it was not until 1950 that other nations made a substantial contribution. There has been a rise in the last 30 years, but this has been modest, when one takes into account

- The enormous increase in medical journals and publications
- An increase in the nations involved
- The foundation of the Marcé Society and the societies of Women's Mental Health
- The development of mother–infant psychiatry as an area of specialization

By now, 62 nations have contributed at least one case report or survey. Among the more populous nations, Indonesia, Bangladesh and the Philippines have not, to my knowledge, published on this subject.

Menstrual Psychosis

Table 1.2 shows the same data for menstrual psychosis. This distribution is curious:

- Since there were only 76 works published in 1976–2000 (and 24 since then), the peak was reached 100 years earlier.
- The pioneering observations were French, but their contribution came to an end in 1900, except for a cluster of papers on *hyperfolliculinaemia* (a concept with slight relevance) in 1938–1961.
- German-speaking nations followed, with their meticulous dating and have made the greatest contribution, although this suffered as a result of the world wars.
- The first Japanese paper appeared in 1934; since 1950, Japanese authors have contributed many valuable clinical and neuroendocrinological studies.
- Early American papers were about the treatment of mental illness by removal of the ovaries. Recently they have contributed some well-studied cases.

- The contribution of Britain (39 papers) and the Commonwealth (10 papers) has been relatively weak.
- Italy has contributed 21 papers, the Netherlands 7, Norway 5, Russia and Poland 4 each and 12 other nations the remaining 23 papers.

Table 1.2 Publications on menstrual psychosis

Group	Before 1850	1851– 1875	1876– 1900	1901– 1925	1926– 1950	1951– 1975	After 1975	Total
German-speaking nations	9	11	39	49	17	7	11	143
French-speaking nations	18	20	26	13	24	7	1	109
USA			12	1	11	12	28	64
British Commonwealth	2	1	7	3	3	15	18	49
Japan					1	14	26	41
All others	2		8	11	15	11	16	63
Total	31	32	92	77	71	66	100	469

Citation Analysis

In order to track the spread of knowledge, I indexed the citations of 2,205 publications on puerperal psychosis and 357 on menstrual psychosis.

Case Lore

I summarized 4,029 cases of puerperal psychosis; this is also a small number, considering that the first 8 cases were published by Hippocrates⁵, making up 20 per cent of all cases in the 1st and 3rd books of Epidemics, and nearly half his female cases, covering the whole of medicine. Most have been published in the last 200 years. There is no record of the number of children born in that time, but we can make a guess. Worldwide, Carl Haub⁹ has estimated that 15–20 billion have been born since 1800. Some form of puerperal psychosis will have complicated 15–20 million; of this 4,000 cases is a minute proportion. In France, the largest contributor, about 200 million children were born in that time, which will have been complicated by 200,000 cases of puerperal psychoses. Those published in the French literature are about 1/200 of that number.

As for menstrual psychosis, the literature contains descriptions of 246 cases with at least three episodes linked to the menses. If the lifetime rate is 1/10,000 women (see Chapter 30) this is also a small proportion.

There are two sides to this coin:

- Published cases may grossly misrepresent what is happening in the population. This is a major limitation, but the only alternative is personal experience.
- Even a single case may illustrate a disorder that afflicts many women.

Personal Experience

Puerperal Psychosis

In 1970, while working as Senior House Officer to the late Professor RE Kendell, I encountered my first mother with this disorder:

A 20-year old was admitted soon after childbirth: she 'went wild', broke things, hit her husband, threw powder in the baby's face, pulled off the wallpaper, and absconded with the infant: on admission to the Bethlem Royal Hospital, she was disinhibited, distractible and perplexed.

In 1972, we found five cases in a survey of Camberwell 1st admissions.

From 1975 to 1980, as Senior Lecturer in the University of Manchester, I had responsibility for the Withington Hospital mother & baby unit. Through the kindness of other consultants – Drs Hay, JJ Johnson, DAW Johnson, Atkinson, Hore, McGuire and Professor Goldberg, I was able to study more than 80 mothers with puerperal psychosis.

In 1982, on return from visiting professorships in the United States, this mother was admitted under my care:

A 21-year-old developed puerperal mania. She made a rapid recovery but relapsed at her 1st menses. She was arrested by the police, trying to stuff an apple into the baby's mouth. It had begun to turn blue, its throat blocked by apple and banana; a policeman saved its life by mouth-to-mouth respiration.

As a result of this single episode, I began to suspect that menstruation might have a role.

In 1983 I was appointed to the Chair of Psychiatry at the University of Birmingham. Soon afterwards, my colleague Dr Peter Hall of Worcester drew my attention to a mother who suffered six menstrual relapses after an episode of puerperal psychosis. I began to collect literature on menstrual psychosis, and published various reviews¹⁰⁻¹² and a monograph. I had no service for menstrual disorders, but have received letters from many sufferers, or the mothers of teenagers, with this disorder.

It was nine years before the Queen Elizabeth Psychiatric Hospital, with its mother & baby unit, was built. During that time I had the valuable experience of working *without* this resource, treating mothers at home, or admitting them, with their babies, to acute psychiatric wards. From 1992 until my retirement in 2001, I worked as honorary consultant to the Queen Elizabeth mother & baby unit, except for three months as visiting consultant at the Princess Margaret mother & baby unit in Christchurch, New Zealand. Thus I spent 14 years working on three mother & baby units. After retirement I extended my experience through medico-legal work, and received letters and emails from many sufferers. In all I have records of 321 mothers with various forms of 'puerperal psychosis', consisting of three major series, plus some others that have reached me from various sources:

The Manchester series (1975–1982). While working on the Withington Hospital mother & baby unit, we conducted a controlled clinical study¹³ of 56 mothers (58 episodes), who became ill within two weeks of the birth. After its completion I continued to collect information on mothers admitted to the unit, reaching a total of 86 cases. In September 2013, with the agreement of the National Research Ethics Service in Maple St London, and of the Caldicott Guardian, Dr Lennon, I visited the University Hospital of South Manchester to review the case records (six visits). I obtained data on 81 mothers, more than any series so far published in the