



HAL
open science

Inpatient mother-and-child postpartum psychiatric care: factors associated with improvement in maternal mental health.

Nine M.-C. Glangeaud-Freudenthal, Anne-Laure Sutter, Anne-Claire Thieulin, Véronique Dagens-Lafont, Marie-Agathe Zimmermann, Alain Debourg, Blanche Massari, Odile Cazas, Rafaële Cammas, Christine Rainelli, et al.

► To cite this version:

Nine M.-C. Glangeaud-Freudenthal, Anne-Laure Sutter, Anne-Claire Thieulin, Véronique Dagens-Lafont, Marie-Agathe Zimmermann, et al.. Inpatient mother-and-child postpartum psychiatric care: factors associated with improvement in maternal mental health.. *European Psychiatry*, 2011, 26 (4), pp.215-23. 10.1016/j.eurpsy.2010.03.006 . inserm-00493033v2

HAL Id: inserm-00493033

<https://inserm.hal.science/inserm-00493033v2>

Submitted on 10 Jan 2011

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Table 1: Rate of marked improvement at discharge according to factors tested
(N=869; mean rate of marked improvement=69%)

| | sample size N (%) | marked improvement N (%) | 95% CI | p |
|---|----------------------|--------------------------------|---------|------------|
| Social and demographic characteristics | | | | |
| Educational level | | | | |
| - high school and over | 305 (35.1) | 247 (81.0) | [77;85] | p < 0.0001 |
| - secondary | 404 (46.5) | 267 (66.1) | [61;71] | |
| - primary or less or unknown | 155 (17.8) | 82 (52.9) | [45;61] | |
| Occupational status | | | | |
| - occupational activity or training | 256 (29.5) | 216 (84.4) | [80;89] | p < 0.0001 |
| - receiving unemployment benefits | 102 (11.7) | 66 (64.7) | [55;74] | |
| - receiving disability payments | 114 (13.1) | 53 (46.5) | [37;56] | |
| - on sick leave from work | 149 (17.2) | 120 (80.5) | [74;87] | |
| - not in labor force | 118 (13.6) | 74 (62.7) | [54;71] | |
| - other (state allowance,...) | 130 (15.0) | 70 (53.9) | [45;62] | |
| Last employment category | | | | |
| - professional | 92 (10.6) | 78 (84.8) | [77;92] | p < 0.0001 |
| - intermediate | 167 (19.2) | 138 (82.6) | [77;88] | |
| - clerical or sales | 282 (32.5) | 211 (74.8) | [70;80] | |
| - workers, artisan or farmer | 108 (12.4) | 65 (60.2) | [51;69] | |
| - no known profession | 220 (25.3) | 107 (48.6) | [42;55] | |
| Country of birth | | | | |
| - France | 698 (83.6) | 476 (68.2) | [65;72] | p = 0.92 |
| - Other | 137 (16.4) | 94 (68.6) | [61;76] | |
| Maternal age at admission (years) | | | | |
| - 25-35 | 105 (12.1) | 60 (57.1) | [48;67] | p = 0.01 |
| - < 25 | 541 (62.3) | 390 (72.1) | [68;76] | |
| - > 35 | 223 (25.7) | 149 (66.8) | [61;73] | |
| Living with a partner (married or cohabiting) | | | | |
| - yes | 569 (65.5) | 436 (76.6) | [73;80] | p < 0.0001 |
| - no | 300 (34.5) | 163 (54.3) | [49;60] | |
| Maternal mental illness | | | | |
| Index diagnosis | | | | |
| - depressive episode and recurrent depressive disorder | 158 (18.1) | 137 (86.7) | [81;92] | p < 0.0001 |
| - psychotic affective disorders | 207 (23.8) | 171 (82.6) | [77;88] | |
| - schizophrenia and other non-affective psychotic disorders | 116 (13.3) | 54 (46.6) | [38;56] | |
| - acute and transient psychotic disorders | 41 (4.7) | 35 (85.4) | [75;96] | |
| - adult personality or behavior disorder | 106 (12.) | 42 (39.6) | [30;49] | |
| - neurotic and other mood disorders | 146 (16.8) | 121 (82.9) | [77;89] | |
| - other diseases and disorders | 94 (10.8) | 38 (40.4) | [30;50] | |
| Psychiatric history | | | | |
| no known pathology | 166 (19.1) | 133 (80.1) | [74;86] | p < 0.0001 |
| - psychotic disorders | 194 (27.3) | 118 (60.8) | [54;68] | |
| - mood disorders | 289 (33.3) | 235 (81.3) | [77;86] | |
| - behavioral disorders | 95 (10.0) | 38 (40.0) | [30;50] | |
| - other disorders or missing | 125 (14.4) | 75 (60.0) | [51;69] | |

History of trauma in childhood

Foster care in childhood

| | | | | |
|-------|------------|------------|---------|-----------|
| - no | 660 (76.0) | 471 (71.4) | [68;75] | p = 0,006 |
| - yes | 209 (24.0) | 128 (61.2) | [55;68] | |

Abuse in childhood and adolescence

| | | | | |
|---------------------------|------------|------------|---------|------------|
| - no | 608 (70.0) | 442 (72.7) | [69;76] | p < 0.0001 |
| - abuse other than sexual | 141 (16.2) | 71 (50.4) | [42;59] | |
| - sexual abuse | 120 (13.8) | 86 (71.7) | [64;80] | |

Pregnancy and birth

Mean age of baby at admission (weeks)

| | | | |
|-----|-----|-----------|----------|
| 869 | 9.1 | [8.3;9.8] | p = 0.78 |
|-----|-----|-----------|----------|

Parity

| | | | | |
|----------------------|------------|------------|---------|----------|
| -primiparous | 540 (62.1) | 372 (68.9) | [65;73] | p = 0.19 |
| - secundiparous | 190 (21.9) | 140 (73.7) | [67;80] | |
| - over secundiparous | 124 (14.3) | 77 (62.1) | [54;71] | |

Obstetric(pregnancy) complication

| | | | | |
|-------------------------|------------|------------|---------|----------|
| - no known complication | 648 (74.6) | 444 (68.5) | [65;72] | p = 0.65 |
| - complications | 221 (24.4) | 155 (70.1) | [64;76] | |

Child transferred to neonatal intensive care unit

| | | | | |
|-------|------------|------------|---------|-----------|
| - no | 688 (79.2) | 490 (71.2) | [68;75] | p = 0.004 |
| - yes | 181 (20.8) | 109 (60.2) | [53;67] | |

Characteristics at admission

Reason for index admission

| | | | | |
|---|------------|------------|---------|------------|
| - first acute episode | 219 (25.4) | 178 (81.3) | [76;86] | p < 0.0001 |
| - evaluation of maternal competence | 154 (17.7) | 66 (42.9) | [35;51] | |
| - acute and transient psychotic disorders | 287 (33.0) | 183 (63.8) | [58;69] | |
| - relapse of an acute episode | 188 (21.6) | 158 (84.0) | [79;89] | |
| - other, unknown | 21 (1.4) | 14 (66.7) | [47;87] | |

Legal status at admission

| | | | | |
|------------------------|------------|------------|---------|----------|
| - informal | 800 (92.0) | 552 (69.0) | [66;72] | p = 0.95 |
| -involuntary admission | 67 (8.0) | 46 (68.7) | [58;80] | |

Partner characteristics*

Mental and behavioral disorders

| | | | | |
|--|------------|------------|---------|------------|
| - no psychiatric disorder | 426 (49.0) | 333 (78.2) | [74;82] | p < 0.0001 |
| - bipolar or depressive disorders | 38 (4.4) | 23 (60.5) | [45;76] | |
| - schizophrenia or other psychotic disorders | 28 (3.2) | 12 (42.9) | [25;61] | |
| - behavioral disorders | 54 (6.2) | 34 (63.0) | [50;76] | |
| - other disorders | 67 (7.7) | 41 (61.2) | [50;73] | |
| - unknown | 256 (29.5) | 156 (60.9) | [55;67] | |

Occupational status

| | | | | |
|--|------------|------------|---------|------------|
| - occupational activity or training | 588 (67.7) | 446 (75.9) | [72;79] | p < 0.0001 |
| - receiving unemployment or disability benefits or paid sick leave from work | 110 (12.7) | 70 (63.6) | [55;73] | |
| - other (at home, state allowance...) | 82 (9.4) | 43 (52.4) | [42;63] | |
| - unknown | 89 (10.2) | 40 (44.9) | [35;55] | |

Treatments for mental illness during pregnancy

Neuroleptics

| | | | | |
|-------|------------|------------|---------|----------|
| - no | 659 (75.8) | 466 (70.7) | [67;74] | p = 0.04 |
| - yes | 210 (24.2) | 133 (63.3) | [57;70] | |

Anxiolytic/antidepressor/thymoregulator during pregnancy

| | | | | |
|-------|------------|------------|---------|----------|
| - no | 620 (71.3) | 440 (71.0) | [67;75] | p = 0.04 |
| - yes | 249 (28.7) | 159 (63.9) | [58;70] | |

Drug taking behavior during pregnancy

| | | | | | |
|--|----------------------|------------|------------|---------|------------|
| Tobacco | | | | | |
| | - no | 561 (64.6) | 419 (74.7) | [71;78] | p < 0.0001 |
| | - yes | 308 (34.4) | 180 (58.4) | [53;64] | |
| Alcohol | | | | | |
| | - no | 811 (93.3) | 567 (69.9) | [67;73] | p = 0.02 |
| | - yes | 58 (6.7) | 32 (55.2) | [42;68] | |
| Drug use | | | | | |
| | - no | 804 (92.5) | 570 (70.9) | [68;74] | p < 0.0001 |
| | - yes | 65 (7.5) | 29 (44.6) | [33;57] | |
| Unit characteristics | | | | | |
| Size of unit | | | | | |
| | - large unit | 483 (55.6) | 315 (65.2) | [61;69] | p = 0.004 |
| | - medium unit | 263 (30.3) | 202 (76.8) | [72;82] | |
| | - small unit | 123 (14.1) | 82 (66.7) | [58;75] | |
| Unit director's professional domain | | | | | |
| | - child psychiatrist | 424 (48.8) | 275 (64.9) | [60;69] | p = 0.01 |
| | - adult psychiatrist | 445 (51.2) | 324 (72.8) | [69;77] | |

.....
 *partner and, if no partner, baby's father

Table 2: Model for maternal marked improvement at discharge
(N = 814; ORb logistic regression per variable*; ORa multivariable logistic regression *)

| | ORb (CI) | p | ORa (CI) | p |
|---|------------------|------------|------------------|------------|
| Social and demographic characteristics | | | | |
| Educational level | | | | |
| - high school and over | 1 | p <0.0001* | 1 | p = 0,54 |
| - secondary | 0.46 [0.32;0.65] | | 0.88 [0.54;1.46] | |
| - primary or less or unknown | 0.28 [0.18;0.43] | | 1.23 [0.64;2.48] | |
| Occupational status | | | | |
| - occupational activity or training | 1 | p <0.0001* | 1 | p = 0.02* |
| - receiving unemployment benefits | 0.34 [0.20;0.58] | | 0.50 [0.26;0.98] | |
| - receiving disability payments | 0.16 [0.10;0.27] | | 0.37 [0.18;0.76] | |
| - on sick leave from work | 0.77 [0.45;1.30] | | 0.83 [0.44;1.57] | |
| - not in labor force | 0.31 [0.19;0.52] | | 0.36 [0.18;0.70] | |
| - other (state allowance,...) | 0,23 [0.14;0.38] | | 0.46 [0.23;0.93] | |
| Last employment category | | | | |
| - professional | 1 | p <0.0001* | 1 | p = 0.31 |
| - intermediate | 0.85 [0.43;1.71] | | 0.98 [0.44;2.22] | |
| - clerical or sales | 0.53 [0.28;1.00] | | 0.93 [0.41;2.08] | |
| - workers, artisan or farmer | 0.27 [0.14;0.54] | | 0.53 [0.21;1.33] | |
| - no known profession | 0.17 [0.09;0.31] | | 0.60 [0.24;1.50] | |
| Country of birth | | | | |
| - France | 1 | p = 0.13 | 1 | p = 0.18 |
| - Other | 1.02 [0.69;1.51] | | 1.44 [0.85;2.42] | |
| Maternal age at admission (years) | | | | |
| - 25-35 | 1 | p = 0.01* | 1 | p = 0.20 |
| - < 25 | 0.52 [0.34;0.79] | | 1.13 [0.63;2.04] | |
| - > 35 | 0.78 [0.56;1.09] | | 0.68 [0.44;1.06] | |
| Living with a partner (married or cohabiting) | | | | |
| - yes | 1 | p <0.0001* | 1 | p = 0.98 |
| - no | 0.36 [0.27;0.49] | | 1.01 [0.63;1.60] | |
| Maternal mental illness | | | | |
| Index diagnosis | | | | |
| - depressive episode and recurrent depressive disorder | 1 | p <0.0001* | 1 | p <0.0001* |
| - psychotic affective disorders | 0.68 [0.37;1.24] | | 1.07 [0.51;2.22] | |
| - schizophrenia and other non-affective psychotic disorders | 0.13 [0.07;0.24] | | 0.27 [0.12;0.61] | |
| - acute and transient psychotic disorders | 0.77 [0.29;2.10] | | 0.42 [0.14;1.28] | |
| - adult personality or behavior disorder | 0.09 [0.05;0.18] | | 0.21 [0.10;0.44] | |
| - neurotic or other mood disorders | 0.72 [0.37;1.40] | | 0.88 [0.43;1.81] | |
| - other diseases and disorders | 0.10 [0.05;0.19] | | 0.22 [0.10;0.48] | |
| Psychiatric history | | | | |
| - no known pathology | 1 | p <0.0001* | 1 | p = 0.47 |
| - psychotic disorders | 0.39 [0.24;0.62] | | 0.83 [0.38;1.79] | |
| - mood disorders | 1.08 [0.67;1.75] | | 0.97 [0.50;1.87] | |
| - behavioral disorders | 0.17 [0.09;0.29] | | 0.54 [0.25;1.14] | |
| - other disorders or missing | 0.37 [0.22;0.63] | | 0.77 [0.36;1.62] | |

History of trauma in childhood

Foster care in childhood

| | | | | |
|-------|------------------|-----------|------------------|----------|
| - no | 1 | p = 0.01* | 1 | p = 0.23 |
| - yes | 0.63 [0.46;0.88] | | 0.76 [0.48;1.20] | |

Abuse in childhood and adolescence

| | | | | |
|---------------------------|------------------|------------|------------------|----------|
| - no | 1 | p <0.0001* | 1 | p = 0.10 |
| - abuse other than sexual | 0.38 [0.26;0.55] | | 0.79 [0.47;1.32] | |
| - sexual abuse | 0.95 [0.62;1.47] | | 1.60 [0.89;2.87] | |

Pregnancy and birth

Parity

| | | | | |
|----------------------|------------------|----------|------------------|----------|
| -primiparous | 1 | p = 0.19 | 1 | p = 0.29 |
| - secundiparous | 1.26 [0.87;1.83] | | 0.97 [0.60;1.57] | |
| - over secundiparous | 0.74 [0.49;1.11] | | 0.65 [0.37;1.12] | |

Obstetric (pregnancy) complication

| | | | | |
|-------------------------|------------------|----------|------------------|----------|
| - no known complication | 1 | p = 0.65 | 1 | p = 0.84 |
| - complications | 1.08 [0.77;1.50] | | 0.96 [0.62;1.47] | |

Child transferred to neonatal intensive care unit

| | | | | |
|-------|------------------|------------|------------------|----------|
| - no | 1 | p = 0.005* | 1 | p = 0.28 |
| - yes | 0.61 [0.44;0.86] | | 0.78 [0.49;1.23] | |

Characteristics at admission

Reason for index admission

| | | | | |
|--|------------------|------------|------------------|-----------|
| - first acute episode | 1 | p <0.0001* | 1 | p = 0.01* |
| - evaluation of maternal competence | 0.17 [0.11;0.28] | | 0.72 [0.38;1.38] | |
| - acute episode of a chronic disorders | 0.41 [0.27;0.62] | | 0.97 [0.51;1.83] | |
| - relapse of an acute episode | 1.21 [0.72;2.04] | | 2.24 [1.11;4.55] | |
| - other, unknown | 0.46 [0.18;1.21] | | 1.84 [0.50;6.73] | |

Legal status at admission

| | | | | |
|------------------------|------------------|----------|------------------|----------|
| - informal | 1 | p = 0.85 | 1 | p = 0.64 |
| -involuntary admission | 0.98 [0.58;1.69] | | 0.84 [0.41;1.72] | |

Partner characteristics**

Mental and behavioral disorders

| | | | | |
|---|------------------|------------|------------------|----------|
| - no psychiatric disorder | 1 | p <0.0001* | 1 | p = 0.13 |
| - bipolar or depressive disorders | 0.21 [0.10;0.46] | | 0.33 [0.14;0.79] | |
| - schizophrenia or other psychotic disorder | 0.43 [0.22;0.85] | | 0.70 [0.27;1.85] | |
| - behavioral disorders | 0.48 [0.26;0.86] | | 1.26 [0.59;2.69] | |
| - other disorders | 0.44 [0.26;0.76] | | 1.40 [0.66;2.98] | |
| - unknown | 0.44 [0.31;0.61] | | 1.00 [0.59;1.71] | |

Occupational status

| | | | | |
|--|------------------|------------|------------------|----------|
| - Occupational activity or training | 1 | p <0.0001* | 1 | p = 0.30 |
| - receiving unemployment or disability benefits or paid sick leave from work | 0.56 [0.36;0.86] | | 1.09 [0.61;1.96] | |
| - other (at home, state allowance...) | 0.35 [0.22;0.56] | | 0.67 [0.36;1.26] | |
| - unknown | 0.26 [0.16;0.41] | | 0.60 [0.30;1.18] | |

Treatments for mental illness during pregnancy

Neuroleptics

| | | | | |
|-------|------------------|-----------|------------------|----------|
| - no | 1 | p = 0.04* | 1 | p = 0.71 |
| - yes | 0.72 [0.52;0.99] | | 0.91 [0.55;1.50] | |

Anxiolytic, antidepressor or thymoregulator

| | | | | |
|-------|------------------|-----------|------------------|----------|
| - no | 1 | p = 0.04* | 1 | p = 0.98 |
| - yes | 0.72 [0.53;0.99] | | 0.99 [0.63;1.56] | |

Drug taking behavior during pregnancy

Tobacco

| | | | | |
|-------|------------------|------------|------------------|----------|
| - no | 1 | p <0.0001* | 1 | p = 0.68 |
| - yes | 0.48 [0.35;0.64] | | 0.91 [0.59;1.41] | |

Alcohol

| | | | | |
|-------|------------------|-----------|------------------|----------|
| - no | 1 | p = 0.02* | 1 | p = 0.22 |
| - yes | 0.53 [0.31;0.91] | | 1.64 [0.74;3.63] | |

Drug use

| | | | | |
|-------|------------------|------------|------------------|----------|
| - no | 1 | p <0.0001* | 1 | p = 0.33 |
| - yes | 0.33 [0.20;0.55] | | 0.70 [0.34;1.44] | |

Unit characteristics

Unit director's professional domain

| | | | | |
|----------------------|------------------|-----------|------------------|----------|
| - child psychiatrist | 1 | p = 0.01* | 1 | p = 0.59 |
| - adult psychiatrist | 1.45 [1.09;1.94] | | 1.12 [0.73;1.75] | |

.....
*adjusted for age of baby and size of MBU

**partner and if no partner baby's father