

### Institution: Birkbeck College

# Unit of Assessment: Psychology, Psychiatry, & Neuroscience

### Title of case study:

Preventive interventions for vulnerable mothers offered in pregnancy

# **1. Summary of the impact** (indicative maximum 100 words)

Jacqueline Barnes' evaluations of government initiatives promoting parenting and child development for vulnerable families have directly affected major policy decisions since 2008. Her study of the Home-Start programme demonstrated limited benefits of unstructured volunteer support, and informed recent NICE guidance on early intervention. Her subsequent evaluation of the Family Nurse Partnership (FNP) programme for vulnerable mothers changed government policy. The success of FNP, as demonstrated during the initial evaluation phase, led to ministerial decisions to more than double the provisions of this programme in 2010 and 2013. FNP has now been rolled out widely in England, Scotland and Northern Ireland.

# **2. Underpinning research** (indicative maximum 500 words)

The first phase of this research involved the evaluation of Home-Start, a volunteer home visiting programme for vulnerable mothers during late pregnancy and after birth (Grant G1). Can a voluntary unstructured and variable home-visiting service reduce depression and stress, change an infant's temperament over 12 months, and improve infant cognitive development? Research assessments at 2 and 12 months included semi-structured interviews, observations and questionnaires, and compared supported mothers, case-matched controls and those offered but not receiving support. Results showed that Home-Start led to few measurable benefits: While those receiving Home-Start reported a greater reduction in parenting stress, there were no significant differences in alleviation of postnatal depression and no positive impact on infant cognitive development at 12 months of age. The study led to the conclusion that this type of home-based volunteer support is of limited value, and is useful only if volunteers follow a theoretically driven strategy, over a set number of visits, with a standardised set of materials (Barnes et al., 2009). These conclusions were integral to recent guidance published by the National Institute for Health and Clinical Excellence (NICE; section 4).

A potentially more effective approach is the US-based Nurse Family Partnership (NFP) programme, which offers curriculum-based support from nurses to first-time vulnerable mothers. Based on positive results from randomized controlled trials in the USA, it was decided in 2006 to introduce NFP in England (renamed as Family Nurse Partnership, FNP). Results from abroad are of limited value when introducing such programmes in the UK, as care systems are different. Barnes won the contract to conduct the implementation evaluation of FNP for 1200 women in ten sites in England, starting in 2007 (Grants G2-G4). Goals were to determine the feasibility of implementing FNP within the NHS, to evaluate short-term impacts on practitioners, the service community, and on children and families, and to develop eligibility criteria for a wider rollout of FNP.

The evaluation showed that FNP was very acceptable to clients and nurses. Clients reported a high regard for the nurses throughout, fathers participated, and attendance was high through pregnancy, infancy and toddlerhood. Reduced smoking in pregnancy and higher breast-feeding rates were found. Mothers were positive about their parenting and reported higher self-esteem, with increased confidence and higher aspirations for themselves and their children. Children were developing in line with age group norms, which is particularly important for children at risk for poor development. These findings (Barnes, 2010; Barnes et al., 2011a, 2011b, 2013; Barnes & Henderson, 2012) formed the basis for the government's decision to expand FNP in 2010, and to further expand this programme in 2013 (section 4). Additional research funded by the Department of Health (Grants G5-G6) showed that a follow-on programme (Group FNP) is also effective and



can be offered to women not eligible for FNP. In 2013, Barnes won an award from the National Institute for Health Research to extend this research with a randomised trial of Group FNP within Children's Centres at seven sites in England (Grant G7).

# 3. References to the research (indicative maximum of six references)

### Peer-reviewed articles:

Barnes, J., Senior, R. & MacPherson, K. (2009). The utility of home-visiting volunteer support to prevent maternal depression in the first year of life. *Child: Care, Health and Development*, 35(6), 807-816. doi:10.1111/j.1365-2214.2009.01007.

Barnes, J. (2010). From evidence-base to practice: implementation of the Nurse Family Partnership programme in England. *Journal of Children's Services*. 5(4), 4-17.

Barnes, J., Ball, M. & Niven, L. (2011a). Providing the Family-Nurse Partnership programme through interpreters in England. *Health & Social Care in the Community*. 19(4), 382-391.

Barnes, J. et al. (2013). First steps: study protocol for a randomized controlled trial of the effectiveness of the Group Family Nurse Partnership (gFNP) program compared to routine care in improving outcomes for high-risk mothers and their children and preventing abuse. *Trials, 14,* 285. Open access: <u>http://www.trialsjournal.com/content/14/1/285</u>

### Government reports:

Barnes, J., Ball, M., Meadows, P. Howden, B., Jackson, A., Henderson, J. & Niven, L. (2011b). *The Family-Nurse Partnership Programme in England: Wave 1 implementation in toddlerhood and a comparison between Waves 1 and 2a of implementation in pregnancy and infancy:* <u>http://www.dh.gov.uk/prod consum dh/groups/dh digitalassets/documents/digitalasset/dh 123366</u>.<u>pdf</u>; <u>http://tinyurl.com/qc64reb</u>

Barnes, J. & Henderson, J. (2012). Summary of the formative evaluation of the first phase of the group-based Family Nurse Partnership programme. <u>http://www.dh.gov.uk/health/2012/08/fnp-evaluation-reports/; http://tinyurl.com/pp5986m</u>

### Research Grants:

(G1) Barnes, J., Senior, R. & Waller, B. Right from the start: evaluation of Home-Start with mothers of new-born infants. Health Foundation. £371,991, 1/1/02 – 31/03/05.

(G2) Barnes, J., Ball, M. Meadows, P. Belsky, J. & McLeish. J. Evaluation of the first phase of Health-Led Parent Support demonstration sites. DCSF. £548,349, 15/03/07 to 31/03/08.

(G3) Barnes, J., Belsky, J., Meadows, P. & Ball, M, Evaluation of the first phase of Health-Led Parent Support demonstration sites. Year Two. DCSF. £475,125, 1/4/08 to 31/3/09.

(G4) Barnes, J., Meadows, P. & Ball, M. Family Nurse Partnership programme - Formative evaluation of Wave 1 test sites: Years 3 and 4. Department of Health, £487,712, 1/4/09 to 31/12/10.

(G5) Barnes, J. Formative evaluation of the FNP and Group-Based Antenatal Care Project. Department of Health. £63,699. 1/9/09 to 30/6/11.

(G6) J Barnes. Evaluation of gFNP development (phase 3). Department of Health. £39,537, 15/10/2012 to 30/3/2013.

(G7) Barnes, J., Allen, L., Barlow, J., Elbourne, D., Macdonald, G. Melhuish, E. Petrou, S. & Spiby, H. Randomised trial of the effectiveness of Group Family Nurse Partnership (gFNP) in improving outcomes for high-risk mothers and preventing abuse. NHS National Institute for Health Research.  $\pounds1,195,254,1/2/2013$  to 31/1/2016.



### **4. Details of the impact** (indicative maximum 750 words)

The research had immediate impacts on major government policy decisions to introduce and expand the FNP programmes, and contributed directly to official guidance on early years intervention. Barnes' finding that Home-Start showed very limited benefits was integral to NICE guidance "Social and economic wellbeing: Early years" (2012, source S1), which informs commissioners of services, health visitors, practioners and early years staff. This guidance stated that volunteer support may not be effective, and also recommended the implementation of professionally delivered programmes with strong evidence, such as FNP. As part of NICE guidance on early interventions to promote the social and emotional wellbeing of vulnerable children under 5 years, Barnes also provided an in-depth expert review paper on Home-Start (2011, source S2).

The FNP evaluation extended over four years. Even before it was concluded, the strength of the evidence and the quality of delivery identified by Barnes' research was sufficient for policy to be changed. In 2010, Health Secretary Andrew Lansley announced that the programme was successful enough to warrant launching a randomized trial in England and to more than double its provision from 6,000 to 13,000 families by 2015. In direct reference to Barnes' report, Lansley stated "We know that early intervention – as provided by the Family Nurse Partnership programme - can help young parents to look after their children better, and can help break inter-generational patterns of disadvantage. And it can improve the health and wellbeing of the parents themselves they are reducing smoking during pregnancy, are coping better with pregnancy, labour and parenthood and are improving their confidence and self-esteem. The evidence base for expanding this programme is clear. That's why I want to see the numbers of families who get this intensive support to double by 2015. This, together with our plans to put 4,200 new health visitors into the workforce, will ensure that more and more young families - particularly those living in disadvantaged areas - get the help they need." (source S3). In 2013, a second expansion of FNP to 16,000 mothers was announced by Health Secretary Dr Dan Poulter, again citing Barnes' findings as justification (source S4).

The main findings of Barnes' FNP evaluation were made publicly available in a press release by the Department of Health (May 2011, source S5), and in a DoH information pack for NHS Trust CEs, directors of nursing and children's support services, other health and educational professionals, and local authority CEs (April 2012, source S6). Based on this evidence, the government's evidence-based commitment to expand FNP was reinforced in the Cabinet Office's policy paper 'Breaking Barriers, Opening Doors' (2011, source S7), and by a statement of Public Health Minister Anne Milton on 11 May 2012. The evidence basis for the successful implementation of FNP was also highlighted in a recent independent government review (Allen review: Early intervention: the next steps, 2011; source S8), which refers extensively to the results of Barnes' implementation evaluation. FNP is one of a small number of programmes that are recommended for early intervention by this review.

In addition to providing the evidence basis for government policy decisions to expand the FNP programme, results from the FNP evaluation study at Birkbeck also have direct implications on how FNP will be implemented in subsequent waves of programmes. In a recent DoH report aimed at directors of public health, nursing, and children's support services (source S9), Ailsa Swarbrick (FNP Project Director at the DoH) stressed the importance of the evaluation for expansion of the programme and for informing implementation of subsequent phases. According to Swarbrick, key points highlighted by the evaluation were the need to improve practitioners' use of data to monitor their delivery of FNP services, to identify the organisational support necessary for good implementation, and to prepare local health organisations for FNP before its arrival.

Barnes has disseminated her research findings on the effectiveness of preventive interventions to a wide range of practitioners, including those delivering or planning to deliver the FNP programme. Audiences included Primary Care Trust (PCT) members, local authority staff, government officials, and parenting charities such as the Fatherhood Institute. For example, she was the keynote



speaker at the Healthy Development Adelaide meeting (2011) that was attended by over 200 delegates from government, health care and clinicians, and gave a grand rounds at the Women's and Children's hospital in Adelaide. Research design and methods have also been shared with the evaluators looking at introducing FNP in Scotland, Northern Ireland and in Australia.

# 5. Sources to corroborate the impact (indicative maximum of 10 references)

(Full URLs and additional tinyurl links have been provided for all weblinks. Copies of all source materials are available upon request if external weblinks are no longer operational.)

S1. Public Health Interventions Advisory Committee (PHIAC) (October 2012) Social and emotional wellbeing early years guidance PH40. NICE: <a href="http://www.nice.org.uk/nicemedia/live/13941/61149/61149.pdf">http://www.nice.org.uk/nicemedia/live/13941/61149/61149.pdf</a>; <a href="http://tinyurl.com/d8d62y2">http://tinyurl.com/d8d62y2</a> <a href="http://tinyurl.com/d25h9pg">http://tinyurl.com/d8d62y2</a> <a href="http://tinyurl.com/d25h9pg">http://tinyurl.com/d8d62y2</a> <a href="http://tinyurl.com/d25h9pg">http://tinyurl.com/d25h9pg</a>

S2. Schrader-McMillan, A., Barnes, J. & Barlow, J. (2011) Primary study evidence on effectiveness of interventions (home, early education, child care) in promoting social and emotional wellbeing of vulnerable children under 5. PH40 Social and emotional wellbeing - early years: expert report 1. London: National Institute for Health and Clinical Excellence (NICE): <a href="http://guidance.nice.org.uk/PH40/SupportingEvidence/ExpertReport1/pdf/English">http://guidance.nice.org.uk/PH40/SupportingEvidence/ExpertReport1/pdf/English</a> <a href="http://tinyurl.com/lbbetzs">http://tinyurl.com/lbbetzs</a>

S3. Andrew Lansley MP, Health Secretary. Press release, Dept. of Health, 28 October 2010: <u>http://collections.europarchive.org/tna/20110720072732/http://dh.gov.uk/en/MediaCentre/Pressrele</u> <u>ases/DH\_121040</u>; <u>http://tinyurl.com/lhf4tb3</u>

S4. Dr. Dan Poulter, MP, Health Secretary. Press release, Dept. of Health, 4<sup>th</sup> April 2013: <u>https://www.gov.uk/government/news/family-nurse-partnership-programme-to-be-extended</u> <u>http://tinyurl.com/br2ev9p</u>

S5. Young Mums and Dads get help from Innovative Programme. Press release, Dept. of Health, 5th January 2011:

http://collections.europarchive.org/tna/20110720072732/http://dh.gov.uk/en/MediaCentre/Pressrele ases/DH\_123277; http://tinyurl.com/jw74ktl

S6. The Family Nurse Partnership, Information leaflet. Dept. of Health, July 2012: <u>http://www.dh.gov.uk/health/files/2012/07/The-Family-Nurse-Partnership-Programme-Information-leaflet.pdf</u>; <u>http://tinyurl.com/m346ppf</u>

S7. Opening Doors, Breaking Barriers, A strategy for social mobility (2011). Nick Clegg. Cabinet Office:

<u>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/61964/opening-doors-breaking-barriers.pdf</u>; <u>http://tinyurl.com/qz538tb</u>

S8. Graham Allen (2011). Early Intervention: The next steps. An Independent report to HM Government:

http://www.dwp.gov.uk/docs/early-intervention-next-steps.pdf http://tinyurl.com/6g8dtg2

S9. Ailsa Swarbrick, Foreword in: Ball, M. Barnes, J, Meadows, P. (July 2012). Issues emerging from the first 10 pilot sites implementing the Nurse-Family Partnership home-visiting programme in England:

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/126914/3-Birkbeck-Final-Issues-Evaluation-Report-For-Publication-July-2012.pdf.pdf http://tinyurl.com/luamyvh