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Safe staffing in midwifery care: Gathering data and learning lessons with Birthrate Plus®.

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Birthrate Plus® provides health services with a Framework for Workforce Planning specifically designed and developed for midwifery services in both hospital and community settings. Its foundation is a classification system is based upon clinical indicators of need during labour, birth and the immediate post-partum period and the principle of one to one care for women during labour with increased ratios of midwife time for women with higher than normal need of care.. The methodology also encompasses all aspects of hospital and community based care and has been used widely in the NHS for a number of years.

More recently the intrapartum classification has been modified to provide a real –time assessment of maternal needs within a delivery suite and the number of midwives required to meet the required standard of care. It is hoped that a similar tool can be developed for antenatal and postnatal wards.

Overview

Health service managers are faced with running their services and deploying their staff effectively within the constraints of a fixed staffing budget, to meet the variation in demand arising from numbers of clients, clinical need, and local care policies; and to provide staff with a good working environment.

Managing that situation requires a framework for decision making based upon empirical data, professional judgement and an understanding of differences in staffing needs which may be found in different health trusts.

A number of questions need to be addressed;

What standard is to be maintained and who decides?

How can workload be measured to provide a valid and ongoing assessment of demand in terms of the numbers and needs of clients?

What other issues will affect staffing needs in different services?

How can staff be deployed on a daily basis to meet the variation of demand in a maternity service?

Is it possible to exert some control over workload and staffing?

Background

It was to address some of these needs that the work of Birthrate Plus® (BR+) began. Starting with intrapartum care, the methodology was applied in a number of hospitals and then extended to all other aspects of hospital and community care.[1, 2] Having been used in the majority of maternity services in the NHS, the methods have been regularly updated in line with NICE guidelines[3, 4] and have been endorsed by the Royal Colleges.[5,6] From the data obtained it has been possible to produce local and national ratios for midwifery planning.[7] More recently the Intrapartum Classification system has been adapted to provide a prospective assessment of each client in the delivery suite. This can be used to record a 2 or 4 hourly census of the acuity of demand and the number of midwives required at that time to meet agreed standards of care.[8]

When undertaking these studies it has become apparent that there is a lack of expertise on workforce planning methods available to Health Trusts and that a number of issues affecting workforce needs were identified which had not been recognised before.

Who sets the standard?

In 1980 the Short Report on Perinatal and Neonatal mortality[9] first cited the need for one to one care from a midwife throughout labour. This has often, and quite recently, been dismissed by some health service managers as "the Gold Standard" and as being unaffordable, but such managers were unwilling to suggest what should be put in its place. Numerous professional and government reports have emphasised the need for continuity of care during labour, and this cannot be achieved when midwives are caring for more than one woman. The NICE guidelines for Intrapartum care[10] have recently affirmed one to one care as the required standard.

Lessons learnt from Birthrate Plus®

A sound basis for measuring need in intrapartum care.

Simply using normal records of labour outcome was found not to reflect midwifery workload. There was a need to combine the progress and length of labour together with interventions or crises which required increased oversight for both mother and baby. A method based upon clinical indicators (which could then be validated by reference to clinical records) allocated mother and baby into one of five categories of need. Drawing on principles used in Intensive Care Units, midwife time was assessed on the basis of one to one care for normal outcomes and an increased ratio of time for women in higher need categories.

The classification system later proved to be a sound indicator of the length of postnatal care in hospital and the subsequent community care needed.

Identifying other factors affecting workload

A number of important lessons emerged which not only impacted on staffing requirements, but also offered an opportunity for managers to address previously unrecognised issues. Such issues included the variable factors in staffing requirements between different services, and the danger of thinking that "one size fits all". These are outlined below.

Workload in delivery suites not recorded under births

Delivery suites cater for large numbers of clients who do not proceed to give

birth on that visit. They include antenatal admissions who may have moderate or acute need of intervention, postnatal readmissions, and women being induced who do not proceed to established labour. However the vast majority were Category X or "worried well" women, usually near term who were found not to be in labour. In many hospitals the number of Category X admissions exceeded the number of recorded births, and often were not recorded in hospital admissions. Caring for these clients not only increases staffing needs, but adds to the intensity of workload for midwives who may be diverted from the needs of women in labour.

Hospital births alone are not a sound basis for assessing the overall requirement of hospital and community midwives.

Community midwives provide the bulk of antenatal and postnatal care for all women booked for hospital birth in their area, but these women may give birth in a number of different hospitals. Although this cross–border activity can vary a great deal it is a significant factor in strategic planning, and has two main effects;

a) some Health Trusts may need 10 or more full time community midwives to provide care to women giving birth in external hospitals over and above those needed for their own clients.

b) the opposite effect is to reduce the total number of community midwives required by a Trust where the hospital discharges a number of its clients to other Health Trusts. For example, one hospital providing specialist care to a wide area found that 50% of all its births involved women who received their community care elsewhere.

Therefore staffing should be assessed separately for hospital and community staff. This also highlights the danger of using staffing ratios based on hospital births as any form of performance indicator.

Allowances for staff time over and above client workload

There was a need to include allowances for the management of wards/ departments and other responsibilities such as statutory supervision, and to account for the time that community midwives spent travelling. In some rural areas this can amount to 20% of total staff time.

Other staffing needs not related to overall activity

Most services now employ midwives in specialist roles meeting the needs of women with particular obstetric, psychological or social needs. This varies with the size and type of hospital and the area it serves. These midwives need to be counted over and above numbers generated by workload assessment.

Community midwife role extension.

Community midwives are increasingly working with other agencies in the care and oversight of women and families with significant psychological and social problems. This can vary widely relative to local population needs.

Changes in the work undertaken by midwives.

Midwives increasingly undertake tasks previously done by doctors. These include responsibility for the discharge of clients and clinical examination of the newborn.

Staffing Small Units.

In units caring for less than 2000 births per annum, the staffing level generated by workload alone may not provide safe staffing over a 24 hour period. In this situation, staffing should be based upon

the numbers of midwives per shift needed to provide the desired duty of care for their clients.

How can standards be maintained given unlimited demand and a limited workforce?

Maintaining safe staffing standards in the face of increasing and changing demand is neither easy nor at times possible and that issue needs to be recognised. Workload data provides an insight into the effect of changing care policies, and may provide a basis for decisions about restricting access to overloaded services as well as evidence of the situations faced by staff.

1. Managing day to day staffing needs in the delivery suite

The Birthrate Plus acuity system provides a real-time assessment of the demands within a delivery suite and the number of midwives needed to match them. Recording this fluctuating workload and staffing requirement provides an insight into times of particular pressure which are not readily available via other information sources, and can identify times when demand is outstripping resource. Clinicians and managers can then determine polices on how to respond to such situations and this gives a certain sense of control.

Many services using the Acuity methodology have established a warning system where green means all is well with staffing, amber indicates increasing staffing pressure and red means urgent staffing action is needed to maintain required standards. This can lead to bringing in midwives from other areas of the hospital until the situation eases.

Once the workload is reaching the 'Red for danger limit' then a decision to restrict patient access until the situation has improved may be made. This is however a contentious issue and maybe distressing for clients who are directed to another hospital, if one is within reasonable distance.

2. Reviewing clinical policies

The intrapartum case-mix enables clinicians and managers to plan the management of labour based on the local population need, changes in client expectation and current care policies. Some of the Birthrate Plus data has highlighted a greater than expected percentage of women in the higher need categories, and the subsequent impact on staffing needs and the intensity of care to which midwives must respond. A useful debate may address questions such as what proportion of the local population might be expected to achieve a normal delivery. What is the impact of the increased demand for epidurals on workload and can this be universally available?

3. Restricting admission of Category X clients

The high level of demand from category X clients indicates a need for reassurance and assessment which needs to be met, but this does not need to be undertaken within the delivery suite. Some services have established a form of triage in a different clinical area, others encourage women to contact their community midwife, but it must be acknowledged that this issue remains a problem for most services. Research is needed to discover what underlies this continuing area of need and how it may be best addressed.

Summary

Given the numbers of births in the population is a completely independent variable, maternity services are being asked to respond to a constantly changing level of demand. Managers need to have relevant and timely data supported by well-designed computer support. The Dunkirk spirit of somehow "coping" is no longer tenable and policy makers should realise that rhetoric alone is not enough. Workforce planning research needs to be extended and will be money well spent in the long term.

References

1. Ball J.A. & Washbrook M; 1996 ***Birthrate Plus®; A Framework for Workforce Planning and Decision Making for Midwifery Services***. Books for Midwives Press/ Elsevier Press.

2. Ball J A and Washbrook M; ***Workforce Planning in Midwifery: an Overview of Eight Years*** British J Midwifery August 2010 Vol. 18, No. 8, pp.527-532

3. Department of Health and Social Security 1980;***The Second Report of the Social Service Committee on Perinatal and Neonatal*** Mortality: Chair: Short H.M.S.O

4. N.I.C.E National Institute for Health and Care Excellence (N.I.C.E) ***2006 Antenatal care; routine care of the healthy pregnant woman. CG62*** RCOG London

5. N.I.C.E. National Institute for Health and Care Excellence (N.I.C.E) ***2006 Postnatal care of women and their babies. CG37*** RCOG LONDON

6. RCOG, RCM, RCOA, RCPCH (2007) ***Safer Childbirth; Minimum Standards for the Organisation and Delivery of Care in Labour.*** RCOG London

7. Ball J A, Washbrook M. and the Royal College of Midwives (2012) ***Working with Birthrate Plus®: A User's Manual.*** RCM LONDON

8. Ball J A and Washbrook M; ***Birthrate Plus®: Using Ratios for Workforce Planning*** British J Midwifery November 2010 Vol. 18, No. 11, pp.724-730

9. Ball J A and Washbrook M; ***Developing a real-time Assessment of Staffing Needs in Delivery suites*** British J Midwifery December 2010 Vol. 18, No. 12 pp 780-785

10. National Institute for Health and Care Excellence (2014) ***Intrapartum care: care of healthy women and their babies during childbirth.*** [CG190]. London: National Institute for Health and Care Excellence.