Executive Summary

Background

It is widely recognised that the early years of childhood is of great importance to human development. To provide a comprehensive and integrated service to children and their families, a pilot programme on child development was announced in the 2005 policy address. This pilot programme was implemented in phases in four selected communities, namely, Sham Shui Po, Tin Shui Wai, Tseung Kwan O and Tuen Mun, in the name of Comprehensive Child Development Service (CCDS), which commenced in July 2005. The CCDS was a community-based programme aiming to ensure early identification of the varied needs of children and their families and timely referral to appropriate services for intervention. Maternal and Child Health Centres (MCHCs), which provide public health services to over 90% of newborn babies until 5, was used as a platform where services could be delivered through inter-sectoral partnership among government departments and relevant agencies.

Design of the CCDS

The design of the CCDS was based on the theories of help seeking behaviour, and drew on the concepts of the hierarchy of health promotion outcomes (Nutbeam, 1988), dimensions of quality of service (Maxwell, 1992) and assessment of quality in health care (Donabedian, 1988). Guided by the theories of help seeking behaviour, changes in organizational structure and professional practices were introduced to facilitate the identification and referral of clients to various services. It was anticipated that these changes would lead to an improvement in the quality of service, in terms of access, acceptability, equity, effectiveness and efficiency (intermediate outcome), and the well-being of families and children (social and health outcome) would ultimately be improved.

The CCDS components

Built on existing services provided in MCHCs, hospitals of the Hospital Authority (HA), Integrated Family Service Centres (IFSCs) and pre-primary institutions, the pilot CCDS comprised four additional components:

a. Identification and holistic management of at-risk pregnant women - comprehensive assessment would be conducted and holistic management plans developed for at-risk pregnant women identified by health and social service professionals. Midwives from the HA were responsible for service coordination and progress monitoring of these women. After delivery, a visiting community paediatrician would provide follow-up service for their children in MCHCs.
b. Identification and management of mothers with postnatal depression (PND) - postnatal mothers would be routinely screened for PND in MCHCs using the Edinburgh Postnatal Depression Scale (EPDS). Counselling services would be provided by trained MCH

nurses with referral to visiting psychiatric nurses on-site and other specialist and support services where necessary.

c. Identification and management of families with psychosocial needs - in collaboration with the Social Welfare Department (SWD), the Department of Health (DH) had developed an assessment tool for MCH staff to facilitate early identification and referral of families with psychosocial needs. These families would be referred to IFSCs for service. For families who were not yet ready to approach IFSCs for assistance, IFSC staff would meet them at MCHCs or conduct home visits where appropriate.

d. Identification and management of pre-primary children with physical, developmental and behavioural problems - in collaboration with pre-primary institutions, a referral and feedback system was developed to enable pre-primary educators to identify and refer these children to MCHCs for assessment and further assistance.

The evaluation framework and methodology

The evaluation of the pilot CCDS covered both formative and summative aspects. The formative evaluation focused on whether the implementation of the new initiative had been proceeding according to plan and how this had impacted on the quality of health services (i.e. intermediate outcome), as well as identifying the conditions necessary for the successful implementation of the initiative. Both structural (e.g. facilities, staff, and training) and process (e.g. client identification and referral, and service interface) issues were examined. The data collected had been used to inform the improvement and refinement of the programme during the formative period. The summative evaluation aimed to examine whether there were changes in the quality of services, in terms of access, acceptability, equity, effectiveness and efficiency. Quantitative and qualitative data were collected, including service statistics, training evaluation, client outcomes, client and staff feedback, and case progress reports.

Evaluation results

The evaluation attempted to answer the questions: “Did the CCDS work?”; “What worked?” and “Why and how did it work?” The summative evaluation provided answers to the first question as to whether the CCDS could achieve the anticipated improvement in service quality. The formative evaluation provided answers to the latter two questions in terms of the structural and process issues that had contributed to the success or otherwise of the CCDS.

Did the CCDS work?

Highlights

Across the four CCDS components, there was an increase in ***access*** and ***acceptability*** to various health and social services, although there was still room for improvement in the use of the service by pre-primary institutions.

In terms of ***equity,*** through the CCDS, disadvantaged groups such as pregnant women with

regular heroin use, low-income families and children of new arrivals were identified, their needs were assessed and referrals for intervention were made, where appropriate. However, clients who could not turn up at MCHCs personally, such as working parents, were less able to access the service.

There was preliminary information on ***effectiveness***. The available data suggested that the PND screening programme using EPDS was more effective in improving the clients' mental health outcome than the usual practice of clinical assessment. Clients who returned the pre- and post-intervention questionnaires also showed improvement in mental health outcome after social service intervention. However, it was likely that this represented a group of more motivated clients and/or more enthusiastic social workers.

Regarding ***efficiency***, it was anticipated that with problems identified and dealt with effectively at an early stage, it would help save more resource-intensive interventions at a later stage. However, there was no available data to show whether the CCDS could achieve this aim because of the short period of trial.

Details

Details about the four components are presented below:-

a. Identification and holistic management of at-risk pregnant women – different at-risk groups were targeted in different HA clusters, including mothers with illicit drug use and teenage pregnant women. The CCDS had enhanced access by bringing the service to the clients, through collaboration with NGOs, such as in the case of the Integrated Service Programme for heroin users. Clients were highly appreciative of the integrated service, the accepting and caring attitudes of the workers, and their professionalism. Many of the clients were able to make informed decisions on their pregnancy and lifestyle such as contraception, drug use and smoking after intervention.

b. Identification and management of mothers with postnatal depression (PND) – service statistics indicated an increase in the number of clients identified as having probable PND and that referred for MCH nurse counseling, and psychiatric and social services. This suggested an increase in service access. Clients were positive about the services of MCH nurses and visiting psychiatric nurses. However, some clients were still reluctant to accept referral to psychiatrists because of perceived stigma and inconvenience. Preliminary results also indicated better client mental health outcome under EPDS screening, compared with the usual practice of clinical assessment. However, clients who did not personally attend MCHCs were not able to access PND assessment.

c. Identification and management of families with psychosocial needs - this component was set up to target and address the needs of the disadvantaged clients at an early stage. The aim was largely achieved as statistics indicated that most of the clients assessed belonged to this group, and there was an increase in the number of referrals to social services. Around 70% of the clients accepted referral to social services. Clients were appreciative of MCH

nurses' caring and professional attitudes. Most clients found the social workers caring and understanding, though some would like their social workers to show them more concern. Among those who returned the questionnaires, there was also an improvement in their mental health outcome after social service intervention. However, clients who could not personally turn up at MCHCs were unable to access the service.

d. Identification and management of pre-primary children with physical, developmental and behavioural problems – despite direct contact through school letters, there were still a fair number of pre-primary institutions which had not been aware of the CCDS. The number of referrals was not high though those which had used the service were satisfied. Among those children referred by pre-primary institutions, there was a higher proportion of children from new arrival families in comparison with the general population profile. It suggested that the service had facilitated the access of this socially disadvantaged group.

What worked? Why and how did it work?

There were common factors identified to have contributed to the success or otherwise of the CCDS across all components and all communities.

a. Structural issues - arranging psychiatric nurses and social workers to meet clients in MCHCs as appropriate had helped to reduce stigmatization and increase convenience, which were vital in increasing clients' access to psychiatric and social services. Clients' perception of staff competence and professionalism contributed significantly to their confidence in the staff. On the other hand, the lack of privacy during interviews by MCH nurses might have hampered clients' disclosure of personal difficulties. The increased workload, against a background of manpower deficiency due to recruitment difficulties, might have led to higher stress and lower morale for the MCH staff. Furthermore, staff members who lacked a sense of self-efficacy, or those with unrealistic expectation about their roles, experienced more stress and frustration. It was recognized that staff mental well-being/morale could be associated with the quality of service delivered.

b. Process issues - with empathy, a caring attitude, perseverance, and good knowledge of service, health and social workers were able to encourage clients' sharing of personal difficulties and acceptance of referral. Moreover, the provision of an out-reaching and one-stop service was important for enhancing service accessibility to socially disadvantaged groups that were "hard-to-reach". Team spirit and teamwork were essential to enhancing staff sense of competence and boosting morale. As for inter-sectoral collaboration, mutual respect, open communication, responsiveness and flexibility in service delivery, and experience sharing, were instrumental in ensuring that clients receive the most appropriate services.

Recommendations

Many issues identified during the formative stage had been addressed, where possible, to

improve and refine the programme. Based on the experience of the pilot, the following recommendations were considered essential for the successful implementation of the programme and further improvement of service quality.

Issues applicable to all or more than one components:

a. Facilities
   - Sufficient interview rooms should be made available in MCHCs to protect the privacy of clients during interview.
   - Each district should have at least one of its MCHC(s) equipped with a Parent Resource Corner to enable parents to obtain updated information about child/family issues, services and resources.
   - Data management should be computerized to enhance efficiency and to reduce staff workload.
   - A computer platform for information sharing between MCHCs, IFSCs and HA should be actively pursued in order to enhance the effectiveness and efficiency of the referral-feedback systems and tracking of defaulters.

b. Staff
   - Manpower - there should be adequate professional staff to meet the increased workload for down-stream services including developmental assessment and treatment services for children with special needs.
   - Team building – teamwork should be strengthened to boost staff morale and to ensure smooth service implementation.
   - Staff training - to enhance staff competence, training on understanding client psychosocial issues, readiness to change and cultural sensitivity should be provided. MCH nurses should be adequately briefed about their roles in the various CCDS components to reduce stress arising from unrealistic role perception.

c. Procedures - referral procedures and record keeping should be streamlined to reduce workload.

d. Inter-sectoral collaboration - there should be information sharing, mutual visits, case discussion, and more flexible management of service boundary issues to better meet client needs.

e. Continuous evaluation and service quality management - to ensure that interventions are evidence-based and to continuously improve service quality, all service providers should undertake rigorous evaluations and maintain effective quality management mechanisms.

Issues specific to individual components:

a. Identification and management of at-risk pregnant women
   - As regards the discrepancy in service boundaries between MCHC and HA, all parties involved should adopt a flexible approach to best meet clients' needs.

- To provide intervention of sufficient intensity to the most severely disadvantaged client groups and to yield the best results, HA clusters should review the number and the nature of at-risk groups to be targeted.
- The CCDS midwives should consider taking up the role of case manager to better meet clients' needs and monitor their progress.
- To improve service efficiency, the follow-up service for the children of at-risk families, currently provided by the visiting community paediatrician, could be shared by the MCH staff. The community paediatrician could take up the strategic role of overseeing programme development and implementation.

b. Identification and management of mothers with PND
   - The number of visiting sessions by psychiatric nurses should be increased to meet clients' needs and provide ample support to MCH nurses.
   - To reduce the barrier for women with PND to receive psychiatric service, the possibility of arranging visiting psychiatrist, where appropriate, could be explored.
   - To improve efficiency, in the long term, MCH nurses could be expected to take up more of the counselling services while the psychiatric team could focus its efforts on assessing and managing more difficult cases.
   - To include more working mothers in the EPDS screening programme, screening could be advanced to 6 weeks postnatal, when most working women are still on their maternity leave.

c. Identification and management of families with psychosocial needs - to improve working mothers' access to the service, the assessment for psycho-social needs could be performed earlier in the postnatal period.

d. Identification and management of pre-primary children with physical, developmental or family problems - to enhance service utilisation by pre-primary institutions, the coordination work through school development officers of the EMB could be strengthened. Moreover, a training VCD introducing MCHC child health services, the recognition and support of children with developmental needs and the referral and feedback mechanism could be produced and distributed to all pre-primary institutions.

Main limitations of the study

Since the evaluation was based on data collected within a period of between 9 to 15 months after the CCDS had been piloted in the 4 respective communities, only intermediate outcome could be examined. The results should therefore not be interpreted as representing the long-term effectiveness of the CCDS. Besides, there was no control community in the present evaluation.

Due to the time limitation, the summative evaluation was being conducted at the same time as the formative evaluation, i.e. during the formative stage of the programme when it was likely to be fraught with teething problems. It was possible that the results might not be a true

representation of the usefulness of the CCDS.

The way forward

In summary, the early results of the pilot CCDS indicated an improvement in service quality, in the dimensions of access, acceptability, equity and effectiveness. Ongoing evaluation and quality management of the CCDS by all service providers were considered vital for continuous quality improvement. Subject to additional resources, the pilot model is recommended to be rolled out territory-wide so as to benefit more children and their families. The schedule of extension could be prioritized on the basis of the social need as defined by demographic characteristics and the operational preparedness of the various implementing agencies in different districts.