Review article

Integrating MCH/FP and STD/HIV services: current debates and future directions

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The issue of integrating MCH/FP and STD/HIV services has gained an increasingly high priority on public health agendas in recent years. In the prevailing climate of health sector reform, policy-makers are likely to be increasingly pressed to address the broader concept of ‘reproductive health’ in the terms consolidated at the Cairo International Conference on Population and Development, and the UN Conference on Women in Beijing. Integrated MCH/FP and STD/HIV services could be regarded as a significant step towards providing integrated reproductive health services, but clarity of issues and concerns is essential. A number of rationales have emerged which argue for the integration of these services, and many concerns have been voiced. There is little consensus, however, on the definition of ‘integrated services’ and there are few documented case studies which might clarify the issues. This paper reviews the context in which rationales for ‘integrated services’ emerged, the issues of concern and the case studies available. It concludes by suggesting future directions for research, noting in particular the need for country-specific and multi-dimensional frameworks and the appropriateness of a policy analysis approach.

The question of integrating Sexually Transmitted Disease (STD)/HIV services with family planning (FP)/mother and child health (MCH) services is gaining an increasingly important place on international health policy agendas and receiving attention from an expanding cast of actors. There has been no comprehensive review covering all aspects of integration from clinical and programmatic issues to social, ethical and policy implications. Indeed there is little consensus on the definition of ‘integration’ or ‘integrated services’; consequently discussion of the issues is often opaque. This review briefly analyzes three areas: first, the context in which the rationales for integration developed, the processes by which the issue came to prominence and the key actors involved; second, the issues of concern, and finally, case studies of integration.

How ‘integration’ reached public health agendas

Policy and budgetary documents show that STD and FP programmes have each been afforded very different status by the international health community and have been organized under separate material, financial and organizational remits (World Bank 1984, 1993; WHO/GPA 1990a; WHO 1991; WHO-HRP 1994; Population Reports J.39 1991, L.9 1993; AIDS Analysis Africa 1993; IPPF 1993; UNICEF 1992; UNFPA 1995). Over the last decade a number of factors have forced policy-makers to consider integrating these two services.

The focus of Western donors on HIV/AIDS interventions fuelled the development of specialist programmes which evolved separately from other STD programmes, and generated a wealth of literature on the epidemiology of HIV and clinical and programmatic aspects of HIV/AIDS services. AIDS has been seen as distinct from other STDs, possibly because the modes of transmission are not necessarily sexual, and because of the particularly virulent, fatal nature of the epidemic, which affects economically active sections of populations. Historically, other STD services have generally been poorly resourced and under prioritized with far less research and less literature produced (Piot et al. 1988; Population Reports L.9 1993). They accrued few benefits from the resources...
going into AIDS programmes until results from the widely publicized, well-documented trials in Mwanza, Tanzania, confirmed earlier indications that certain sexually transmitted infections can increase the risk of HIV transmission by 2–9 times (WHO/GPA 1989; Grosskurth et al. 1995). This added a perceived urgency to the question of effective treatment of STDs and helped focus attention on STD treatment and prevention programmes. WHO led the way by integrating its global STD and HIV programmes in 1993 (WHO 1990a, 1994), and with the World Bank and other donors, have encouraged recipient countries to combine national level efforts (WHO 1994; World Bank 1994). UN agencies subsequently strengthened multi-sectoral collaboration on AIDS and STDs. In 1993 the World Health Assembly took a resolution to create a joint and co-sponsored programme on HIV and AIDS (WHO 1994). By 1996 UNAIDS had been ratified, replacing WHO’s Global Programme on AIDS. This new body is jointly sponsored by WHO, World Bank, UNICEF, UNFPA, UNESCO and UNDP with WHO currently serving as the administrative base. While its mandate has yet to be consolidated, the creation of UNAIDS reflects the broader, multi-disciplinary ethos pervading global thinking on how to tackle the AIDS/STD pandemic.

Despite this impetus, however, STD services in most lower income countries (LICs) remain poorly resourced and ‘new avenues for prevention’ continue to be needed (Sai 1995). One suggestion for overcoming this deficit is to integrate STD/HIV services with MCH/FP (WHO-HRP 1990–1; World Bank 1993). The development community has argued that this may be one way of securing additional funds needed to support and improve STD services (WHO-HRP 1990–1, 1992–3; Dodd 1994; World Bank 1993). FP/MCH programmes have long been on international health policy agendas, have gained high credence with donors and governments and already attract the funds and resources which would be necessary to secure STD drug supplies.

The prevalence of STDs is difficult to ascertain because diagnosis is highly problematic, particularly for women who are often asymptomatic. Surveillance studies conducted during the late 1980s to early 1990s, predominantly in Western countries and in Africa, suggest that each year 10% of adults are infected with an STD, with the highest prevalence in many parts of Africa (WHO-HRP 1988–9; WHO 1990a; Blaxter 1991; Elias 1991; Fransen et al. 1991; Population Reports L.9, 1993; Wagner et al. 1994; Meda et al. 1995). These findings confirm STD treatment as a public health priority in its own right and the studies highlight the huge public health and financial cost to the health sector of STD complications and sequelae \(^2\) (WHO-HRP 1988–9, 1990–1; Population Reports L.9 1993). The few studies of STD incidence undertaken in general populations in Uganda, Tanzania, Mozambique, Malawi, Burkina Faso and elsewhere indicate high and rising levels of infection compelling a reassessment of traditional STD service provision (Wasserheit 1990; Fransen et al. 1991; Dallabetta et al. 1993; Wagner et al. 1994; Meda et al. 1994). STD programmes have been clinical and predominantly urban-based treating three men to every one woman (Cates and Stone 1992a), suggesting a bias in access to services. Alternatively, programmes have focused on ‘high risk’ populations like prostitutes or truck drivers (Population Reports L.9 1993; Meda et al. 1995). FP/MCH services, on the other hand, focus largely on women and have far wider coverage, providing clinical and outreach services to both urban and rural women, and therefore represent a means of providing the necessary base for integrated services that reach wider (female) populations.

FP programmes are evolving from being narrowly focused on fertility control as a means to slow population growth (Meadows et al. 1972; Lucas 1980; World Bank 1984; Jones 1990), to embrace the broader concept of reproductive health (Brown 1987; ICPD 1994; Population Reports M.12 1994). Conflicting views during the 1960s to early 1980s over the provision of vertical or integrated FP programmes (Bulatao 1984; World Bank 1984; Brown 1987; Cleland and Wilson 1987) have moved towards greater consensus (Brown 1987). Most FP services are now provided under the auspices of MCH, which is often substantially integrated into primary health care (PHC), although most FP programmes also include activities unrelated to MCH. Many provide community outreach strategies for remote populations; private sector contraceptive social marketing initiatives also provide a major source of family planning commodities.

Emerging consensus on the need for a wider view of reproductive health gave further leverage to consideration of integrating services, strengthening conceptual links between FP, reproductive and sexual health and STDs, and involving an expanding cast of actors (Ford 1993; WHO-HRP 1990–1, 1992–3; IPPF 1993; ICPD 1994; UN 1995). Activists for
women's rights and sexual and reproductive health, and anthropologists stressing the social dimension of STD/HIV infection and care, have joined the clinical researchers, policy-makers and FP/STD programme managers as stakeholders in reproductive health (Dixon-Mueller 1993; ICPD 1994; UN 1995). The proliferation of women's health organizations, such as the Prevention of Maternal Mortality Network and International Women's Health Coalition (IWHC), in the late 1980s/early 1990s, began to link STDs to obstetric and gynaecology related complications in addition to restating the role of FP in reducing these (National Research Council 1989; McIntosh and Finkle 1994). A considerable literature has emerged, especially on reproductive tract infections (RTIs), which calls for efficient STD treatment as a means of reducing gynaecological and pregnancy related complications and indicates points of overlap in the remits of STD/HIV and FP/MCH programmes (Dixon-Mueller and Wasserheit 1991; IWHC 1991, 1994; Bastos dos Santos et al. 1992; Cates and Stone 1992a; Shultz et al. 1992; Pachauri 1994; Population Reports L.9 1993, J.40 1994).

The motives for integration inevitably vary with the stakeholder. Women's health advocates regard STD/HIV infections as significant hazards to reproductive health which require more effective treatment. Integration with FP/MCH provides an obvious mechanism for reaching women, at key points in their reproductive cycles, who may not use health services at any other time. FP providers increasingly concur since integration is seen to fit their broader concerns for reproductive health. For external donor agencies and national governments, cost and resourcing are crucial issues. Cost-effectiveness and accountability of resources must be transparent before changes in provision are likely to be agreed but there is a lack of comparative cost-effectiveness studies, or evaluation and cost analyses of existing integrated programmes. Nevertheless, the scale of the STD/HIV problem and the escalating costs of treating these infections and their sequelae, together with the perception that the two services currently have some overlap in their remits, have encouraged programme financiers to seriously consider integration as a cost-effective and rational policy. Moreover, the prevailing global rationale is for ensuring women's reproductive health as a basic human right (UN 1995; UNFPA 1995). In this context, donors and national governments will be keen to be seen to concur, and providing integrated 'reproductive health' services would be evidence of commitment.

Researchers have often been blinkered, focusing on issues around either FP or STD/HIV and often divorcing both from the socio-cultural, behavioural context of sexual relations, by working with a narrow model of medically-orientated health care – an imbalance now slowly being redressed (Potts 1995; Post Cairo Working Group 1995). The convergence of rationales from all parties is encouraging consensus on integrating reproductive health services. It is also forcing a broader conceptual framework compelling analysis of integration issues to be sensitive to the wider multi-sectoral dimensions of reproductive health service provision, particularly the empowerment of women, and addressing the gendered power structures which dictate sexual decision making (Dixon-Mueller 1993; Ankrah and Henry 1994). While there is consensus over the need to integrate reproductive health services, universal definitions as to what those services should constitute are lacking, and different stakeholders inevitably have different priorities and concerns. The key question researchers and policy-makers must now address is at what level and under what circumstances is integration feasible.

Realities of integration: key issues of concern

Some reports and journals have attempted to summarize integration issues and document case studies (notably Population Reports, Network and AIDS Analysis Africa). There have been few independent articles – of notable exception are Cates and Stone’s chapters in Reproductive Tract Infections (Germaine et al. 1992) which give comprehensive treatment to practical delivery issues, especially those around contraceptive choice. Discussion of issues and case studies in an African context took place at a regional workshop on the integration of HIV/AIDS with MCH/FP held in Kenya during May 1995 (Setting The African Agenda, 1995). This was the first regional meeting of its kind to discuss specifically the possibility of integrating STD/HIV and FP/MCH services and is symptomatic of the widespread concern in this area. There are many points of overlap in the two programmes, but there are many unanswered questions (Bastos dos Santos et al. 1992; Cates and Stone 1992a; Pachauri 1994). Several areas of concern emerge from the literature which are considered here in turn.

Technical, programmatic issues

Costs/funding

This is probably the most critical factor for decision makers. Three main issues emerge, namely cost-
effectiveness of integrated programmes, their relative and absolute costs, and funding sources and conditionalities. There is a dearth of data on comparative costs3 between integrated and non-integrated services (Pachauri 1994; Sai 1995). The question for decision makers is whether the greater costs of staff training, drugs and clinical equipment will be outweighed by the money saved from reducing STDs and sequelae needing treatment.

Data available from WHO4, the World Bank and academic researchers suggest that STD programmes are at least as cost-effective as FP programmes and would therefore not overburden them (Over and Piot 1991; Bastos dos Santos et al. 1992; Population Reports L.9 1992; Shultz et al. 1992; World Bank 1993; WHO-HRP 1994). Debate over the most cost-effective method of STD treatment is ongoing, although there has been little evaluative research. Essentially services can either target ‘high-risk’ groups of ‘core transmitters’, as has been the case with many vertical programmes (Over and Piot 1991; Meda et al. 1995), or, given the high cost of treating STD sequelae, provide extensive screening and primary treatment which is likely to be far more cost-effective (Bastos dos Santos et al. 1992; Shultz et al. 1992; Schneider 1994). Where STD prevalence rates are high, mass treatment may be more cost-effective than screening5 (Pachauri 1994), though this raises ethical questions.

Different strategies for STD treatment will have different implications for integration. While extensive screening and mass treatment might easily be achieved through integrated and outreach services, targeting ‘high risk’ groups who are unlikely to use FP/MCH services may require the more vertical, specialized approach currently employed. The chosen method should ideally reflect the epidemiological pattern of STDs in the country, although this requires extensive surveillance which induces extra costs.

Discourse on STD/HIV programmes has focused, as with other health programmes, on financial implications of service provision (largely clinical) at the expense of cultural, moral and ethical considerations. STDs are social as well as medical diseases. They have been affected by the changes in social structures of lower and higher income countries (such as mobility, tourism, rapid urbanization and disintegration of traditional family structures) which have encouraged ‘high risk’ behaviours facilitating the spread of HIV/STDs (Lee and Zwi 1996). If clinical programmes are to be effective (and cost-effective), preventive strategies, such as counselling and education, are also required to promote behaviour change and to address the gendered power relations in which males dominate sexual and reproductive decision making, which can render female FP and STD treatment ineffective (Ankrah 1991; Lane 1992; Prevention of Maternal Mortality Network 1992; Mbizvo and Bassett 1996). Without outreach strategies which reach and include men, integrated programmes are likely to have only limited effect. Preventive strategies are seen as low-cost treatment alternatives and have been used with apparent success in a number of countries but most documentation omits discussion of costs (Mukaire 1995; Penxa and Blackie 1995; Twahir 1995). One counselling intervention was piloted in Malawi which concluded that counselling could be a low-cost, effective strategy for STD control but even here no analysis was made of actual costs (Wynendaele et al. 1995). While education and condom promotion might be achieved by FP/MCH outreach programmes, STD/HIV treatment may need to be through general clinics, and integration of STD services into all PHC level clinics should also be considered.

There is a growing literature acknowledging the cost-effectiveness, in terms of both financial and efficacy costs, of providing STD services with FP/MCH (Finger 1994; Population Reports L.9 1993; World Bank 1993; Tinker et al. 1995). It could optimize the use of existing resources, reducing service delivery costs, and reduce client time and travel costs. Most literature predominantly considers integration of STD services with FP programmes, only including MCH in as far as most FP services are provided through the MCH network. Expanding the scope of FP/MCH services to include STD/HIV rather than categorically integrating STD and FP programmes may be a more feasible approach to integration (Pachauri 1994). There is growing interest in MCH (within PHC) in its own right as a more cost-effective way of reaching the largest number of women of reproductive age (Ghana National Consultative Meeting on Safe Motherhood 1994; WHO personal communication 1996). The World Bank includes FP services, prenatal and delivery care and STD management as a fundamental part of its ‘minimum package’ of essential primary health services (World Bank 1993; Tinker et al. 1995) and WHO is soon to convene an informal working group on integrating STD management into MCH (WHO personal communication 1996).
The financing of programmes is subject to the general debate on health sector funding. Consensus among public health researchers is that given the preventative advantages of treating STDs, treatment should be free, funded by donors and central government (Grosskurth et al. 1993). Some World Bank economists, however, take the view that government intervention for STD/HIV treatment is not justified either on public health or economic grounds. Where STDs are treated in non-specialized facilities, user charges often already exist, though their impact is equivocal. Some studies record falls in attendance at clinics after the introduction of user fees (Moses et al. 1992; Grosskurth et al. 1993), while others show clients are willing to pay for services if they think they are of a higher quality (Population Reports L.9 1992; World Bank 1993).

STD/HIV and FP/MCH services are differentially funded. The former have attracted fewer resources and national programmes rely heavily on donor funding (Bastos dos Santos et al. 1992; Population Reports L.9 1992; Shultz et al. 1992; World Bank 1993; WHO 1994). Family planning programmes are better resourced and public sector services are now largely funded by national governments of LICs (Population Crisis Committee 1990; Population Reports J.39 1991; UNFPA 1991). Integration is likely to have serious implications in terms of sources and quantity of funding. Lower income country governments may not be able to cover extra costs incurred by providing STD services at FP/MCH facilities; donors of STD/HIV programmes may not wish to see their budgets incorporated into wider, less quantifiable or accountable, MoH treasuries (Unger and Killingsworth 1986; Potts 1995). Given the strength of the rationales for integration, the latter may prove less of a problem, particularly since, in the health sector generally, the trend is for donors to provide aid for health through multilateral channels, with increasing flexibility allowed for its designation and use at national levels (World Bank 1993, 1995).

Organization and management

The question of whether specific health services should be provided through 'horizontal' or 'vertical' structures has a long history and the struggle to integrate programmes has continued since the 1950s and before (Mills 1983). The differing organizational structures of STD/HIV and FP/MCH services developed in the context of these ongoing debates. Most FP provision is based on the model of horizontal 'primary health care' (PHC) which came to prominence in the 1970s, and services are largely decentralized and locally-orientated, often linking with the private sector (WHO/UNICEF 1978; Brown 1987). Ideological conflict and difficulties in implementing PHC during the economic hardships of the 1980s led to promotion of specific strategies and interventions, or 'selective primary health care' (SPHC) targeting certain key diseases (Walsh and Warren 1979; Evans et al. 1981; Boland and Young 1982). STD services are examples of these more recent, specialized, vertical programmes which have faced considerable criticism (Berman 1982; Banerji 1984; Rifkin and Walt 1986; Unger and Killingsworth 1986). The pertinent question is whether vertical STD programmes dependent on medical drug supplies can in fact be integrated with less clinical, broader based MCH/FP programmes.

Efficient management of STDs involves both clinic-based treatment and preventive strategies which may require different delivery approaches. Clinical services depend on an adequate drug supply and often require expensive laboratory equipment and skilled clinical personnel beyond the resources of many Ministries of Health, except through selected vertical services. Studies in Mwanza and Mozambique show that effective STD treatment is a function of access to drugs (Bastos dos Santos et al. 1992; Grosskurth et al. 1995). If adequate supplies are not available, self medication or incomplete drug dosages result in antibiotic resistance which then poses serious problems for decision-makers (Mabey 1995). TB control programmes face similar problems deriving from their necessarily drug-focused approach. Case studies from South East Asia underline the necessity of well-established medical infrastructures for drug delivery (Chonde 1989; Tang Lin-Hua et al. 1991; Chum 1991). Once in place however, integrating drug delivery into the PHC network has proved successful in these countries even in remote areas, for example in Nepal (Onozaki and Shaky 1995; Zhang and Kan 1992). An adequate base for STD drug delivery could be provided by FP/MCH programmes in many countries where there is relatively good infrastructure.

Preventive strategies are increasingly recognized as necessary components of STD programmes. Counseling and information/education programmes have been used to apparent effect in a number of countries (Ankrah 1991; Dallabatta 1993; Mukaire 1995; Penxa and Blackie 1995; Twahir 1995). Counseling, education and condom/contraceptive distribution
drug sellers and transnational corporations, and the private sector (both ‘for-profit’ practitioners, and ‘not-for-profit’ NGO/Mission organizations) is a largely unknown quantity. It is acknowledged as an important provider of both FP/MCH and STD/HIV services (Population Reports J.37 1989; Population Reports J.39 1991; AIDS Captions 1996) and there is increasing interest in public-private sector collaboration in providing these services, especially where national capacities are poor (Population Reports J.39 1991).

**Resources, remits and workloads**

Given certain overlaps in the remits of FP and STD services, some researchers suggest that integrating services better utilizes scarce resources avoiding duplication and improving cost-effectiveness and quality of services (Population Reports L.9, 1993, M.12 1994). STD/HIV infections can cause serious maternal/pregnancy related complications and therefore have implications for the safety and quality of FP services and the demand for contraceptives (Cates and Stone 1992a, 1992b; Pachauri 1994). Many medical professionals favour an integrated approach because it provides an opportunity to inform, screen and treat women for a variety of reproductive health conditions, including STDs and related pregnancy/gynaecological complications, and give appropriate contraceptive advice (Pachauri 1994; Population Reports M.12 1994; Setting The African Agenda, 1995, Appendix D).

Counter arguments suggest that offering a broader range of services would result in a loss of focus and a possible reduction in quality of services. Some integrated programmes in Africa note problems of overburdened and inadequately trained staff (Penxa and Blackie 1995; Kisubi 1995; Walsh and Pollock 1995). Some of the burden may be averted if community participation is introduced (FP community workers taking on STD diagnosis and referral activities), although case studies from South East Asia show the necessity of staff motivation and support for the success of integration (Manderson 1992; Riji 1992). There is particular concern that resources may be drained from FP activities, weakening the programmes, although Finger and Barnett (1994) surveyed case studies of integrated services from several Latin American countries and found that integration of STD/HIV into FP/MCH does not necessarily weaken FP programme effectiveness or popularity; indeed it actively encouraged utilization by some clients. IPPF affiliates in the Western Hemisphere Region document positive results from integrating services, taking care not just to ‘tack on’ STD/HIV services.
but actually change the way services are provided (Lauglo 1996).

Clinical issues

Clinical management and the Syndromic approach

There is a paucity of cheap, reliable diagnostic tests for STDs, especially for gonorrhoea and chlamydia, despite ongoing research (IWHC 1991, 1994; Finger 1994; Population Council 1994). In addition, cheap, single-dose therapies need to be developed for all the major STDs to reduce the problems associated with patients not returning for STD treatment. STD services face major problems of cost and access to drugs. These are exacerbated by the reality that many STDs are being treated, often ineffectively, at PHC level (usually MCH), rather than in specialized clinics (Fransen et al. 1991). In an attempt to address the situation and make STD treatment more feasible for non-specialized personnel, WHO and STD experts developed the ‘syndromic’ approach to diagnosis and treatment (WHO/GPA 1984; WHO 1991; WHO/GPA 1994).

Providers diagnose and treat on the basis of groups of symptoms or syndromes, rather than for a specific STD, and treat for all diseases that could cause that syndrome. The approach does not require extensive laboratory tests and is therefore affordable and feasible to integrate with FP delivery which already undertakes physical examinations and utilizes clinical equipment, for example taking swabs and using slides (Finger 1994). It allows patients to be diagnosed and treated during a single visit — currently patients may have to visit several locations — and is more reliable than clinical diagnosis (identification of the STD causing the evident symptoms based on clinical experience). It can be learned by PHC workers — clinical officers, medical assistants, nurses or nurse-midwives — and the simple flow-charts showing diagnostic and treatment procedures can be locally adapted (Finger and Barnett 1994; Schneider 1994). It is currently used with reported success in many countries including Botswana, Kenya, Nigeria, Senegal, Tanzania, Uganda, Zambia and Zimbabwe (Population Reports L9, 1993; Finger and Barnett 1994; Aboagye-Kwarteng and Moodie 1995; Mukaire 1995; Twahir 1995). The treatment regimes are flexible to some extent and need to be sensitive to local STD/HIV epidemiologies and drug-resistant strains. Locally-specific alternative (cheaply available) drug treatment regimes were developed with apparent success in Senegal and Kenya (Network 14.4, 1994; Van der Veen et al. 1994).

Health professionals have expressed concern over the appropriateness and effectiveness of the syndromic approach (Finger 1994; Pachauri 1994). Many patients, especially women, are asymptomatic and can only be diagnosed aetiologically (with microscopy or laboratory tests). Unless screening programmes are implemented to detect asymptomatic patients, many are treated only once complications have already occurred and symptoms become apparent (Schneider 1994). Because the syndromic approach does not allow aetiological diagnosis, no distinction can be made between STDs and other causes of reproductive tract infections (Bastos dos Santos et al. 1992). Syndromic protocols involve over-treatment, raising ethical and cost questions about treating uninfected persons and using scarce resources unnecessarily (Finger 1994). Nevertheless, given the severe resource constraints of many LICs, the syndromic approach appears to be the most feasible method currently available.

Contraceptive choice

Cates and Stone (1992a, 1992b, 1992c) give comprehensive treatment to the implications of integration for provision of contraceptives, and review research on the relative effectiveness of each method for pregnancy prevention and STD control. They do not cover related ethical and socio-cultural implications in any depth. The pertinent issue is that the contraceptives most effective for preventing pregnancy (the pill, IUDs, implants and sterilization) offer little or no protection from STDs; some studies suggest oral contraceptives and IUDs may even increase the risk of HIV/STD infection (Cates and Stone 1992a, 1992c; AIDS ALERT 1993; Sinei et al. 1996). Similarly, those offering protection from STDs (barrier methods and spermicides) do not provide as effective a safeguard against pregnancy. In addition, condoms, which are considered by many donors and providers to be key components of both FP and STD programmes, have lower acceptability in LICs and their use is subject to gendered power structures (Cates and Stone 1992a; Lande 1993).

Providers have to decide whether to recommend a contraceptive method primarily for STD protection or for pregnancy prevention, weighing a patient’s potential exposure to STD infection and the possible increased risk of infection posed by some contraceptive methods, against potential complications.
arising from high-risk pregnancy. The mix of contraceptive methods available varies with the country and programme, and choice may be based on availability, cost, provider preferences, perceived 'risk' behaviour of the client, or programme policy. Some programmes advocate the use of dual methods to ensure protection from both unwanted pregnancy and STD infection (Cates and Stone 1992a, 1992c; Finger 1994). A female-controlled microbicide providing adequate protection against both is being developed with support from several organizations (IWHC 1991, 1993; Population Council 1994). The issue of developing a vaginal microbicide effective against HIV/STDs without impairing conception is also under consideration and could be crucial in effective STD/HIV treatment since, in LICs, more women are likely to accept a female STD prevention method if it is seen not to impair fertility (Elias and Heise 1994).

**Provider issues**

**Treatment focus**

Despite some overlap in the treatment (examinations, use of slides and swabs) and prevention methods (education, counselling and condom promotion) of the two programmes, concern has been expressed that the fundamental differences in foci of STD and FP programmes make them unsuitable for total integration (Pachauri 1994). The clinical treatment approach of the two programmes is totally different (Cates and Stone 1992a). STDs are treated with antibiotics, while FP involves distribution of hormonal and barrier contraceptives, insertion of IUDs, and surgery for sterilization or abortion services. Consequently the providers' approach is very different. STD patients usually receive directive counselling because they are sick. FP providers are non-directive in their approach, since they are essentially advising and supporting healthy clients to take preventive action (Cates and Stone 1992a). Distinct aspects of STD/HIV programmes, such as care for terminal AIDS patients, also need to be considered, though this is not an area of concern or financial significance in most LICs (Ankrah 1991).

The nature of family planning counselling and provision has, nevertheless, clear implications for HIV/STD transmission, and vice versa, which argue for integration. The experience of STDs by family planning clients may negatively influence their perception of the services and demand for contraceptives if they attribute the STD symptoms to the contraceptive method (Cates and Stone 1992a; Population Reports J.9 1993; Pachauri 1994). Provider understanding and diagnosis of HIV/STDs will enable appropriate contraceptive advice to be given, reducing risks to reproductive health (Finger 1994).

**Stigmatization and wider populations**

Stigma may be attached to using HIV/STD services which are often perceived as dealing with 'immoral' sections of society. Objections to providing STD services for this reason have also been reported by FP providers in Asia (Finger and Barnett 1994). Women attending STD clinics in Nairobi felt they were stigmatized and treated badly, and preferred to receive STD counselling and treatment from FP clinics (Finger and Barnett 1994). FP services are often more accessible to women and do not have the stigma associated with STD clinics (Schneider 1994). For the same reason there are fears that FP services will become stigmatized if HIV/STD programmes are integrated. One of the few reviews of integrated programmes, however, found that only two of 14 programmes examined considered stigmatization as a problem. The others regarded integration as having a positive effect on client perception and utilization (Walsh and Pollock 1995). An integrated service approach would thus appear to make it easier to treat groups at risk from STD infection who may otherwise seek care, particularly women for whom attendance at MCH/FP clinics may be their only point of contact with the health service (Cates and Stone 1992a).

Stigmatization can also be age related. While integrated facilities may work well for older women, unmarried adolescents may feel unwelcome or embarrassed and make little use of the services. Younger people are biologically and socially most susceptible to STD/HIV infection, yet they are often hardest to reach (Cates and Stone 1992a; Grosskurth et al. 1995; AIDS Captions 1996). Outreach activities, community involvement and low-threshold services (as currently employed by many FP delivery systems) will be important if these age groups are to be influenced (Laga 1995). Confidentiality and privacy need to be ensured, if young people are to be encouraged to use services (Population Reports J.41 1995; Lauglo 1996). Training of staff should include ways of dealing sensitively with patients over private matters. One of the commonly cited criticisms by clients of both FP and STD services is the rude or humiliating attitude of staff (Schuler et al. 1985; Population Reports J.41 1995; Field 1996).
Similarly sex workers may not feel comfortable using (or see no need to use) integrated services. A private clinic in Uganda documents success in reaching these groups by using outreach strategies such as songs and plays (Mukaire 1995). Peer group education has been particularly effective among commercial sex workers in Kenya and among prostitutes and truck drivers in Malawi (Population Council 1994; Wynendaele 1995). In a number of programmes in Africa, community workers were actually better received when their FP remits were widened to encompass STD/HIV services since communities felt they were now addressing their needs more comprehensively (Population Council 1995).

One of the most crucial issues integrated programmes need to address if they are to be successful, is how to reach men as well as women. While integrated MCH/STD services could serve women well, men are unlikely to want to utilize MCH/FP clinics. While the shortcomings of FP programmes in their neglect of men (and therefore of the power structures which determine sexual behaviour) have been recognized for many years and attempts have been made to rectify this (Bhatia and Neuman 1980; Mott and Mott 1985; Oppenheim-Mason and Taj 1987; Kwansa 1989; IPPF 1989; Richters 1992; Chibwana 1995; Ezeh 1993; Edwards 1994; Population Reports M.12 1994), the issue has not been transferred to the debate over STD/FP integration and few programmes provide reproductive health services for men. A crucial (and highly problematic) part of any STD control is to reach and treat the male contacts of infected women, yet there is little literature on strategies for encouraging male participation in, and for reaching them through, integrated services.

In Brazil and Colombia the main FP organizations provide male FP services (often in separate male areas of the FP clinic) which have proved popular (Finger 1994). Similarly in Africa, where men have been included in FP programmes, there has been considerable support (IPPF 1989; Kwansa 1989; Chibwana 1993). If FP clinics extend their remits to STD treatment, men should be included or referral systems established to other male services; current experiences with involving men in FP programmes, though limited, indicate that such strategies can be effective if properly organized and managed. Various strategies for involving men in integrated programmes have been suggested, such as establishing an STD clinic as an annexe to the FP clinic, as tried in San Salvador and Kenya, or having different hours and male providers to deal separately with men (Finger and Barnett 1994). Separate clinics could be established for men and women, though this has major cost implications, or STD clinics serving largely men could add FP services, including male methods and counselling (De Lay 1994). While men infected with STDs can seek treatment from existing types of STD services, it is to safeguard the reproductive health of their female partners that they need to be included in integrated strategies. With careful planning, integrated programmes could have great potential for encouraging male contraceptive use and helping to address the sexual power structures which currently subjugate women.

The lack of case studies

There is limited documentation of case studies of integrated reproductive health services, with many merely providing operational description. Those extant suggest that integration is possible at different levels and in different contexts, but indicate the need for location specific strategies and clarity at the country level over what is meant by ‘integration’ and ‘reproductive health’. National governments, donor agencies and NGOs are still grappling over these definitions. A Donor workshop set up in the wake of ICPD has tried to define a number of essential elements, and different organizations are beginning to develop operational strategies (Lauglo 1996).

Many donor agencies are strengthening STD services within FP programmes. WHO and World Bank definitions of programmes providing for ‘reproductive health’ include MCH/FP and STD/HIV services (WHO/HRP 1992–3; World Bank 1993). WHO and USAID have issued guidelines for FP/MCH providers on how to approach integration, focusing on condom promotion/education and preventive counselling (WHO/GPA 1990a; Finger 1994). The World Bank advocates integration of reproductive health and FP and has increased lending for the strengthening of MCH services with this in view (Over and Piot 1991; World Bank 1994; Tinker et al. 1995). UNFPA endorses screening for STDs by MCH/FP programmes, particularly to identify the causes of infertility, though it also recognizes the need to refer patients for comprehensive diagnosis and treatment (UNFPA 1995). UNFPA also supports AIDS education in FP communication programmes, AIDS counselling and condom distribution in MCH/FP programmes, and AIDS education in training of MCH/FP providers (UNFPA 1991; Population Reports L.9 1993).
At present FP programmes handle STDs in a variety of ways (Lande 1993). IPPF affiliates and many NGOs in Africa provide some counselling for symptomatic clients and refer them to government clinics for diagnosis and treatment (Population Reports L.9 1993; Finger and Barnett 1994; Mukaire 1995). Many programmes, for example in The Gambia, Kenya, Mozambique and Zambia, diagnose and treat selected STDs, such as candidiasis and trichomoniasis, referring women with other STDs to government clinics (Bastos dos Santos et al. 1992; Population Reports L.9 1993; Finger and Barnett 1994; Twahir 1995). Some programmes are able to treat most STDs on site, though Zimbabwe is probably the only example of nation-wide public-sector integration (Grosskurth et al. 1993, 1995).

There have been a few attempts in the last 18 months to draw together case studies of integration in sub-Saharan Africa (Pathfinder International/Population Council 1995; Setting the African Agenda 1995). Many document integration of STD/HIV services into general PHC structures as well as MCH/FP. The studies cover urban and rural settings and both private and public sectors. The objectives and strategies used by the different programmes vary, but a number of basic components were present in most and recurrent problems can be identified.

Private and church initiatives in Kenya and Uganda, and government services in Mozambique, Zambia and Zimbabwe have integrated STD/HIV services into PHC clinics, providing basic curative care as well as FP/MCH and STD/HIV services (Bastos dos Santos et al. 1992; Population Reports L.9 1993; Pathfinder International/Population Council 1995; Mukaire 1995; Twahir 1995). IEC (Information, Education and Communication), counselling, risk assessment and referral of clients where necessary to better equipped facilities, were successfully integrated by all the programmes. Basic diagnosis and treatment was undertaken at various levels using the syndromic approach with reputed success. Testing for HIV, with care to prevent cross infections, was carried out by the larger clinics, the others referring to better equipped facilities. Screening of antenatal clients for syphilis was provided at most clinics.

Many of the programmes provided both clinical services and outreach/community initiatives. Pathfinder International (PI) together with the Population Council (PC) are compiling an inventory of population programmes which are undertaking integration of STD/HIV services with FP. They record 65% of those surveyed so far as providing a combination of clinic, community-based distribution (CBD) and/or other outreach facilities. IEC/counselling was found to be very successful at community level, particularly for reaching groups who may not attend the clinics. It was less successful in a clinic setting, largely because of overworked staff and negative attitudes (Population Council 1995).

Problems were also documented with under-trained staff, particularly in the private clinics. Government programmes in Zimbabwe and Mozambique fared better with extra training in STD/HIV diagnosis and treatment provided for staff (Bastos dos Santos et al. 1992; Population Reports L.9 1993). Referral networks and drug delivery systems were also well developed in these two countries. Private ventures were more likely to have to develop their own referral systems and drug procurement strategies, liaising either with other private hospitals or with government facilities. Provincial or District hospitals often operate as referral centres for laboratory testing and treatment of complicated cases.

Difficulties were encountered with drug procurement since some of the recommended regimes were expensive. Many private clinics, and some government services, run cost-recovery systems and not all clients can raise the minimal costs. The most severe problems were with contact tracing. Several strategies were used including verbal and written requests to the client's partner, and sending treatment to the partner via the client. Where the primary contact was male, tracing was much easier, reflecting the gender power relationships in the communities. Many of these problems still need to be addressed but, in general, integrated services seem to be considered successful by medical staff and are well utilized by clients.

**An integration continuum?**

The existing literature suggests that some aspects of STD/HIV services are better suited to integration with FP/MCH than others, and successful programmes need to be location specific, dependent on local STD epidemiology, organizational, financial and resource bases and capacities, and the socio-cultural values of the country. These criteria warrant a spectrum of different levels of integration, perhaps involving a symbiosis of vertical and horizontal approaches (Pachauri 1994; Hellberg 1995; Potts 1995).
STD management requires both clinical treatment and preventive strategies. Lower cost preventive programmes, including education, counselling and condom promotion, lend themselves to incorporation with FP advice and community outreach initiatives which have the capacity to reach hard-to-contact sections of the population (male partners of infected women, adolescents and stigmatized groups like sex workers). A number of programmes have successfully integrated these strategies with little reported stigmatization. Providing clinical supplies of drugs and laboratory equipment at MCH/FP facilities may prove more problematic and depends on an already functioning infrastructure, personnel and clinical capacity, and staff and client attitudes to including STD/HIV services. Referral mechanisms from local services to better equipped District hospitals have been developed, with some success, to reduce these problems. Diagnosis and treatment using the syndromic approach is of doubtful efficacy for asymptomatic women yet until cheap, reliable alternatives are developed, it is currently the most feasible method of diagnosis and treatment of STDs in resource-poor settings and is being used with reputed success by FP/MCH and PHC workers in a number of countries. Careful thought should be given to how males and adolescents might be encouraged to use integrated facilities for treatment. Specialist STD clinics or STD wings of District hospitals probably need to be maintained as referral centres for laboratory testing, treatment of complicated cases and ongoing research into local epidemiologies, drug resistance and appropriate drug regimes, and development of vaginal microbicides and improved diagnostic tests.

International consensus is emerging on the need to integrate reproductive health services, but policy-makers must clarify their definitions both of ‘integration’ and ‘reproductive health services’. Building on the multi-sectoral concepts of reproductive health consolidated at ICPD, Marilyn Lauglo (1996) usefully suggests viewing reproductive health in a threefold manner. First as a commitment to reproductive rights, second as a set of strategies (including empowerment, IEC, integrated services, encouraging adolescents and men) which will involve a variety of sectors, and third as a set of programme activities. The framework attempts to provide an approach to operationalizing the values adopted at the Cairo Conference. At the implementation level, programme activities for reproductive health services might ideally include FP, MCH, treating the consequences of unsafe abortion, prevention and control of STDs including HIV, full counselling, infertility treatment, pap smears and general gynaecology and urology services. Such high level integration is probably only feasible at District/Regional level hospitals, with lower level facilities integrating preventive strategies and some basic diagnostic and treatment services. National policy-makers need to determine what elements can realistically be integrated within programmes of varying organizational capacity without compromising their effectiveness (Pachauri 1994; Sai 1995).

While a number of models exist for analyzing specific aspects of reproductive health, no research has systematically developed models or criteria to guide policy-makers and programme managers on how and at what level reproductive health services could and should be integrated. In-depth, country-specific studies are needed to provide an analysis of the political and socioeconomic context of programme development and implementation, the health sector resource base, and local clinical and programmatic issues of STD/HIV and FP/MCH services. These could generate useful guidelines for decision makers on how to approach integration and under what circumstances it is feasible and appropriate for given communities.

Increasing attention is being given to the policy dimensions of health care provision spurred by widespread health sector reforms (Walt 1994, 1995; Walt and Gilson 1994; Foltz 1995). Policy aspects and implications of STD/HIV and FP/MCH integration have yet to be systematically researched, nor has there been a comprehensive analysis of the different stakeholders now involved in reproductive health (including the often subjugated service providers and the clients themselves) and their relative influences (financial, material, bureaucratic, moral etc.) on policy and service provision. Given the necessarily multi-sectoral dimensions of reproductive health, a policy analysis approach provides a particularly appropriate framework for analyzing and understanding the complex, multi-faceted issues, and synthesizing the claims and concerns of the diverse parties involved. Clarifying these aspects is essential to understanding current programmes, informing potential policy directions and articulating reproductive health goals in operational terms. A systematic policy analysis would be valuable for any country considering integrating reproductive health services. Moreover, in the prevailing climate of health sector reform, policy-makers are likely to be increasingly
pressed to address reproductive health in terms of the wider context consolidated at the Cairo Population Conference and the UN Conference on Women in Beijing. If the arguments for integrated reproductive health services are to have the wider resonance they require, they must be analyzed in a more country-specific and multi-dimensional context hitherto lacking.

Endnotes

1 HIV/AIDS funding has been a priority for Western governments since the 1980s. Between 1982 and 1991 c. US$5.63 billion has been channelled into AIDS-related research world-wide (Mann et al. 1992). 95% AIDS budgets have been spent in high income countries (Lancet 1994).

2 Complications and advanced symptoms, or 'sequelae', of STDs include epididymitis, urethral stricture and sterility in men, congenital syphilis and blinding eye infections in new-borns, and in women pelvic inflammatory disease (PID), infertility, cervical cancer, ectopic pregnancy. Advanced stages of syphilis and AIDS lead to death.

3 While the Plan of Action agreed at Cairo recognized the importance of empowerment of women for securing their reproductive rights, the Platform of the Second UN Conference of Women in Beijing took the issues further and succeeded in negotiating an acceptance that 'The human rights of women include their right to have control over and decide freely and responsibly on matters related to . . . sexual and reproductive health' and, more significantly, that 'it is the duty of states, regardless of their political, economic and cultural systems, to promote and protect all human rights and fundamental freedoms' (UN, Beijing 1995).

4 This is so far only rhetoric, the consensus it represents is at least a step in the right direction.

5 It was attended by 165 health-care professionals from 18 Sub-Saharan African countries, the US and Thailand. Other participants included USAID Population, Health and Nutrition officers, and senior Ministry of Health officials representing the areas of primary health care, family planning, and STD/HIV. There were also representatives from many NGOs that provide health care in Africa.

6 There are currently no standard cost analysis methods for integrated programmes. FP programmes are usually evaluated in terms of 'couple years of protection' and STD programmes in terms of the number of patients served (Finger 1994).

7 The World Bank suggests mass treatment be employed when STD incidence reaches 10% of the population (World Bank 1993).

8 Arguments for intervention are denied on public sector grounds because STDs are seen to be caused by self-determined 'risk behaviours' and denied on economic grounds since public sector provision would subsidize potential private sector clients (personal communication 1996).

9 Key donors for STD programmes include the EC and its member countries, USAID, UNAIDS and the World Bank.

10 Many attempts have been made to integrate other vertical programmes into horizontal structures, including malaria, TB and leprosy programmes. Some of the experiences can usefully inform discussion of STD-FP integration although most research has been carried out in South East Asia.

11 Other vertical programmes, for example Malaria control strategies in South East Asia, have already successfully utilized a community participation approach (Tang Lin-Hua et al. 1991; Manderson 1992; Riji 1992).

12 This is in fact a common mode for integration and has also been proposed for malaria control.

13 As is the case in Bangladesh, India, Tanzania and Uganda, where the FP unit is placed within Health or Home Affairs.

14 In Ghana, for example, FP is placed under the Ministry of Economic Planning and Finance; in Mexico it is under the Interior Ministry; in the Philippines it is in the Office of the President.

15 Although the global failure rate for condoms stands at 12% this is largely because of poor or inconsistent use rather than poor quality (Cates and Stone 1992b).

16 Promotion of IUDs and oral contraceptives in high STD/HIV prevalence settings raises serious ethical questions.

17 This is a critical factor for decision makers with implications for strategy preferences and drug choices, yet little epidemiological research exists, certainly not at a level, in much of the developing world.

18 For example Bulatao's and the Evaluation Project's indicators for FP programmes and Bruce and Jain's quality of care model (Bruce 1990; Bruce and Jain 1991; Evaluation Project 1993; Bulatao 1995; Lauglo 1996).

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Integrating MCH/FP and STD/HIV services


**Biography**

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