Reproductive Health and Emergency Contraception in South Africa: Policy Context and Emerging Challenges

Pranitha Maharaj and Michael Rogan¹

Working Paper No 48

July 2007

ISBN 978-1-86840-621-0

Comments to maharajp7@ukzn.ac.za or rogan@ukzn.ac.za

PLEASE DO NOT QUOTE OR DISTRIBUTE WITHOUT PERMISSION OF THE AUTHORS.

BACKGROUND

This report reflects the preliminary findings of an ongoing collaborative project to investigate the impact of trade liberalisation on reproductive health rights. The project is being undertaken simultaneously by researchers at the School of Development Studies, University of KwaZulu-Natal in South Africa and by researchers from the International Center for Research on Women (ICRW)-India. In response to the growing international attention given to free trade, trade related intellectual property rights (TRIPS) and the accessibility of essential drugs and medicines, the project aims to examine the links between trade policy and reproductive health commodities. In South Africa, the project focuses on the availability and use of emergency contraception pills (ECPs). Emergency contraception (EC) has been recognised both internationally and locally as being an important commodity with respect to the realisation of reproductive health rights.

Emergency contraception is clinically defined as the use of a drug or device as an emergency measure to prevent, or reduce the risk of an unwanted pregnancy (Cheng et al., 2004). Emergency contraception pills are effective for use at any time during the menstrual cycle under conditions where sexual intercourse occurred and where a woman makes an informed decision to use them (Department of Health, 2003). Emergency contraception use is most common under conditions of unprotected sexual intercourse or method failure (such as condom slippage, leakage or breakage, missing hormonal pills or an IUD expulsion) (Department of Health, 2003). Emergency contraception pills have been shown to reduce a woman's risk of pregnancy by at least 75 percent if taken within the period of efficacy (Trussell, Rodriquez, Ellertson, 1999). It may be an especially useful method for young people because, in this group, sexual activity is often unplanned, infrequent and unprotected (Department of Health, 2003)

Emergency contraception, also known as postcoital contraception or the morning-after pill, can be used up to five days (120 hours) after unprotected sex. However, it is often most effective when taken 1-3 days after unprotected sex. Regardless of the length of the window period, the efficacy of the pill still depends on when during the cycle the pill is taken and on what type of regimen is taken (Progestin-only pills are more effective than combination pills which contain both estrogen and progestin) (Feijo, 2005; Parker, 2005). ECPs include both combined oral contraception pills (COCs) and levenorgestrel contraception pills. The use of estrogen-

levonorgestrel/norgestrel-containing oral contraception is normally comprised of 2 doses taken 12 hours apart. The pills should be used within 120 hours of unprotected sexual intercourse at any time in the menstrual cycle to prevent pregnancy. However, the efficacy of the contraception appears to decline with time. The earlier after coitus the treatment is taken, the greater the efficacy, although the rate of decline in effectiveness cannot be precisely evaluated with available data (WHO, 2000).

An intrauterine device (IUD) which can be inserted internally within five days of unprotected sex is another less frequently used form of emergency contraception (Beitz, 2002). Emergency contraception pills are not a standard method of contraception and therefore should only be used in emergencies. The pills work by delaying or inhibiting ovulation, disrupting follicular development and/or interfering with the maturation of the corpus luteum (Feijo, 2005). It is a safe and effective way of preventing an unwanted pregnancy and does not affect an established pregnancy and does not cause abortion. According to the World Health Organization guidelines, pregnancy is the only contra-indication (WHO, 1998). While the pills are not harmful to a pregnant woman or her fetus and they will not terminate a pregnancy, some women may experience short-term nausea and vomiting (Blanchard, Harrison and Sello, 2005). Analysts have noted that emergency contraception pills are likely to have more severe side effects than regular contraception and it is therefore advised that individuals that are having sexual intercourse should use a regular contraception method such as the pill, condom or injection (Feijo, 2005).

Emergency contraception is a relatively new product on the South African market and has only recently been made available to women directly from a pharmacist without a prescription. As such, there is currently a paucity of information about the impact of the legal rescheduling of emergency contraception pills on the availability and take up of emergency contraception in South Africa. The objective of the report is to highlight the various factors and policies that have likely impacted on the availability and use of emergency contraception in South Africa thus far. The report begins with a critical review of both the historical and policy context surrounding reproductive health care in South Africa, presents a literature review of emergency contraception in South Africa, and then offers some tentative conclusions regarding the inter-linked effects of global, historical, political, social and economic factors that are likely to be impacting on the use of emergency contraception in South Africa. Taken as a whole, the findings presented in this report serve as a point of departure for the ongoing investigation into the links between trade and the accessibility, availability and take up of emergency contraception in South Africa.

INTRODUCTION

South African health legislation since the end of apartheid in 1994 has been characterised by a strong policy commitment to reproductive health, rights and equity. As the result of a broadly consultative process, South Africa, over the past twelve years, has formulated a reproductive health policy package that is widely accepted as one of the most progressive in the world. It is becoming increasingly evident, however, that explicit reproductive health policy is only one component of the multi-sectoral approach that is required to improve reproductive health services. A myriad of factors affecting access to, awareness of, quality, availability, and the equitable distribution of reproductive health services and products may be identified. As such, improving reproductive health care in South Africa requires an expansion of the existing understanding of the framework for the provision of quality reproductive health care.

Contraception policy and the promotion of emergency contraception (EC), in particular, offer a useful platform for a critical analysis of the policy context surrounding reproductive health in South Africa since 1994. As one of the government's most recent reproductive health reforms (2001 National Contraception Policy Guidelines, 2003 National Contraception Service *Delivery Guidelines*), the dedicated contraception policy was designed within a unique economic, social and political context. Following nearly a decade after the ANC-led government's initial health and reproductive health policy formulation process, contraception policy has been introduced at a significant time in both South Africa's democracy and in the progress of reproductive rights internationally. With respect to the introduction of EC, contraception policy formulation has also coincided with an increased global understanding of the importance of EC to the reproductive rights and the health of women. According to the National Department of Health (NDoH), emergency contraception, in recognition of its potential to reduce the prevalence of unplanned pregnancies, is now considered an integral part of the national contraception strategy (NDoH, 2003).

Progressive contraception policy in tandem with a relatively high national rate of contraception use notwithstanding, the use of EC products in South

Africa has traditionally been very low. According to the recently released 2003 South African Demographic Health Survey (SADHS), modern contraception methods are used by 50.6 percent of South African women (65.3 percent of sexually active women and 60.3 percent of married women)(Department of Health, 2006). Despite this high take up of contraception, numerous studies on emergency contraception in both rural and urban areas of South Africa have found that use of emergency contraception pills (ECPs) is almost non-existent (Smit et al., 2001; Ehlers, 2003; Mghayi et al., 2004; Roberts et al., 2004). Low take up of emergency contraception is occurring in the context of a very high rate of unplanned pregnancies, sexual violence against women, unequal gender relations, maternal mortality and endemic poverty (Meerkotter, 2002). Research into the low take up of emergency contraception products has focused, at the micro-level, on the attitudes towards and knowledge of emergency contraception products by providers of reproductive health services and by public health sector clients. Still missing, however, is a contextual analysis of the macro-level determinants of emergency contraception use, in particular, and of the effectiveness, more generally, of reproductive health policy in South Africa.

The objective of this report is, thus, to highlight the multitude of diverse factors that influence both the shape and effectiveness of reproductive health policy in South Africa- with a particular emphasis on emergency contraception. The report is structured as follows: the first section introduces the global context surrounding reproductive health policy and its influence on national policy processes; the second section provides a brief overview of the historical context of reproductive health and population policy in South Africa; the third section offers a critical review of the challenges and successes of the reproductive health policy reform process since 1994; the fourth section describes several emerging market related factors linked to the provision of reproductive health care and emergency contraception; the fifth section offers a literature review of the recent research findings on emergency contraception in South Africa; finally, the last section offers some conclusions about the inter-linked effects of global, historical, political, social and economic factors that are likely to be impacting on the use of emergency contraception in South Africa and offers recommendations for areas of further research.

A GLOBAL CONTEXT

A significant turning point in the global understanding of family planning, population policy and reproductive health was marked by the 1994 International Conference on Population and Development (ICPD). The extent of the influence of the ICPD and its Programme of Action on population policy in developing countries should not be underestimated. In short, the conference paved the way for a re-orientation of reproductive health delivery away from the vertical incorporation of family planning services into tertiary care. Instead, the conference guidelines underscored the need for the integration of reproductive health services and products into a primary health care system geared towards the objective of promoting the comprehensive well-being of patients (Haselgrave, 2004; Matthews, 1999). This holistic approach to providing care, the conference suggested, is more in line with existing international norms eliciting the right of all to basic health care. Objectives for achieving equity in health care provision were also emphasized through the conference's recommendations on introducing progressive reproductive health policies in developing countries $(\text{Haselgrave}, 2004)^2$.

More than ten years after the conference, a series of reviews of the ICPD's accomplishments have started to appear in the literature on reproductive health policy. Despite the strong platform for progressive reproductive health policy provided by the ICPD, the literature acknowledges the emergence of global trends that challenge the implementation of some of the conference's core tenets. Most notable is the observation that health reform, in general, and reproductive health policy, in particular, are increasingly being shaped by ideology, politics and economics (Lubben et al., 2002). Lubben et al. (2002) argue that, although reproductive health has been implemented within a rights based context since the ICPD, the diversity in the ideologies and politics of health reform stakeholders has introduced tension into the incorporation of reproductive health into primary health care structures. The result of this tension has often been 'disjointed policy-making' with a significant disjuncture between health reform and reproductive health policy (Lubben et al., 2002: 1).

Global ideology has also had a supply side impact on the formulation of progressive reproductive health policies in developing countries. The 1980's and 1990's witnessed the polarisation of thinking on health reform into two

distinct camps. On the one side, the World Health Organisation (WHO) embodied the ideal of health as a human right and promoted an ideology couched in concepts of social justice. On the other side, the World Bank and the International Monetary Fund (IMF) framed public health reform within the agendas of efficiency, increased fiscal austerity and privatisation (Poku and Whiteside, 2002). During the mid 1990's, the World Bank approach eclipsed that of the WHO and, as a result, health sector reform has since been exposed to new 'rules, actors and markets' (Poku and Whiteside, 2002: 192; Lubben et al., 2002). These new rules have likely affected, to varying degrees, the ability of developing countries to formulate and implement reproductive health policy without first reconciling its objectives with those of demands for fiscal austerity.

The emergence of these new actors and markets has developed in tandem with the globalisation of medicine. As such, a new economic dispensation now accompanies the ongoing changes to reproductive health reform taking place in developing countries. Perhaps the most notable example of this dispensation and its new set of rules has taken the form of South Africa's challenge to global pharmaceutical companies and the United States government over the licensing of patented medicines, parallel trade and the distribution of patented anti-retroviral (ARV) medication (Heywood, 2002). While the South African government eventually won a landmark decision in its own high courts and while a 'temporary stalemate' now exists, the overriding lesson learned is that 'medicine cannot be re-bottled in the nation state' (Heywood, 2002: 222,226). Globalisation, the expansion of capitalism and the revolution in communications technology have combined with the neo-liberal ideology on an unprecedented scale to shape global access to commodities, ideas, innovations and medicines that are central to reproductive health services (Thomas, 2002; Heywood, 2002). Recent upheavals within the World Trade Organisation (WTO) and the ongoing debate around the validity and efficacy of intellectual property rights notwithstanding, it is now imperative for health sector policymakers in developing countries to be cognizant of the many inter-linking factors that affect access to essential medicines (including reproductive health products) within a new and ever-changing global economic dispensation.

An additional challenge to the promotion of reproductive health is that, in spite of the success of the ICPD in articulating the approach of progressive reproductive health policy, the global response to the proactive implementation of reproductive health rights over the past ten years has been

luke-warm. The Millenium Development Goals (MDGs) have, to a large extent, excluded any mention of dedicated reproductive health status objectives (Haselgrave, 2002). Where mention is made, reproductive health indicators are limited to maternal morbidity or are often considered as subcategories under diseases such as HIV/AIDS (Haselgrave, 2002). The likely result of this treatment, in addition to the marginalisation of reproductive health rights, is the creation of further tension between donor agencies and organisations aligned with public health campaigns featuring singular foci. Focus on the few indicators of reproductive health that are included in the MDGs has also directed attention away from the provision of essential services and medicines. Access to contraception, in particular, has lessened as a priority in developing countries over the past several years as it is being sidelined by a focus on public health threats such as HIV/AIDS, tuberculosis and malaria (Haselgrave, 2002). Hence, a waning interest in reproductive health as a priority area of public health reform and donor funding must be recognised as an emerging threat to the effective integration of reproductive health care into primary health care services.

Overall, then, the global context overlaying reproductive health policy in South Africa is not entirely enabling. While notable progress has been observed, new challenges to the promotion of reproductive health are evident. Ideology and economics have combined to shape the internal policy mechanisms of developing countries. In many respects, the success of reproductive health policy in South Africa is tied to the ability to ensure the provision of essential products and services within an evolving global dispensation.

THE HISTORICAL CONTEXT

The history of population policy in South Africa cannot be ignored in a review of current reproductive health and contraception policy. During the apartheid era, population policy was overtly Malthusian in design and was intended to control the fertility of the black population while simultaneously increasing the population share of white South Africans (Chimere-Dan, 1993; Klugman, 1993). On the whole, the evolution of reproductive health policy between 1974 and 1994 can be described as a process that, partially as a result of its ideological implications, has both marginalised the participation of communities and limited the scope for contraception use in the post-apartheid era.

Prior to 1994, the ruling National Party apartheid government classified the population into racial groups: White, Indian (or Asian), Coloured (of mixed heritage) and Black (or African). The Group Areas Act, passed in 1950, geographically separated the population along racial lines, and all Africans, approximately 75 percent of the population, were relocated to one of ten homelands or bantustans. During the apartheid period, each homeland had a separate ministry of health. There were in total 14 departments of health in South Africa – one for each homeland and one for general affairs, Indians, Coloureds and Whites (Buch, 1987). As a result, health services in South Africa were characterised by unnecessary duplication and inadequate coordination of services and costs, which contributed to the fragmentation of the health system (Buch, 1987).

In South Africa, family planning services have traditionally been offered by private agencies, chiefly the Family Planning Association of South Africa, and funded by limited subsidies from the Department of Health (Chimere-Dan, 1993; Brown, 1987). In 1974, the Department of Health announced the establishment of the national family planning programme. The state-sponsored family planning programme was launched at a time of rising African unemployment, rapid African urbanisation and increasing resistance to the government (Kaufman, 2000). The government promoted the family planning programme as a means of improving the health and status of women and children while curbing the rate of population growth. The programme was relatively successful in facilitating a decline in fertility by increasing access to family planning services and increasing contraception use. Levels of contraception use increased steadily after 1974 and were estimated to have reached 44 percent for Africans in 1991 (Kaufman, 1998).

Despite the successful reduction in fertility, the population policy, under the auspices of the family planning programme, was riddled with contradictions and did not enjoy widespread support from the black population. Family planning services were introduced within the context of a policy environment that aimed to both limit the spatial movements of black South Africans and curb their population growth (Chimere-Dan, 1993). Historically, resistance to the National Party's population policy has been strong and still fosters a legacy of mistrust with political undertones with respect to family planning services and contraception, in particular (Chimere-Dan, 1993; Kaufman, 2000). The provision of family planning was often conducted in a paternalistic fashion with little regard for the preferences of clients. Injectable contraception was, by far, the most

common form of birth control provided and was often administered without the consent of clients (Simmons et al., 1997). Significantly, the historical dominance in South Africa of this method of contraception is understood to contribute to its continued widespread use (Kaufman, 2000).

In 1984, the National Party introduced its Population Development Programme (PDP) in line with international trends moving towards an emphasis on comprehensive health care and reproductive rights. While representing a vast improvement in the approach taken to family planning since 1974, the PDP was still affected by mistrust associated with the overall apartheid agenda (Chimere-Dan, 1993). Concomitantly, high rates of take up of modern contraception were not associated with a reduction in unwanted pregnancies among young black women in the 1980's (Chimere-Dan, 1993). Perhaps one of the most significant impacts of apartheid-era population policy, however, was the marginalisation of communities. As Klugman (1993) argued during the transition period, despite the progressive rhetoric of the PDP, the implementation of the programme (amidst intense resistance to apartheid and the National Party's declaration of a state of emergency) served to undermine the imperative of community participation and development. The result has been a persistent legacy of mistrust around contraception provision and the fragmentation of traditional community support structures around family planning and reproductive health services.

On the whole, then, the historical context surrounding reproductive health and contraception policy in South Africa has been challenging. Despite the progressive rhetoric and substantial funding for the PDP, it has been widely acknowledged that population policy prior to 1994 has adversely affected the success of the ANC's respective health policies. The marginalisation of communities and the restriction of the choice of contraception methods, in particular, have resulted in far-reaching implications for the design and implementation of effective reproductive health policies.

REPRODUCTIVE HEALTH POLICY SINCE 1994

Within the global and historical context outlined above, the reproductive health policy framework formulated since 1994 is undeniably progressive. On paper, South Africans have access to an extensive range of reproductive health services and products. The accessibility of these services and products is built into the district health system and integrated within a suite of primary health care services. This section offers a review of the reproductive health policy and legislation introduced since 1994 and then highlights some of the more tangible challenges that have emerged with respect to both improving reproductive health and integrating contraception services into a primary health care system.

The formulation of a reproductive health policy framework in South Africa began prior to the 1994 elections and was largely the result of a broad consultative process. Reproductive health policy formulation in South Africa is widely acknowledged to have directly benefited from the agenda ratified in Cairo (during the ICDP) at the same time (Cooper et al., 2004). It is generally accepted that South African policy closely followed the international emphasis on reproductive rights, comprehensive well-being and equity in reproductive health that emerged at the conference (Cooper et al., 2004). A recent WHO paper cites South Africa as having achieved a 'multi-sectoral' approach to reproductive health care in the face of a noticeable divergence between health care and reproductive health care provision in many developing countries (Lubben et al., 2002). Table 1 below outlines the major policy contributions with an impact on reproductive health care since 1994.

As Table 1 suggests, reproductive health is explicitly covered within a number of diverse policies. Beginning with the ANC's renewed attention to HIV/AIDS, South Africa began to host workshops, stakeholder conventions and conferences to broadly define the requirements for reproductive health during the transition period just prior to 1994 (Klugman, 1999). The process was largely influenced by the Women's Health Project and culminated in the 1994 Women's Health Policy Conference. Collaboration between stakeholders at the conference ensured that the voice of South African women was articulated in the ensuing policy processes (Klugman, 1999; Matthews, 1999). An emphasis on reproductive rights is arguably one of the most important victories stemming from this stakeholder support for reproductive health policy. South Africa's *Constitution* makes provision for the 'right to make decisions concerning reproduction' and further stipulates that discrimination against pregnant women be outlawed (Government of South Africa, 1996; Matthews, 1999). As such, many of the ANC-led government's early policies, guided by the Reconstruction and Development Programme (RDP), were formulated with an emphasis on rights. It is in this rights based context that the health legislation enacted in the following years was grounded.

Table 1: Reproductive health milestones since 1994

1994:	New National Department of Health reviews and reforms HIV/AIDS policy
	Free basic primary care introduced for pregnant women and children under the age of six
1995:	United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) ratified by the South African Government
1996:	Choice on Termination of Pregnancy Act is passed
	Equality clause in the Constitution
	Formation of the MCHW Directorate
	National Drug Policy
1998:	New Population Policy introduced
	Formation of the South African National AIDS Council
1999:	Prevention of Mother to Child Transmission (PMTCT) Programme in the Western Cape
2000:	National Guidelines for Cervical Screening Programme
	Emergency Contraception reclassified as a Schedule 2 medicine
2001:	PMTCT programmed established in Gauteng
	National Contraception Policy Guidelines
	The National Adolescent-Friendly Clinic Initiative Handbook of Adolescent and Reproductive Health Care
2002:	Treatment Action Campaign (TAC) and the Children's Rights Centre (CRC) win a court order mandating the government to introduce a nation-wide PMTCT programme
2003:	National Contraception Service Delivery Guidelines

Source: Cooper et al., 2004; NDoH, 2003; South African Government, 1996

The success of a rights based framework for reproductive health policy is embodied, for many advocates and stakeholders, in the 1996 Choice on Termination of Pregnancy (TOP) Act. The Act distinguishes South Africa from many other developing countries in that it allows women of any age access to safe and legal abortion services within the first three months of pregnancy (Matthews, 1999). The TOP Act is also significant in that it was ratified largely as the result of a strong and sustained support base from civil society and women's organisations, in particular (Cooper et al., 2004). Evidence suggests that the Act has been successful in curbing the number of illegal abortions performed in South Africa since 1994 (Mhlanga, 2003). A recent paper has shown that the Act has impacted on maternal morbidity and that the incidence of 'severely ill women' presenting in public health facilities with incomplete abortion has significantly declined between 1994 and 2000 (Mhlanga, 2003). From a rights perspective, this legislation represents one of the greatest successes with respect to the realisation of reproductive health rights for South African women, despite the recent challenges to the Act.

The enactment into legislation of the New Population Policy in 1998 denoted another significant move away from the past approach to population and reproductive health policy. In particular, the new policy focuses on the equity requirements inherent in redressing past inequalities and mandates that population policy should be in line with an overall strategy to achieve human development (Matthews, 1999). Also explicit in the policy is the acknowledgement that gender equality and the empowerment of women are critical to achieving 'sustainable human development' (Matthews, 1999; Cooper et al., 2004). In acknowledging the multi-faceted requirements of integrating population and development goals, the new population policy draws together a diversity of stakeholders in what is termed a 'multisectoral' approach to population and health (Matthews, 1999). To a certain extent, this approach is evident in the mechanisms for the delivery and implementation of reproductive health policy vis-à-vis the district health system and the primary health care system that will be discussed later in the report. On the whole, however, the new population policy is the cornerstone of what is widely accepted as a progressive and comprehensive national reproductive policy framework.

National contraception policy, introduced towards the end of the first decade of democracy in South Africa, has benefited substantially from the

progressive policy context established by the government's population policy. Building on the fundamental right of all South Africans to exercise control over reproduction, the national contraception policy introduced in 2001 sets out the guidelines for the provision of contraception products and services by provincial and district health facilities. To this end, *The National Contraception Policy Guidelines* document holds as its main objective, the improvement of 'the sexual and reproductive health of all people in South Africa' (NDoH, 2001). Significantly, the document mandates that 'an appropriate contraceptive method mix' be expanded and that emergency contraception should be 'extensively promoted' and be available in all public health facilities (NDoH, 2001). Moreover, the fundamental components of contraception policy are listed under the policy document's 'guiding principles' and notably include (NDoH, 2001):

- Free contraception services in the public health sector- including emergency contraception
- Information and counseling on sexual and reproductive health should be provided with contraception services
- No patient requesting a contraception service should be sent away
- Where services are not provided, referral networks should be used
- Contraception should be made available to all who need it
- Informed choice should be a part of all contraception services
- Contraception services should be equitably distributed throughout South Africa
- An enabling legislative environment should be created to realise the objectives of population policy.

It is with respect to the last two principles that debate around the efficacy of contraception policy is often directed. The National Department of Health's acknowledgement that reproductive health is affected by a myriad of factors including socio-economic development, gender inequality, education and spatial location notwithstanding, there remains significant scope for a critical analysis of the policy and legislative processes that impact on reproductive and sexual health service delivery. In particular, the processes of integrating reproductive health into both the district health system and a primary health care package have elicited wide debate and carry important implications for the accessibility of emergency contraception to South African women. Perhaps the core of the debate is based on the realities on the ground that often affect the implementation of contraception and reproductive health

policy. Reviewing some of the more significant obstacles to implementing effective reproductive health policies, Fonn et al. (1998) observe,

[The health system] is one of disorganised and fragmented services, low morale among health sector staff, low literacy levels among those using services, especially among rural women, a significant proportion of the population living in poverty, and inadequate infrastructure such as roads, transport, water supply and electricity.

While this critique is aimed at the public health system in general, the delivery of reproductive health services through the district health system has had serious repercussions for the quality of reproductive health provision; a phenomenon observed internationally (Cooper et al., 2004; Lubben et al., 2002). Challenges to health care delivery and the process of integrating contraception and family planning services into primary health care systems appear to have directly impacted on the accessibility of emergency contraception in many developing countries (Heimburger et al., 2003).

Reproductive health care and the district health system

As a brief review of the district health system will emphasize, the outcomes of reproductive and contraception policy cannot be understood without first placing them in the context of the overall health sector reform process in South Africa. Of all health sector reforms, it has been argued that decentralisation has the most significant impact on reproductive health services (Lush, 2002). This process was introduced in South Africa under the general policy umbrella of primary health care and district health system demarcation through which a multitude of programmes were launched in the years immediately following the introduction of the ANC's health plan (Magwaza and Cooper, 2002). More specifically, the government, primarily through an ambitious Minister of Health, simultaneously implemented a number of programmes and policies to address the following: 'immunisation, nutrition, reproductive health care, HIV/AIDS, tuberculosis, tobacco control, clinic building, and health systems information' (Gilson et al., 1999). As stipulated by the White Paper for the Transformation of the *Health System in South Africa*, these programmes were to be administered in an equitable manner, in line with the *Constitution* and the new population policy, in terms of an '...emphasis on reaching poor and vulnerable groups, the re-allocation of health personnel from urban to rural areas, the reallocation of funds between the public and private sector and the distribution

of funds in an equitable and needs based manner' (Gilson *et al.*, 1999). Hence, all policy changes between 1994 and 2000 were overtly designed to enhance health care and reproductive health care equity through an overarching primary health care approach administered through a district health system.

The restructuring and decentralisation of the nation's health network under a district health system, however, has likely had a significant impact on the provision of emergency contraception. One of the strongest criticisms of the district health system is that rural municipalities with fewer resources, a smaller tax base and less capacity have been unable to deliver health services as efficiently as wealthier urban municipal governments (Groenewald, 2003). Groenewald (2003) notes that many rural municipalities have fewer health facilities, less access to water and sanitation, and weaker administrative health systems. Devolving increased responsibilities to district or municipal authorities has exacerbated these existing inequities and is likely to be threatening resource-intensive programmes such as contraception and family planning. With respect to health system capacity and its impact on emergency contraception, research in Latin American countries has demonstrated that the greatest barriers to the successful promotion of emergency contraception are often associated with a lack of appropriate information on the part of health care providers (Heimburger et al., 2003). Unevenness in the delivery of reproductive health care, moreover, has also been enhanced by an increase in donor and NGO resources to combat HIV/AIDS. This influx in resources and their selective distribution in the face of vast inequalities between district health administrations has further contributed to inequities in reproductive health services across provinces, districts and programmes (Klugman, 1999).

Another serious challenge to the promotion of reproductive health care equity under a district health system is the 'equitable shares formula' of resource allocation that ultimately determines how much funding each district receives. As McIntyre *et al.* note, the large 'block grants' that are issued to the provinces by the Treasury (based on needs) make up the majority of the national government's contribution to health care (McIntyre *et al.*, 2003). The size of these 'general purpose' grants invariably determines the level of funding to be allocated to provincial health care and, thus, the districts and municipalities that fall under provincial jurisdictions. McIntyre *et al.*(2003:37), have concluded that, '... the vertical equity goal of giving relatively greater priority to the most disadvantaged areas is not being met by the current Treasury 'Equitable Shares' formula'. In part, this is likely to be the outcome of a paucity of information on provincial health systems. The first ever National Health Accounts Report, for instance, indicated that, in 2000, inter-provincial inequities were still a serious concern and that funding for primary health care services must be a future priority (Andrews and Pillay, 2005). Additionally, provincial governments currently do not have internal equitable allocation procedures, with the result that resources are often allocated according to 'historical distribution' patterns (Mbatsha and McIntyre, 2001). Historical distribution channels, together with a top-down management structure, have meant that many components of reproductive health, in particular emergency contraception provision, have not received adequate support from health care providers (Klugman, 1999). Thus, the government's current resource allocation mechanism is ill equipped to ensure the equitable distribution of national funds to district health authorities, with serious implications for sexual and reproductive health rights.

Capacity related problems have also had a significant impact on health equity and policy changes since 1994. One of the main problems with the implementation of health policy in South Africa has been the design of policy without a consideration of the existing capacity to implement specific reforms (Gilson et al., 2003; McIntyre and Klugman, 2004). It is widely acknowledged that capacity has a particularly significant impact on the provision of contraception and that clients' existing choice of contraception method is often constrained by provider capacity (Cooper et al., 2004). Similarly, empirical evidence suggests that many elements of health system restructuring have been hampered by '...a lack of capacity to manage human resources' (Stack and Hlela, 2002: 6). On the ground, this lack of capacity has translated into low morale among health care workers, a lack of infrastructure and a hostile attitude towards clients. These are all outcomes that have a particularly severe impact on the quality of reproductive health care (Lush, 2002; McIntyre and Klugman, 2004).). In terms of contraception policy, there is some evidence to suggest that policy service packages have been undefined, to a certain extent, as a result of a lack of dedicated resources (Fonn et al., 1998). A significant result of this outcome, with respect to reproductive health care, has been a divergence between policy rhetoric and the capacity to effectively implement policy in line with health sector reform (Klugman, 1999). On the whole, these experiences underscore the notion that reproductive health services have been greatly

influenced by both health sector reform and the introduction of a district health system (Cooper et al., 2004; Matthews, 1999).

Integration of reproductive health and contraception services

The principles of primary health care have encouraged a move away from traditional vertical and autonomous health care programmes towards 'an integrated (health) infrastructure capable of providing both general and specialised health care effectively to entire populations in relation to their main needs' (Smith and Bryant, 1988:910-2). Under the ANC government, commitment to delivering an integrated system of service delivery and management remains strong and explicit moves to foster integration have taken place (Lush, 2000). The broad aim of integration has been to bring previously separate and independent reproductive health service functions into a new single structure (Magwaza and Cooper, 2002).

While the integration of reproductive health care is inherently linked to health system decentralisation and the overall health sector reform process, several distinct issues around programme integration emerge. Despite the apparent logic in integrating reproductive, sexual health and primary care services, a number of problems, not the least of which is the cumbersome implementation of a district health system, can be identified (Lush, 2002). As Lush (2002) argues, the international health community, along with many developing nations, embraced the notion of integration without first considering the political, financial and administrative implications. In South Africa, this gap in planning most obviously manifests itself in the persistence of reproductive health services in a vertical system despite the policy rhetoric mandating otherwise (McIntyre and Klugman, 2004). McIntyre and Klugman (2004) suggest that the resistance of many health services (in some cases sectors) to integration can often be directly linked to the chaotic demarcation of districts and the resultant reliance of many administrative institutions on historically based channels of governance and funding.

Despite these obvious setbacks, a case for an integrated health service still remains. Much of the debate around service integration is aimed at the implementation process while the theory behind an integrated health system has emerged relatively unscathed. Similarly, a study of both provider and client perspectives on integration in one South African province demonstrated that integration enjoys widespread approval 'in principle' (Maharaj and Cleland, 2005). The main barrier to implementation, it is argued, is the difficulty in accommodating the administration of reproductive services that have historically been arranged vertically, require different types of training, technology and equipment, and have become convoluted through the overall process of decentralisation (McIntyre and Klugman, 2004). Once again, tangible obstacles such as staffing problems, health system logistics and health worker salaries have been identified as the most significant barriers to the effective integration of reproductive health services (Maharaj and Cleland, 2005).

Emergency contraception, under the umbrella of contraception and family planning provision, is likely to be affected by its integration into the primary health care system. Existing evidence suggests that, in order to effective, emergency contraception should be integrated into programmes and sectors beyond the normal scope of family planning (e.g. school and community outreach, law enforcement, sexual violence crisis support, and STI treatment and prevention) (Heimburger et al., 2003). The accessibility of emergency contraception pills, as commodities that require dedicated educational interventions as part and parcel of their provision, is particularly sensitive to their effective integration into reproductive health care programmes and primary health care packages. As such, it is suggested here that the ongoing problems linked to district health decentralisation and health service integration are likely to be impacting on the availability and accessibility of emergency contraception pills in South Africa, with the greatest impact being observed in resource constrained rural health districts.

TRADE, MARKET CHARACTERISTICS, REPRODUCTIVE HEALTH COMMODITIES AND EMERGENCY CONTRACEPTION

Within the health reform context outlined above, it is suggested that further barriers to delivering high quality reproductive health care in an equitable manner are likely to be embedded in various market factors as well as in several facets of trade and economic policy. Building on the premise that effective health care delivery requires more than sound health policy, a number of authors have begun to interrogate the many ways in which a variety of market related factors influence the price, distribution of, and access to essential drugs and medicines. While a detailed analysis of the market and policy factors affecting the supply and distribution of emergency contraception pills in South Africa is beyond the scope of this report, this section submits that the influence on emergency contraception provision by an inter-linked series of commodity related factors warrants a separate discussion.

Much of the international debate on trade policy and reproductive health commodities has centred around the profit margins of large trans-national pharmaceutical corporations. A growing body of literature is also demonstrating the role of TRIPS in upholding an unequal balance of economic power in the global pharmaceutical industry (Thomas, 2002; Heywood, 2002). While the price of drugs is only one aspect of accessibility, it is widely recognised that cost has a 'knock-on' effect with respect to choice, and especially informed choice, and reproductive health services, medicines and commodities. Other key determinants of reproductive health commodity availability are understood to include: market structure, sector dynamics, information asymmetries and 'market failure' (Gray, 2000).

In South Africa, the market analysis of emergency contraception is framed by the 1996 *National Drug Policy* which was introduced with the explicit intent of controlling drug prices and ensuring the equitable distribution of essential drugs and medicines (Gray and Matsebula, 1999; Gray and Suleman, 2000). The *National Drug Policy* holds as its main objectives (National Department of Health, 1996):

- The regulation of the quality and price of drugs administered and sold in both the private and public sectors
- The creation of an Essential Drugs List and treatment guidelines for public health facilities
- The creation of strategies to increase the take up of generic drugs
- The development of a strategy for the effective procurement and distribution of drugs in the public health sector- and especially for health facilities in rural areas
- The development of a local pharmaceutical industry for the local production of essential drugs.

In terms of shaping the local pharmaceutical industry, the NDP offers a 15 percent price preference in the national tender process for essential drugs that are manufactured in South Africa³ (National Department of Health, 1996).

Trade policy in South Africa is shaped predominantly by *The International Trade Administration Act* (Department of Trade and Industry, 2003). In terms of import control, the Act lists as its objectives (DTI, 2003):

- To ensure that industry sensitive goods are imported in a regulated manner
- To protect local industry and manufacturing from imported second hand goods
- To comply with South Africa's international trade agreements.

With respect to pharmaceutical products, South Africa currently has no tariffs scheduled for either finished pharmaceutical products or active pharmaceutical ingredients (APIs) (International Trade Administration Commission of South Africa, undated a,b). As such, the pharmaceutical market in South Africa is largely unregulated, in terms of trade.

A starting point for the analysis of the market structure of hormonal contraception products (including emergency contraception pills) is the nature of global pharmaceutical sales. Across all therapeutic categories of pharmaceutical products, the great majority of sales are concentrated in the northern hemisphere (Gray and Matsebula, 1999). On the whole, the market and demand for contraception pills closely track the trends observed in other therapeutic categories. Significantly, global demand for all pharmaceutical products is rising steadily, while manufacturing output tends to fluctuate (Dummett, 2002). In South Africa, the trend over the past 5-10 years has been for an increasing demand for pharmaceutical products to be met by a 154 percent real value increase in imports since 1991 (Dummett, 2002). This trend, while not fully understood, is likely to have implications for the local production, supply and distribution of pharmaceutical products- including both hormonal contraceptive pills and emergency contraception pills.

The pharmaceutical industry, like many others, is becoming increasingly global. In 1999, 30 percent of sales in the South African market were supplied by local firms, while the other 70 percent were supplied by products from four other main countries (IMS Health cited in Dummett, 2002). Despite the dominance of large multi-national R&D firms, countries like South Africa, with the capacity to produce quality bio-equivalent and generic contraception products, will likely be looking to compete in American and European markets (Armand, 2006). Thus, for South African firms that manufacture contraception pills, exporting is likely to be an

important survival strategy in the future. The overall trend in the industry is for these generic or bio-equivalent pills along with original patented products, to enjoy increasing market shares at the expense of copy products or bio-equivalents that have not undergone stringent testing and certification by an internationally recognised body (Armand, 2006).

Included among the many strategies for exporting contraception products and increasing global market share, South African firms are likely to join the growing trend of bidding for government and donor tenders. Contracts for government or donor contracts to supply to public sector markets are becoming increasingly important due to the imperative of improving supply efficiency through economies of scale (Armand, 2006). Public tender contracts both globally and locally, while highly competitive, are lucrative and tend to ensure a certain amount of product loyalty and, as such, typically result in a 'winner takes all' system (Dummett, 2002). The impact of this trend on the end consumer, however, is not detailed in the literature and is likely to be a critical area for new research.

The market and supply structure of hormonal contraception pills in developing countries is understood to play a critical role in shaping the distribution of products. Much of recent research on the pharmaceutical industry has demonstrated that, in developing countries, the demand for contraception pills (including emergency contraception) is often two-tiered (Armand, 2006). The first-tier is typically characterised by a private-sector market selling commodities predominantly to high income consumers, while the second-tier consists of a public-sector agent distributing to low income consumers (Armand, 2006). In South Africa, this dichotomy is underscored by the distinction between private medical aid patients and public sector patients that receive free care in government hospitals and clinics. This distinction between public and private provision and demand tends to benefit larger research and development (R&D) pharmaceutical corporations. R&D companies are typically able to serve both markets by seeking profits in the private sector markets while taking advantage of economies of scale by selling large commodity volumes to government procurement agencies or donors (Armand, 2006).

The end result of the public-private market division for consumers is often an artificial hike in private sector drug prices and a potential lack of contraception choice in the public sector. Many analysts directly attribute the higher prices in the private sector to a 'de facto' system of cross-

subsidisation (Dummett, 2002; Gray and Matsebula, 1999). The mechanism driving this market strategy is the fact that pharmaceutical corporations are forced to lower drug prices to bid for competitive government tenders in order to supply to the larger public sector market. Companies then 'recoup' costs by raising prices for private sector clients (Gray and Matsebula, 1999). As such, the consumer price of pharmaceutical products in South Africa is widely recognised as being extremely high; perhaps as much as two to three times as high as in other middle income countries (Gray and Matsebula, 1999). Moreover, the price and availability of drugs are more likely to be determined by manufacturers themselves and are neither a reflection of real market values, the costs of production, or, most importantly, the need for specific commodities in the public health sector (Grey and Matsebula, 1999). Contraception products are not likely to escape the impact of market structure on price allocation. In terms of market size, hormonal contraception products represent a significant proportion of the pharmaceutical market in South Africa. Of all therapeutic classes, hormonal contraception (this includes emergency contraception in South Africa) is the fourth largest in the public sector and competition for government tenders remains high (Dummett, 2002).

The characteristics of the pharmaceutical industry also have a significant impact on the cost and availability of emergency contraception pills in South Africa. As a sector, the industry is characterised by a heavy reliance on regulatory institutions, the increasing importance of exports and the pursuit of global markets, and very high distribution costs. Regulatory structures play a key role in determining which types of commodities are sold and distributed globally. The wide variety of products available on the market and the importance of the safety and efficacy of pharmaceutical commodities require strict regulation. The lack of 'pre-qualification programmes' for hormonal contraception pills, however, enhances the importance of existing regulatory bodies on the approval, testing and certification of generic and bio-equivalent contraception pills (Armand, 2006). As a result, large R&D companies have been able to increase their global market share of these products as a result of having adequate resources to pursue U.S. Food and Drug Administration (FDA) approval for their products.

In the absence of an independent international regulatory body, it is often argued, institutions such as the FDA command significant leverage in the industry and, as a result, the scope for encouraging the production of cheaper generic and bio-equivalent products, as mandated by South Africa's National Drug Policy, is reduced (Armand, 2006). The command of the contraception industry by large R&D corporations has also lead to a certain level of secrecy within the industry. Complex contracting, subsidiary and licensing arrangements between national producers and global corporations are often difficult to untangle (Armand, 2006). It is often suggested in the literature, however, that pursuit of certification or regulatory approval is the driver behind this trend. On the whole, the large R&D companies enjoy the majority of the market share and will likely continue to do so as a result of significant economies of scale and the need for regulatory approval from industry institutions based in Western countries (Armand, 2006).

Several sector specific characteristics of emergency contraception commodities are also likely to ultimately affect the product received by the end consumer. Marketing costs play a significant role in shaping the hormonal contraception market and often act as a significant entry barrier for many contract manufacturers or licensed producers of contraception pills. Armand (2006) suggests that proper brand support is an essential component of sustainable contraception production. Moreover, it has been the experience of many low-cost manufacturers that marketing, public awareness campaigns, and 'behaviour-change interventions' are essential components of successful and sustainable contraception supply chains in developing countries (Armand, 2006).

Finally, the pharmaceutical industry on the whole is supply-driven and, as such, the provision of emergency contraception to end clients in public health clinics is likely to be impeded by both information asymmetries and market failure. Pharmaceutical products as 'ethical' commodities are not promoted to consumers, but rather to providers (Armand, 2006). With respect to emergency contraception, this places even more importance on the discretion of providers as the gatekeepers of emergency contraception pills (Smit and Gray, 1999). As the literature review of emergency contraception in South Africa will suggest, significant provider barriers are already likely to exist. Thus, compounding the situation is unequal knowledge and awareness of emergency contraception pills between providers and clients. Gray and Matsebula (1999) argue that the pharmaceutical industry, as a whole, is unique in that it does not 'follow classic market principles' and has a 'three-tiered' demand structure featuring providers, the health care system and the end client. This structure, it is suggested, erodes consumer leverage and impedes product knowledge and informed choice. Gray and Matsebula (1999) further submit that factors such as cost structures, prohibitive TRIPS,

disparity in product information and market structure have prevented the pharmaceutical industry as a whole from achieving the objective of equity without government intervention.

With respect to emergency contraception products specifically, this lack of equity in product availability has likely translated to a diminished level of informed choice for clients. The principle barriers to acceptable levels of both informed choice and emergency contraception take up in South Africa have been documented to include: 'lack of physical and financial access; lack of knowledge about the difference between emergency contraception and abortion; and inadequate knowledge by provider and consumer about dosing and dosing intervals, mechanism of action and side effects' (Smit and Gray, 1999). Government procurement policies and the consistency in which the National Drug Policy is applied *vis-à-vis* trade policy are also likely to have a significant influence on which manufacturers and suppliers are able to serve the public sector and, in turn, have an impact on the types of emergency contraception products that are available in both public sector clinics and private health care facilities.

EMERGENCY CONTRACEPTION IN SOUTH AFRICA: A LITERATURE REVIEW

In light of the underlying global, historical, political and market related factors that are likely to impact on the level of informed choice South African women enjoy with respect to contraception methods and, in particular, emergency contraception, a literature review of emergency contraception in South Africa is instructive. In 2000, all hormonal products used for emergency post-coital contraception were rescheduled by the Medical Control Council to Schedule 2 medicines (South African Government Gazette No. 21687 cited in McFadyen et al., 2003). McFadyen et al. (2003) explain that this effectively means that any of the hormonal contraception products, when used for emergency contraception, may now be obtained over the counter without a prescription. As such, the small body of research directed towards emergency contraception availability, awareness and take up in the years immediately after the re-scheduling of emergency contraception products represents a preliminary attempt to understand the existing challenges to the improved accessibility of emergency contraception pills for those who need them.

Types and variations of emergency contraception pills

There are many different types and variations of emergency contraception pills available worldwide. While it is ambitious to develop an exhaustive list of all emergency contraception products available, Table 2 displays the most widely available and accepted types worldwide. As suggested in the table, Norlevo is the most common dedicated emergency contraception product and is available without a prescription in South Africa, Sri Lanka, Sweden and Switzerland. Postinor is another popular dedicated emergency contraception product available in many countries and may be purchased over the counter in Sweden. Of the combination pills, Nordette is the most widely available and is accepted in most countries. In South Africa Norlevo, Ovral and Nordette are most commonly provided as emergency contraception.

Brand	Pill Type	Pills per dose	Country
Norlevo	Dedicated	2 pills within 120	Australia, France,
	product/Progestin	hours after	India, Italy
	Only	unprotected sex	Madagascar,
			Netherlands, Niger,
			Norway, Senegal,
			Spain, Sri Lanka*,
			Sweden*, South
			Africa*,
			Switzerland*
Postinor	Dedicated product/	2 pills within 120	Austria, Malaysia,
	progestin-only	hours of	Nigeria, Norway,
		unprotected sex	Russia, Spain,
			Sweden*
Postinor-2	Dedicated product/	2 pills within 120	Hong Kong,
	Progestin-only	hours after	Malaysia, New
		unprotected sex	Zealand*,
			Singapore, Sri
			Lanka, Switzerland,
			Taiwan, Zimbabwe
Microval	Progestin only	50 pills within 120	Australia,
		hours after	Botswana, France,
		unprotected sex	Germany, New
			Zealand, South

Table 2:The most available and accepted types of emergency
contraception

Nordiol	Combination (Progestin-Estrogen)	2 pills within 120 hours after unprotected sex and 2 more 12 hours later	Africa, Senegal, Sweden, Tanzania, Uganda, United Kingdom, Zambia, Zimbabwe Austria, Germany, Hong Kong, Malaysia, new Zealand, Nigeria, Sweden, Switzerland, Taiwan, Tanzania, United States
Ovral	Combination	2 pills within 120 hours after unprotected sex and 2 more 12 hours later	France, Germany, Hong Kong, India, Japan, Namibia, New Zealand, Senegal, Sierra Leone, South Africa, Sri Lanka, Tanzania, United States, Zambia, Zimbabwe
Nordette	Combination	4 pills within 120 hours after unprotected and 4 more 12 hours later	Austria, Botswana, France, Germany, Hong Kong, India, Malaysia, Namibia, New Zealand, Egypt, Norway, Sierre Leone, Singapore, South Africa, Sri Lanka, Sweden, Switzerland, Taiwan, Tanzania, Zambia, Zimbabwe
Loette	Combination	5 pills within 120 hours after unprotected sex and 5 more 12 hours later	Italy, India, Malaysia, New Zealand, Singapore, Australia, Germany

Note: * Emergency Contraception available over the counter without a prescription. Source: <u>www.not-2-late.co.za</u>

Contraception and emergency contraception in South Africa

The state is currently the main source of supply of contraception in South Africa. Contraception services, including emergency contraception, are available at no cost in public sector health facilities. As a result, the majority of South African women obtain contraception from public sector clinics. The remainder obtain contraception from private doctors, gynecologists, private hospitals and pharmacists (SADHS, 1999; Smit et al., 2004). At the national level, the Maternal and Child and Women's Health (MCWH) and Nutrition Cluster has primary responsibility for contraception service policy making and the provincial directorate is tasked with the responsibility of managing contraception services in line with national policies-through the district health system. Contraception service delivery points range from those at community level, mobile units, clinics and community health centers to district hospitals, referral/tertiary hospitals and academic centres (Department of Health, 2003).

Contraception use in South Africa is high compared to the other sub-Saharan African countries and the major form of contraception use in South Africa consists of modern methods of contraception⁴ (National Department of Health, 2006). The preferred family size is also declining in South Africa with over 60 percent of urban women and 31.8 percent of rural women wanting two or fewer children (Department of Welfare and Population Development, 1998). This trend towards a desire for smaller families is largely explained by increasing levels of education and income, better accessibility of services, and greater involvement of women in the labour force (Nkau, 1998).

Contraception is integral to the attainment of womans' health, especially when it is used to prevent pregnancies that are too early, too close, too late and too many (Smit et al., 2004). Worldwide, the use of modern contraception methods is often associated with higher levels of education (Kimuna and Adamchak, 2001; Koc, 2000; Oppong, 1983). A South African study on rural women concluded that the proportion of women who had ever used or were currently using a contraception method increased with the level of education from 16 percent among uneducated women to 67 percent among those with schooling (Chimere-Dan, 1996). Smit et al. (2004) found that women who had attained Grade 10 or beyond were more than twice as likely to use contraception compared with women with no education (78.1 percent versus 33.1 percent). These findings may be attributed to the fact that schools increase awareness and educate pupils regarding safe sex practices and contraception use. As such, the findings underscore the need for education and improved awareness in order to increase both the take up of contraception and the practice of safe sex.

Although support for contraception in South Africa is increasing, the level of fertility among young women remains high. Rates of teenage and unintended pregnancies are especially high in South Africa where more than one third of women have had their first child by the age of 19 years (SADHS, 1999). Most of these pregnancies are unplanned and are often unwanted. Almost 78 percent of births to women aged 19 or younger were unplanned (SADHS, 1999). Despite a decrease in the teenage pregnancy rate from 16 percent to 12 percent between 1998 and 2003 (National Department of Health, 2006), young South African women between the ages of 15-24 years have the highest unintended pregnancy rate and as a result, there is a desperate need to increase awareness and use of emergency contraception amongst young women, especially among this age group (Ibis Reproductive Health, 2005; Mqhayi et al., 2004).

The contraception revolution is occurring in the context of a high prevalence of STIs in South Africa, and indeed sub-Saharan Africa as a whole. Historically, STIs have not warranted significant attention in South Africa, however, with the rapid spread of the AIDS epidemic and the recognition of the role of STIs in enhancing HIV transmission, STI prevention and control has become a high priority. The results of antenatal surveys conducted on blood samples from women attending antenatal clinics show that HIV prevalence has risen from less than one percent in 1990 to almost 27.9 percent in 2003 (Department of Health, 2004). According to the 2004 national HIV survey, 32.5 percent of women attending state antenatal clinics in South Africa were HIV positive (Department of Health, 2005).

As the level of HIV infection continues to increase in many countries, the condom has an important role to play in curbing the intensity and future impacts of the pandemic (Kapiga et al. 1995). Laboratory and epidemiological studies have shown the latex condom to be an effective barrier against HIV and other STIs, if used correctly and consistently (Center for Disease Control 1998; Cates 2001). Studies show that condom use is low in South Africa; however, recent data suggests that use is increasing, especially among young people. In 1998, the South African Demographic and Health Survey reported that less than 20 percent of

women in the age group 15 to 24 years reported condom use at last sex. Among those in the same age group, almost 50 percent of women in more recent surveys reported condom use at last sex (Rutenberg et al., 2001; National Department of Health, 2006; Maharaj, 2006). Increased take up of condoms, however, increases the need for emergency contraception as a method for dual protection against pregnancy and HIV infection in the event of method failure (condom breakage) (Smit et al., 2001; Ibis Reproductive Health, 2005; Morroni et al., 2003; Smit et al., 2004).

Family planning and emergency contraception

There are currently no age restrictions on access to contraception services in South Africa. Young people may have access to sexual and reproductive health care without the permission of their parents. The 2001 contraception policy emphasizes the need to use barrier methods in an attempt to reduce the incidence of sexually transmitted infections, HIV and unwanted pregnancy (Mqhayi et al., 2004). Although most contraception methods are efficient in preventing unwanted pregnancies they can, however, fail or be used incorrectly. As a result, emergency contraception can provide backup in these situations and can be used to prevent unwanted pregnancies by women who do not use a contraception method on a continual basis (Senanyake, 1996; Feijo, 2005; Morroni et al., 2003). Emergency contraception, as a family planning method, enhances reproductive choice and is especially useful for women who may have limited control over their sexual lives (Blanchard et al., 2005). According to Rudgers and Verkuyl (1998: 145), 'thousands of unwanted pregnancies that end in ruined lives happen every day because so few teenagers in this part of the world protect themselves at the time of first sexual intercourse. Emergency contraception can give them a second chance.'

Emergency contraception also forms an important part of the treatment regime for survivors of sexual violence. In South Africa, as in other parts of Africa, rape and other forms of sexual coercion are, unfortunately, very common (Meerkotter, 2002). Violence against women has detrimental consequences for women's health which include the risk of HIV infection and unwanted pregnancy. Women's vulnerability to violence and HIV infection is compounded by poverty and the subordinate status of women both in society and within relationships (Meerkotter, 2002). The national contraception guidelines recommend that post-rape management and care should include the provision of emergency contraception pills (Department of Health, 2001). According to Meerkotter (2002), women who have been

sexually assaulted should be given information on emergency contraception as well as their right to have an abortion and information on how to obtain one if they present late or if emergency contraception has failed. However, at an emergency strategy meeting held in Durban, participants expressed concern that research is lacking about whether and how hospitals/clinics provide emergency contraception pills in these circumstances (Emergency Contraception Strategy Meeting, 2005). Moreover, it has been observed that there are no specific policies or a set of guidelines for dealing with reproductive choice among HIV infected individuals in South Africa. On the whole, both advocates and policymakers have expressed concern about a lack of guidelines, insufficient training in contraception, inadequate dual method counseling and the limited reference made to emergency contraception in public health facilities (Cooper et al., 2005).

Availability of emergency contraception products

South Africa is one of the many countries that make emergency contraception pills available directly to those that need them without a prescription (Ibis Reproductive Health, 2005). Most advocates agree that the most effective and systematic way of ensuring that women have access to emergency contraception when they need it is by making it available over the counter (Boonstra, 2002). Women who are forced to wait for clinic or physician appointments to obtain access to emergency contraception often face significant delays; potentially compromising the efficacy of the treatment (Van Riper and Hellerstedt, 2005). To this end, it is often suggested that direct pharmacy provision of emergency contraception ensures quick and easy access by removing the barriers associated with obtaining a prescription from a health care provider (Blanchard et al., 2005).

In the Department of Health's *Framework for the National Contraception Policy Guidelines*, emergency contraception is rated as a core contraception option that should be more actively promoted, especially among adolescents, together with the active promotion of condoms for dual protection against STIs (including HIV) and pregnancy (McFadyen et al., 2003; Department of Health, 2003). The guidelines articulate that ECPs in the form of regular oral contraception pills should be available at all levels of service delivery but acknowledge that they currently require more extensive promotion (Department of Health, 2003).

Brand	Type of EC	Dose- tablets (12 hours apart)	1999 Cost- public sector (total dose)	1999 Cost- private sector (total dose)
E-Gen-C	COC	2+2	R2.85	R24.62
Ovral 28	COC	2+2	R0.27	R3.38
Nordette	COC	4+4	R0.52	R4.06
Microval	POP	15+25	R3.56	R25.34
Norlevo	POP	1+1	Not available	Not available

Table 3:Products available for use as emergency contraception inSouth Africa (1999)

Source: McFayden et al. 2003

In South Africa, public sector clinics provide emergency contraception free and it is largely supplied in the form of combined oral contraception pills (primarily Ovral-28). Smit et al. (2001: 334) explain that the emergency contraception course is cut up and pre-packaged by dispensary staff and is seldom accompanied by written instructions for users. A dedicated combined estrogen/progestin product (E-gen-C) was available between 1999 and 2004-5 and a dedicated levonorgestrel-only emergency contraception pill (Norlevo) was introduced in 2001. However, the dedicated products are often too expensive (Table 3) for most public sector facilities to offer and, as a result, their availability is largely limited to private sector pharmacies (Smit et al. 2001; Maghavi, Smit, McFadyen, Beksinska, Connolly, Zuma & Morroni, 2004). In the public sector, the range of contraception methods is comparatively limited (Department of Health, 2003). The two most widely promoted methods of emergency contraception at most public clinics consist of either an injectable or some form of contraception pill. Women are typically not offered an adequate contraception method mix that includes methods for dual protection and/or emergency contraception (Department of Health, 2003). Furthermore, private sector services are available on both weekdays and weekends whereas public-sector services are generally only made available to the public between 7h00 to 16h00 on weekdays (de Bruyn, 2004).

Client awareness and knowledge of emergency contraception

Knowledge of, access to and the use of emergency contraception are essential to a reduction in the prevalence of unwanted pregnancies following unprotected sexual intercourse (Department of Health, 2003). In general, however, the level of knowledge of emergency contraception is fairly low among South African women and public health sector clients, in particular. While nationally representative data on the take up of emergency contraception is not available, most studies show that very few people have even heard of emergency contraception (Ehlers, 2003; Mqhayi et al., 2004; Smit et al., 2001). A study of 250 adolescent mothers in South Africa, for example, found that approximately one fifth of the respondents were aware of the existence of emergency contraception and that even fewer knew that ECPs could be taken to prevent pregnancies after unprotected intercourse (Ehlers, 2003). Moreover, Smit et al. (2001) found that even women who heard of emergency contraception were often misinformed about its specific attributes or were not aware of the indications. For example, 47 percent of respondents who knew of the method were uncertain about how soon after unprotected intercourse emergency contraception should be taken (Smit et al., 2001).

Smit et al. (2001) found that in public sector primary health care facilities in two urban and two rural sites in South Africa, knowledge of emergency contraception was significantly lower in the rural areas, especially among older, less educated women. Knowledge was highest in urban sections of the Western Cape Province (34 percent) and was lowest in KwaZulu-Natal (11 percent). Knowledge of emergency contraception was about twice as great among 15-24-year-olds and 25-34-year-olds (25 percent each) than among older women (13 percent), and was more than twice as great among those with at least some secondary education (28 percent) as among the less-educated (11 percent). More than half of the women surveyed were uncertain of the appropriate interval between unprotected sexual intercourse and the ingestion of emergency contraception pills.

Most of the recent studies on emergency contraception in public sector clinics support the finding that awareness of emergency contraception is generally low. Adding to the justification for the improvement of client knowledge about emergency contraception products are the findings from a comparative study conducted in 14 public health facilities offering family planning in a rural district of KwaZulu-Natal and in 17 clinics from an urban area in Gauteng (Mqhayi et al., 2004). The study found that of the young women interviewed, only 25 percent in Gauteng and 11 percent in rural KwaZulu-Natal had ever heard of emergency contraception. More respondents from Gauteng (42 percent) knew the correct timing of emergency contraception dosages compared with far fewer (17 percent) in KwaZulu-Natal. The others did not know or were unsure of the maximum length of time allowed for emergency contraception efficacy after unprotected sexual intercourse.

While higher levels of education are associated with a greater awareness of and a higher take up of modern contraception, research suggests that, in South Africa, education is not necessarily associated with knowledge of emergency contraception. A study of knowledge, use and attitude to the use of emergency contraception among tertiary students in Durban, South Africa found that knowledge of emergency contraception by tertiary students was limited (Roberts et al., 2004). The study found that almost 57 percent had heard of emergency contraception, but that few were aware of the available methods of emergency contraception. Moreover, only 8 percent knew how effective emergency contraception was in preventing an unwanted pregnancy. Not surprisingly, the strongest predictors of a high level of emergency contraception knowledge were having heard of emergency contraception, having used it before and having received formal sex education.

The potential benefits accrued from an improved take up of emergency contraception have also been the subject of recent research. A study investigating knowledge, awareness and use of emergency contraception in two groups of women: those requesting emergency contraception after sexual misadventure and another group of women requesting termination of pregnancy provides further insight into the potential benefits of emergency contraception. The study found that among women requesting termination of pregnancy, 40 percent had not heard of emergency contraception. Drawing from this finding, the study suggests that a lack of awareness of emergency contraception may directly contribute to the number of legal abortions performed (Siebert and Steyn, 2002). Supporting this conclusion, a crosssectional survey of women presenting at Gauteng public hospitals with incomplete abortions also found low levels of emergency contraception awareness (Dickson-Tetteh et al., 2000). While termination of pregnancy is legal in South Africa and the number of legal abortions performed annually is rising steadily, these services remain inaccessible to the majority of women because of provider resistance and a lack of designated facilities in rural areas (Harrison et al., 2000). On the whole, it is widely recognised that greater access to emergency contraception could contribute to a decline in the number of both legal and illegal abortions (Smit et al., 2001).

Perhaps most importantly, research shows that there is a need to increase awareness of both emergency contraception and of the source of supply. Few women are aware of a source of supply of emergency contraception pills even though most health facilities in South Africa currently stock some form of emergency contraception. The national primary health care facilities survey found that emergency contraception was widely available at most public health facilities and that emergency contraception was available in 80 percent of health facilities in KwaZulu-Natal (Health Systems Trust, 2005). The widespread availability of emergency contraception pills notwithstanding, McFayden et al. (2003) found that more than half the women surveyed were unaware that emergency contraception was available at the clinic that they were visiting. Similarly, Smit et al. (2001) observed that nearly all clinic managers interviewed knew that their facility offered emergency contraception, but that 57 percent of women who reported familiarity with emergency contraception did not know if it was available from the facility in which they were interviewed.

Provider knowledge of emergency contraception

That many providers are aware of the indications and efficacy of emergency contraception notwithstanding, recent research has demonstrated that not all health care professionals are sufficiently knowledgeable. Hariparsad (2001a) argues that there is an urgent need to improve the knowledge of emergency contraception among health care professionals. Tellingly, only approximately one third of pharmacists and 28 percent of doctors prescribed the Yuzpe regimen⁵ correctly in a micro-study of health facilities in Durban, KwaZulu-Natal. Few were able to identify common side effects associated with emergency contraception pills, while just over half of pharmacists and 35 percent of doctors agreed that emergency contraception should not be used multiple times (Hariparsad, 2001a). A more recent study examining pharmacists' knowledge of emergency contraception in two urban areas of Johannesburg after the method became available over the counter found that pharmacists were more familiar with emergency contraception (Blanchard et al., 2005). However, six in ten pharmacists believed that using emergency contraception more than once posed serious health risks to women and two pharmacists incorrectly described the medication as an abortifacient. In general, it would appear that mistaken perceptions about the repeated use of emergency contraception still exist. Repeat use of emergency contraception has often been associated with adverse health effects, although there is substantial clinical evidence to suggest that repeat use is safe (Hariparsad, 2001b; Langer et al., 1999; Gold et al., 1997). Such gaps in provider

knowledge have been shown to result in the limited provision of emergency contraception in health facilities (Golden et al., 2001).

Research has shown that the use of emergency contraception is also likely to be influenced by the attitudes of providers (Weisberg et al., 1995). According to Chiou et al. (1998), it is not simply a lack of provider knowledge that contributes towards the under-utilisation of emergency contraception but also the attitudes of health providers and their reluctance to prescribe it. Several studies have found that pharmacists perceive that access to emergency contraception could promote promiscuity, increase the incidence of STIs and decrease the use of barrier methods (Hariparsad, 2001b; Blanchard et al. 2005). In turn, the belief that greater access to emergency contraception results in risky sexual behaviour is likely to serve as a significant obstacle to the willingness of health professionals to provide it (Blanchard et al., 2005). On the whole, pharmacists have been found to not approve of advance provision because of a concern that having an advanced supply would increase the likelihood of the use of emergency contraception pills as a regular form of contraception. Similarly, very few providers have been willing to provide emergency contraception to either third parties or to male partners. Providers are generally of the opinion that women need to obtain direct counseling on method, risks, long-term contraception strategies and follow up (Blanchard et al., 2005).

Attitudes towards the provision of emergency contraception are understood to be highly variable as evidenced by a range of studies. A recent study of pharmacists' attitudes in Johannesburg found, for example, that respondents generally viewed emergency contraception as an effective method for avoiding an unwanted pregnancy, but that the provision of emergency contraception pills should be limited to only a few clinical situations (Blanchard et al., 2005). Overall, pharmacists relayed that the pills were not appropriate for women younger than 18 and admitted to denying young people access to emergency contraception. Other studies support this finding and add that providers often impose age restrictions that prevent young women from accessing contraception methods (Ehlers, 2003; Netshikweta and Ehlers, 2002). The extent of this occurrence, however, is unknown as findings from the study by McFayden et al. (2003) note that almost two thirds of providers felt that there was no minimum age for them to prescribe emergency contraception. Most providers participating in that study reported that they were willing to provide emergency contraception to young people

over 16 years with the percentage declining to 83 percent for under 16 years and to 64 percent to those under 14 years.

The literature suggests, however, that provider attitudes to emergency contraception often serve as barriers to take up in a number of different ways. A study investigating barriers to the use of emergency contraception as a measure of fertility control in Mdantsane found that the attitude of providers to emergency contraception directly resulted in a lack of knowledge about the method (Mangesi, 1999). Similarly, a study of Durban pharmacies that employed a randomised controlled mystery client visit following an educational intervention found that pharmacists, on the whole, are willing to recommend emergency contraception, but that many pharmacists do not adequately advise clients. Most pharmacists dispensed the repackaged Ovral product, which was considerably cheaper than the dedicated emergency contraception pills, and advised clients on the time period within which emergency contraception should be used after unprotected sex. Although the need to counsel clients about side effects and their management is important, this was done by only half of the pharmacists interviewed. Few pharmacists counseled clients on long term contraception options and only 15 percent provided counseling on the risks of STIs/HIV (Manzini et al., 2004).

Together with a lack of client knowledge of availability, a paucity of educational material or literature available in health facilities is also likely to be contributing to the low take up of emergency contraception products and services. In the Durban study, Hariparsad (2001b) found that few pharmacists reported having literature on emergency contraception to provide to clients. More recent studies have supported this finding and have added that few pharmacists have IEC or reproductive health material on emergency contraception available to clients (McFayden et al., 2003). A large body of literature supports the conclusion that health professionals have an important opportunity to counsel emergency contraception clients on other aspects of reproductive health such as STIs, HIV/AIDS and regular contraception use (Harrison et al., 1989; Gold et al., 1997; Parker, 2005).

Use of emergency contraception

Most studies suggest that the take up of emergency contraception is very low. In the study of public health facilities in rural KwaZulu-Natal and in urban areas of Gauteng, Mqhayi et al. (2004) found that of those young women who had previously heard of emergency contraception, only one from each province had ever used it. One woman explained that her main reason for using emergency contraception was condom failure while the other said she had missed her menses. Both women purchased their emergency contraception pills from pharmacies rather than obtaining them free from public sector clinics. The main source of knowledge about emergency contraception was a friend in one case and a family member in the other. Both women reported that they would like to have a spare package of emergency contraception pills at home in case there is ever a need. Almost 39 percent of the women participating in the study reported having unprotected sexual intercourse in the year prior to the interview, with rural women more likely to report it. The majority reported that they did not consider using emergency contraception because of a lack of knowledge of this method.

The low take up of emergency contraception products is likely the direct result of a variety of factors. Mqhayi et al. (2004) observed that the provision of emergency contraception without a doctor's prescription has improved accessibility to a certain extent, but noted that both the limited number of health facilities in rural areas and the prohibitive price of dedicated products (such as Norlevo) serve as access barriers for many young women. The cost of Norlevo is relatively expensive at R60/dose in private clinics and pharmacies in South Africa (Mghayi et al., 2004). However, the finding of Smit et al. (2001) that those who had used emergency contraception had purchased it from private sector pharmacies, suggests a lack of awareness of its availability in public clinics. That a general lack of awareness is affecting the take up of emergency contraception, is supported by a significant number of unwanted pregnancies in South Africa. Smit et al. (2001) found that 65 percent of women participating in a survey reported that they had become pregnant at least once when they were not ready--varying from 59 percent in the rural parts of Western Cape Province to 78 percent of women in KwaZulu-Natal. Among the women who had been sexually active in the year preceding the survey, 68 percent were currently using some form of regular contraception; most (71 percent of users) relied on an injectable contraception device, while 15 percent used the pill and 12 percent condoms.

The study of tertiary students in Durban found that use of emergency contraception was very low with only 12 percent reporting that they had ever used it. Despite displaying relatively low levels of awareness, however, the students expressed strong interest in emergency contraception. Almost half reported that they would use it or recommend it to a friend (Roberts et al., 2004). Similarly, the study of adolescent mothers in South Africa found that only one woman attempted to obtain emergency contraception pills but was not successful in doing so because it was during a weekend when clinics are closed (Ehlers, 2003). The women participating in the study provided a number of reasons for not using emergency contraception. Some reported that they did not attempt to use emergency contraception pills because of the fear that their baby might be malformed if they took pills while some did not believe that they could fall pregnant. Other reasons for not using emergency contraception included: a lack of information, belief that the pills were not effective, fear of committing murder and also, resistance from partners and mothers. One woman stated that she did not want the clinic staff to know about her sexual activities and as a result, did not request emergency contraception pills (Ehlers, 2003).

Despite low rates of take up and the barriers preventing improved access, there is some emerging evidence to suggest that the demand for emergency contraception is growing. A study conducted in North and South Central Durban in KwaZulu-Natal using hand delivered, confidential questionnaires among private sector pharmacists and doctors found that 96 percent of pharmacists and 93 percent of doctors had received requests for emergency contraception pills within the last year (Hariparsad, 2001a). More than two thirds of pharmacists were in favour of making ECPs available without a doctor's prescription and almost 62 percent were already supplying ECPs without a doctor's prescription (prior to 2000), although a large proportion still did not have a private room in which to counsel clients (Hariparsad, 2001b). Further evidence of a growing demand for emergency contraception is provided by a study in Johannesburg that found that most pharmacists sold at least one of the two dedicated products. Intuitively, some pharmacists attributed an increased demand for emergency contraception pills to their rescheduling by the Medical Control Council (Blanchard et al., 2005).

CONCLUSION AND RECOMMENDATIONS

A review of the literature describing the global, historical and market-related factors affecting the availability and accessibility of emergency contraception products suggests that, progressive reproductive health policy and the legal re-scheduling of EC pills notwithstanding, there is not currently an enabling environment for the increased take up of emergency contraception in South Africa. Moreover, while some studies have

investigated both the role of providers and the awareness of and take up of emergency contraception by clients, there are still several gaps in the literature around the informed choice of South African women. We conclude with the following recommendations for further research investigating emergency contraception in South Africa:

- Research should focus on the difference in the provision and availability of EC in the public and private health sectors
- In addition to investigating the attitudes and awareness of providers, studies should also investigate the use of guidelines and training protocols by providers of EC
- More attention should be focused on the differences between dedicated and non-dedicated EC products and the impact of these products on consumer awareness of and demand for EC in South Africa
- Information asymmetries are likely to exist at several points in the EC supply chain and further research should attempt to understand how these asymmetries are impacting on the perceived demand for EC and on the supply and distribution of both dedicated and non-dedicated EC pills
- The market structure of emergency contraception should be analysed with a view to better understanding the impact of market structure and firm-level strategy on the end consumers of EC
- The role of the private sector in supplying and distributing EC and the context in which reproductive health commodities such as emergency contraception are introduced and promoted should be further researched

ENDNOTES

- 1 The authors gratefully acknowledge comments received on earlier drafts of this paper from colleagues at both the University of KwaZulu-Natal and the International Center for Research on Women- Washington D.C. and India. The usual caveats apply, however, and any errors or omissions are the sole responsibility of the authors.
- 2 The Programme of Action derived from the ICDP was grounded in the equity and human rights norms established by a number of

preceding international conventions (e.g. Fourth World Conference on Women in Beijing, United Nations Universal Declaration of Human Rights).

- 3 The Act does not, however, describe the local content required for pharmaceutical products finished by local manufacturers.
- 4 Modern methods of contraception include: male and female condoms, contraception pills, IUD devices, injectables, diaphragms, male and female sterilisation and implants.
- 5 Often considered the original method of emergency contraception, the Yuzpe Regimen was developed by a Canadian professor in the early 1970's and consists of two doses of combined (estrogen and progestin) oral contraceptive pills taken 12 hours apart.

REFERENCES

Armand F (2006) Improving Hormonal Contraceptive Supply: The Potential
Contribution of Manufacturers of Generic and Biosimilar Drugs. PSP-
One Technical Report Series: Technical Report No. 2: Bethesda, MD
Beitz J (2002) Emergency contraception: a vital component of reproductive
health programs. West J Med 176(3): 152-154.
Blanchard K and Harrison T et al (2005) Pharmacists' Knowledge and
Perceptions of Emergency Contraception Pills in Soweto and
Johannesburg Central Business district, South Africa. International
Family planning Perspective 31(4): 172-178.
Boonstra H (2002) Emergency contraception: Steps been taken to improve
access. Guttmacher Report on Public Policy 5(5).
Brown B. (1987) Facing the Black Peril: The Politics of Population Control
in South Africa. Journal of Southern African Studies 13: 256-273.
Bruyn D (2004) Living with HIV: Challenges in Reproductive Health Care
in South Africa.' African Journal of Reproductive Health 8(1): 92-98.
Buch E (1987) Health Services in the South African Homelands.
Johannesburg, University of the Witwatersrand.
Caldwell J and P Caldwell (1993) The South African Fertility Decline.
Population and Development Review 19(2): 225-262.
Cates W (2001) The NIH Condom Report: The Glass is 90% Full. Family
Planning Perspectives 33(5): 231-233.

- CDC (Center for Disease Control and Prevention) (1998) Update: barrier protection against HIV infection and other sexually transmitted diseases. *Morbidity and Mortality Weekly Report* 42: 589-591.
- Cheng I, A Gulmezoglu et al (2004) Interventions for emergency contraception (Cochrane Review), *Cochrane Library*. UK, John Wiley & Sons.
- Chimere-Dan O (1993) Population Policy in South Africa. *Studies in Family Planning* 24(1): 31-39.
- Chimere-Dan O (1996) Contraception Prevalence in Rural South Africa. International Family planning Perspectives 22(1): 4-9.
- Chiou V M, L Y Shrier et al (1998) Emergency Contraception Journal of Paediatric and Adolescent Gynaecology 11(2): 61-72.
- Coetzee D and R Ballard (1996) Controlling the Epidemic of sexually transmitted diseases in South Africa the role of syndromic management.' *CME* 14(6): 819-827.
- Cooper D, Morroni C, Orner P, Moodley J, Harries J, Cullingworth L and Hoffman M (2004) Ten Years of Democracy in South Africa: Documenting Transformation in Reproductive Health Policy and Status. *Reproductive Health Matters* 12(24): 70-85.
- Cooper D, H Bracken et al (2005) Reproductive intentions and choices among HIV-infected individuals in Cape Town South Africa. *Policy Briefs*. Cape Town, Women's Health Research Unit.
- Delbanco S, J Mouldon et al (1997) Little knowledge and limited practice: emergency contraception pills, the public and the obstretrician gynaecologist. *The American College of Obstretricians and Gynaecologists* 89: 1006-1011.
- Department of Health (1975) Annual Report. Pretoria Department of Health.
- Department of Health (1996) National Drug Policy. Pretoria, Department of Health.
- Department of Health (2001) National Contraception Policy guidelines within a reproductive health framework- Republic of South Africa. Pretoria, Department of Health.
- Department of Health (2002) National HIV and Syphilis Sero-prevalence Survey of Women Attending Public Antenatal Clinics in South Africa - 2001, Summary Report. South Africa, Department of Health.
- Department of Health (2003) National Contraception Service Delivery Guidelines with a Reproductive Health Framework. Pretoria, Department of Health.

Department of Health (2004) National HIV and Syphilis Sero-prevalence Survey of Women Attending Public Antenatal Clinics in South Africa - 2003, Summary Report. South Africa, Department of Health.

Department of Health (2006) Preliminary Report on the 2003 Demographic and Health Survey. Pretoria, National Department of Health.

Department of Trade and Industry (2003) International Trade Administration Act. Pretoria, Department of Trade and Industry.

Department of Welfare and Population Development (1998) Population Policy for South Africa. Pretoria, Department of Welfare and Population Development.

Dickson-Tetteh K, H Brown et al (2000) An Evaluation of the Implementation of the Choice on Termination of Pregnancy Act. Pretoria, Department of Health.

Dummett H (2002) An Overview of Supply and Demand in South Africa's Pharmaceutical Industry- Opportunity or Risk. World Markets Research Centre.

- Ehlers V (2003) Adolescent mothers' utilization of contraception services in South Africa. *International Nursing Review* 50: 229-241.
- Emergency Contraception Strategy Meeting (2005) Notes from the Emergency Contraception Strategy Meeting held in Durban, South Africa on 2 June, 2005.

Feijo A M (2005) Emergency Contraception: A Safe & Effective Contraception Option for Teens. Washington, Advocates for Youth.

Fonn S, Xaba M, Tint K S, Conco D, and Varkey S (1998) Reproductive health services in South Africa: From rhetoric to implementation. *Reproductive Health Matters* 6(11): 22-31.

Gold M, A Schein et al (1997) Emergency contraception: a national survey of health experts. *Family planning Perspectives* 29(1): 15-19.

Golden N et al (2001) Emergency Contraception: pediatricians' knowledge, attitudes and opinions. *Pediatrics* 107(2): 287-292.

Gray A and Matsebula T (1999) Chapter 9: Drug Pricing, South African Health Review 1999, Health Systems Trust: Durban, South Africa

- Gray A and Suleman F (2000) Chapter 13: Drug Policy.' South African Health Review 2000, Health Systems Trust: Durban, South Africa
- Hariparsad N (2001a) Knowledge of emergency contraception among pharmacists and doctors in Durban, South Africa. *European Journal* of Contraception and Reproductive Health Care 6(1): 21-6.
- Hariparsad N (2001b) Attitudes and practices of pharmacists towards emergency contraception in Durban, South Africa. *European Journal* of Contraception and Reproductive Health Care 6(2): 87-92.

- Harris N (1999) How accessible is the morning after pill and pregnancy kits at pharmacies? *Women's Health Newsletter* 32(5): 5-6.
- Harrison A, E Montgomery et al (2000) Barriers to implementing South Africa's Termination of Pregnancy Act in rural South Africa. *Health Policy and Planning* 15: 424-31.
- Harrison J, M Varnam et al (1989) A request for the 'morning after' pill. *Practioner* 233: 899-902.
- Haselgrave M (2004) Implementing the ICPD Programme of Action: What a Difference a Decade Makes. *Reproductive Health Matters* 12(23): 12-18.
- Health Systems Trust (2004) The National Primary Health Care Survey 2003- KwaZulu-Natal. Durban, Health Systems Trust and Department of Health.
- Hiemburger A, Gras C and Guedes A (2003) Expanding Access to Emergency Contraception: The Case of Brazil and Colombia. *Reproductive Health Matters* 11(21): 150-160.
- Heywood M (2002) Drug Access, Patents and Global Health: Chaffed and Waxed Sufficient. *Third World Quarterly* 23(2): 217-231.
- Ibis Reproductive Health (2005) Moving beyond access to improve knowledge and use of EC in South Africa. *Summer 2005 Newsletter*. Johannesburg, Ibis Reproductive Health.
- International Trade Administration Commission of South Africa (Undated,a) Goods Subject to Import Control Measures.
- International Trade Administration Commission of South Africa (Undated, b). Goods Subject to Export Control Measures.
- Kapiga S, G Lwihula et al (1995) Predictors of AIDS knowledge, condom use and high risk sexual behaviour among women in Dar-es-Salaam, Tanzania. *International Journal of STD and AIDS* 6: 175-183.
- Kaufman C (1998) Contraception Use in South Africa. *Demography* 35(4): 421 434.
- Kaufman C (2000) Reproductive Control in Apartheid South Africa. *Population Studies* 54: 105-114.
- Kimuna S and D Adamchak (2001) Gender Relations: Husband-Wife Fertility and Family planning Decisions in Kenya. *Journal of Biosocial Science* 33: 13-23.
- Klugman B (1993) Balancing Means and Ends- Population Policy in South Africa. *Reproductive Health Matters* 1: 44-57.
- Klugman B (1999) Health Sector Reform and Sexual and reproductive Rights and Health in South Africa: The Challenge of Equity and Quality. *The Implications of Health Sector Reform for Reproductive*

Health and Rights. Center for Health and Gender Equity: Takoma Park, MD.

- Koc I (2000) Determinants of Contraception Use and Method Choice in Turkey. *Journal of Biosocial Science* 32: 329 - 342.
- Langer A and e al (1999) Emergency contraception in Mexico City: what do health providers and potential users know and think about it? *Contraception* 60(4): 233-241.
- Lubben M Mayhew S Collins C and Green A (2002) Reproductive Health and Health Sector Reform in Developing Countries: Establishing a Dialogue. *Bulletin of the World Health Organization* 80(8):
- Lush L (2000) Integrating HIV/STD and primary health care services: International policy developments and national responses with special reference to South Africa. London, University of London.
- Lush L (2002) Service Integration: An Overview of Policy Developments. International Family Planning Perspectives 28(2): 71-76.
- Magwaza S and D Cooper (2002) Reproductive Health Service Integration in South Africa. *Nursing Standard* 16(13): 33-39.
- Maharaj P and Cleland J (2005) Integration of Sexual and Reproductive Health Services in KwaZulu-Natal, South Africa. *Health Policy and Planning* 20(5): 310-218.
- Maharaj P (2006) Reasons for condom use among young people in KwaZulu-Natal: Prevention of HIV, Pregnancy or Both? *International Family planning Perspective* 32(1): 29-34.
- Mangesi L (1999) Barriers to the use of emergency contraception as a measure of fertility control in Mdantsane. *Maternal and Child Health Nursing*. Durban, University of Natal.
- Mantell J, E S Hoffman et al (2003) Family planning Providers Perspectives on Dual Protection. *Perspectives on Sexual and Reproductive Health* 35(2): 71-78.
- Manzini N J Smit et al (2004) Provision of emergency contraception from pharmacies in Durban, South Africa. Durban, Reproductive Health Research Unit.
- Matthews P (1999) Creating a Policy Consensus on Reproductive Health in South Africa. International Council on Management of Population Programmes.
- McIntyre D and Klugman B (2004) The Human Face of Decentralisation and Integration of Health Services. *Reproductive Health Matters* 2: 28-41.
- McFadyen L, J Smit et al (2003) Expanding contraception choice: An African Study of Emergency contraception. A multi-centre situational

analysis of emergency contraception provision and utilization at public sector clinics in South Africa. Johannesburg, Reproductive Health Research Unit.

- Meerkotter A (2002) Violence against young women and HIV/AIDS: Access to post-exposure prophylaxis after rape in South Africa. Paper presented at the Eastern and Southern African Symposium on Young Women and AIDS, Nairobi, 26-30, Nairobi, 25-30 November.
- Mhlanga R (2003) Abortion: Developments and Impact in South Africa. British Medical Bulletin 67: 115-126.
- Morroni C, Smit J, McFayden L, Mqhayi M, and Beksinska M (2003) Dual Protection against Sexually Transmitted Infections and Pregnancy in South Africa. *African journal of reproductive health* 7(2): 13-19.
- Mqhayi M, J Smit et al (2004) Missed opportunities: Emergency Contraception Utilisation by Young South African Women. *African Journal of Rreproductive Health* 8(2): 137-144.
- Netshikweta M L and V Ehlers (2002) Problems experienced by pregnant student nurses in the Republic of South Africa. *Health Care for Women International* 23(1): 71-83.
- Nkau D (1998) How fertility rates vary in different parts of South Africa: The use of GIS in demography. *In Focus Forum* 5(3): 30-33.
- Oppong C (1983) Women's roles, opportunity costs and fertility. *Determinants of Fertility in Developing Countries.* R Bulatao and R Lee. New York, Academic Press.
- Parker C (2005) Adolescents and Emergency Contraceptive Pills in Developing Countires. Family Health International Working Paper Series: *Working Paper 05-01*.
- Pettifor A, H Rees et al (2004) HIV and sexual behaviour among young South Africans: A national survey of 15-24 years olds. Johannesburg, Reproductive Health Research Unit.
- Pham-Kanter G, M Steinberg et al (1996) Sexually Transmitted diseases in South Africa. *Genitourinary Medicine* 72(3): 160-171.
- Poku N and Whiteside A (2002) Global Health and the Politics of Governance: An Introduction. *Third World Quarterly* 23(2): 191-195.
- Roberts C, J Moodley et al (2004) Emergency contraception: knowledge and practices of tertiary students in Durban, South Africa. *Journal of Obstretrics and Gynaecology* 24(4): 441-5.
- Rudgers R and D Verkuyl (1998) Please help, our condom last night. *South African Medical Journal* 88(2): 143-145.

- Rutenberg N, A Dallimore et al (2001) Transitions to Adulthood in the Context of AIDS in South Africa: Report of Wave 1. New York, Population Council.
- Senanayake P (1996) Emergency Contraception: The International Planned Parenthood Federation's Experience. *International Family planning Perspective* 22(2): 69-70.
- Siebert I and P S Steyn (2002) Knowledge and use of emergency contraception in a tertiary referral unit in a developing country. *European Journal of Contraception and Reproductive Health Care* 7(3): 137-143.
- Simmons R, Hall P, Diaz J, Diaz M, Fajans P, Satia J (1997) The Strategic Approach to contraceptive Introduction. *Studies in Family Planning* 28(2): 79-94
- Smit J, M Beksinska et al (2004) Reproductive Health. *South African Health Review 2005*. Durban, Health Systems Trust.
- Smit J, L McFadyen et al (2001) Emergency Contraception in South Africaknowledge, attitudes and use among public sector primary health care clients. *Contraception* 64(6): 333-337.
- Smith D and J Bryant (1988) Building the infrastructure for PHC: An overview of vertical and integrated approach. *Social Science and Medicine* 26: 909-917.
- Smit J and Gray A (1999) 'Legal Constraints to the Provision of Emergency Contraceptive Pills: The Views and Recommendations of the Emergency Contraception Research Group of the Africa Centre for Population Studies & Reproductive Health and The Pharmaceutical Policy Practice Group, University of Durban-Westville.' Position Paper, June 1999.
- South African Demographic and Health survey (SADHS) (1999) South African Demographic and Health Survey 1998: Full Report. Pretoria and Calverton, South African Medical Research Council and Macro International.
- Statistics South Africa (2005) *Statistics in Brief* 2005. Pretoria, Government Printers.
- Thomas C (2002) Trade Policy and the Politics of Access to Drugs. *Third World Quarterly* 23(2): 251-264
- Tollman S and L Rispel (1995) Organisation, Planning and Management. South African Health Review Durban, South Africa, Health Systems Trust.

- Trussell J, G Rodriquez et al (1999) Updated estimates of the effectiveness of the Yuzpe regimen of emergency contraception. *Contraception* 59: 147-151.
- Van Riper K K and W L Hellerstedt (2005) Emergency Contraception pills: Dispensing Practices, Knowledge and Attitudes of South Dakota Pharmacists. *Perspectives on Sexual and Reproductive Health* 37(1): 19-24.
- Webb A (2003) Emergency contraception: Even easier to prescribe but users still need a holistic sexual health service. *British Medical Journal* 326: 775-776.
- Weisberg E I Fraser et al (1995) Emergency contraception: General practitioner knowledge, attitudes and practices in New South Wales. *Medical Journal of Australia* 162: 136-138.
- Young T (2003) Survivors of rape and sexual assault policy and standardized management guidelines: Assessment of the effectiveness of emergency contraception. Cape Town, STEPP.