Management Intercalated BSc 2000/2001

Final Project

12th June 2001

The Provision of Women's Reproductive Health Care in Georgia: Examined using Specific Tracers and Best Practice as a Frame of Reference

by

Philippa Hussey

Sacheen Mohan

Sophie Morris

Anjlee Sheth

Jon Walker

Acknowledgements

The research team would like to thank all those who assisted them in the completion of this research project. In particular Dr. Irina Karosanidze, Mr Otar Vasadze, Dr. Levan Kobaladze, Dr George Godsadze, Mrs Nata Khazakhashvili, Dr Marina Shihashvili, Mr Ushangi Kiladze, Dr Rifat Atun, Dr Dorothy Griffiths and Professor Ewan Ferlie. They would also like to thank all the head doctors, clinic managers, translators and staff who gave up their time to assist them.

The team would especially like to thank their hosts and guides in Tbilisi, Irina, George, Vakho, Sashka and Uka who made their stay both memorable and enjoyable.

Project Outline:

I. Title

The provision of women's reproductive healthcare in Georgia: examined using specific tracers and best practice as a frame of reference.

II. Background

Georgia gained independence from the Soviet Union in 1991 and since this time has been through a decade of economic instability and civil unrest. Against this background, the health system deteriorated markedly. Following a period of transition and rapid reform, the situation is now slowly beginning to improve. However, there is still considerable scope for further development in many areas.

In the Georgian National Health Policy document of 1999, 'Maternal and Child Health' was given top priority. Maternal mortality, abortion rate and STD prevalence are at unacceptably high levels. When combined with the apparent lack of research in this area, it is clear that initiatives are necessary to address these issues.

III. Aim

The aim of the research was to compare the actual provision of women's reproductive healthcare with best practice guidelines from international organisations. If any disparity was found, then the researchers hoped to be able to identify possible contributing factors and make recommendations for how they may be overcome.

IV. Methodology

- *Questionnaire*

A structured questionnaire was formulated to examine the provision of antenatal and contraceptive services, the availability of guidelines for practice and investigate the overall impressions of women's health care services in Georgia. This questionnaire comprised of both quantitative and qualitative components and was distributed to women's healthcare providers in Tbilisi.

- *Interviews*

A series of semi-structured interviews were conducted with a range of stakeholders involved in the provision of women's healthcare.

V. Results

- *Questionnaire*

Questionnaire responses were coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis. The results are presented in sections: General Characteristics of Respondents, Guidelines, Antenatal Care, Contraception and General State of Women's Healthcare.

- *Interviews*

Interviews were coded and the results presented in topics in a similar manner to that of the questionnaire.

VI. Analysis

The results obtained from the questionnaires and interviews were combined for discussion with information taken from relevant literature and the researchers opinions and impressions gained whilst in the field. The analysis is presented using the same categories as for the results.

VII. Conclusions

A summary of the main problems in the current provision of women's reproductive healthcare was constructed. Findings were then compared to both best practice and the existing research. Recommendations have been made in the areas of guidelines, antenatal care, abortion, STDs, contraceptive services and general framework. The researchers have attempted to ensure that these were focussed on women's reproductive healthcare and appropriate within the contextual background of the Georgian healthcare system.

VIII. Resources Used

- National Health Management Centre, Tbilisi
- Imperial College Library
- Curatio International Foundation, Tbilisi
- Japanese International Co-operation Agency
- Internet: Gateway to Georgia, CIA World Fact Book, eBMJ, WHO database, World Bank database

Section 1: INTRODUCTION

Since gaining independence from the Soviet Union in 1991, Georgia has experienced a period of civil unrest, instability and economic hardship that is only now beginning to resolve.

Georgia, like many other countries of the former Soviet Union (FSU), has embarked upon fundamental health sector reforms since her independence.[1] Reform has been implemented rapidly and dramatically and is occurring in the healthcare system concurrently with wider changes to the country's political and economic situation as a whole.

'As in other Newly Independent States, the reformers are faced with chronic under-funding, antiquated and deteriorating facilities, inadequate supplies and outmoded equipment, poor morale with few incentives for healthcare workers, in addition to general consumer dissatisfaction.'[2]

Within the current drive towards reform, the improvement of women's health and women's healthcare services has been given top priority by the government. As stated by the World Health Organisation and found by the researchers, 'there is a clear lack of information regarding women's health issues.' [3]

The researchers decided to conduct their project into women's reproductive healthcare provision having identified several concerning elements in this area at present. These

elements were namely that of the rapidly increasing rate of sexually transmitted diseases (STDs), the high rate of induced abortion compared with that of Western Europe (45.3 abortions per 100 live births[4]), and the seemingly reduced attendance for antenatal care. All of these were highlighted in the document: 'Analysis of policy regarding Sexually Transmitted Disease in the context of health reforms in Georgia.' Further statements supporting this paper include:

'Fewer [pregnant] women are seeking antenatal care and they are seeking care later, often during the third trimester.'

'The implementation of family planning services is still so new that abortion remains the main form of contraception within the population.'[5] 'Modern methods of contraception have been prohibited for many years, making abortion women's primary method of regulating births.' [6]

'Georgia has one of the highest frequencies in the Former Soviet Republics of sexually Transmitted Infections'[7] 'Sexual health is not yet a part of health promotion activities.' [8]

The researchers hoped to identify issues surrounding contraceptive and antenatal service provision and utilisation, and make conclusions and recommendations that will aid the delivery of better healthcare services to women.

The use of best practice as a frame of reference was chosen as this gave the best universally applicable standard from which to gauge the current level of performance of the Georgian healthcare system. Best practice was not expected to be found in the field, but was simply to be used as a tool of reference. The World Health Organisation guidelines on best practice for antenatal care are given in Appendix A and the WHO/UNAIDS recommendations for STD control are shown in Appendix B.

Recently a research project was completed by the Japanese International Co-operation Agency (JICA) who looked at women's healthcare provision from the patient's perspective. Generally research in this area of healthcare in Georgia is lacking, as found from a literature search. In addition to this, it was found that health workers have had little input in health policy formulation in the past.[9] It was for this reason that the researchers decided to investigate this field of care further, solely from a provider's perspective.

This research project will give a brief background to the recent political and social situation in Georgia and how this has affected their healthcare system. Methodology for the research will be described and the results presented and analysed using five broad topics: respondent details, the provision and utilisation of guidelines, the provision and utilisation of antenatal care, the provision and utilisation of contraceptive services, and general issues that arose during the research process. A summary and recommendations will then be offered.

Section 2: **BACKGROUND**

2.1 Geography and Demography

Georgia, "The richest jewel in the Soviet Crown"[10], is a country of approximately 69,700 km^2 in area, with a population of around 5.2 million and is situated on the borders of the Black Sea. Together with Azerbaijan and Armenia, it forms an area known as the Transcaucasus region, variously described as part of Europe, Central Asia or the Middle East, which has long been a flash point for conflict between the people of these regions.

Situated to the north is the Russian Federation, to the south and south-east are Turkey, Armenia and Azerbaijan, whilst to the west is the Black Sea. Within Georgia itself there are two autonomous republics, those of Abkhazia and Ajaria, both situated to the east and one autonomous region, South Ossetia, which is located near the northern border. The capital city is Tbilisi.

Source: CIA World Fact Book

The Georgian landscape is made up largely of mountain ranges and wooded areas. The main mountain range is the Caucasus Mountains. The Great Caucasus Mountains form the

vast majority of the nation's northern border and the Lesser Caucasus Mountains are situated in the south[11]. With this diversity of land comes an equally diverse climate ranging from the humid and subtropical conditions in the lowlands to the drier Eastern Highlands.

There are over 100 different ethnic groups residing in Georgia, with Georgians making up the majority of the population at approximately 70% and the other large groups being Armenian (8%), Azeris (6%) and Russians (6%). The remainder of the population is composed of Ossetians (3%), Greeks (2%), Abkhazians (2%), Ukranians (1%) and Kurds (1%).[12,13]

Estimates of the population vary by up to 1 million between the official Government statistics, indicating a stable number, and those of independent observers, who suggest that the population is in decline[14]. In 1998 it was thought to be 5,108,527 [15] (WHO figures) and was estimated at 5,019,538 [16] (CIA figures) in July last year. The variation between these figures, and the lower ones as given by the State Department for Statistics, can be partly attributed the reliance of the Government Statistical Department on the National Register of Births and Deaths. As there is no longer any form of child support provided to new parents, there is little impetus for the family to register a new child. Similarly, a death certificate is often not required in practice for burial, especially in rural areas. Hence there is considered to be a significant degree of under-reporting in this area, and discrepancies between population estimates occur.

Independent statistics show that there has been a decline in the population over the past decade. This is largely due to a decrease in the natural growth rate of the population (-0.62% (2000 est.))[17] and a migration of people from the country since independence (-2.57 migrant(s)/1,000 population (2000 est.))[18]. This is primarily the younger people who are of fertile age, and particularly unmarried men[19].

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Arrivals	20,0	16,6	8,0	12,6	12,7	5,7	1,2	0,4	0,4
Departures	58,8	60,6	49,6	38,9	44,2	25,9	12,9	0,9	0,6
Migrational increase	-38,8	-44,0	-41,6	-26,3	-31,5	-20,2	-11,7	-0,5	-0,2

International migration of population in 000's [20]

This increased migration since independence is reflected in a declining rural population with a drop of over 10% since the 1970's. The majority of Georgians live in cities with the largest urban area being Tbilisi, having a population of approximately 1,300,000. The second largest urban area is Kutaisi with a population just under 250,000.[21]

At present the nation's population is comprised of approximately 48% men and 52% women. Women comprise most of the 65+ year age group and also those aged between 20 - 40 years of age. In line with the rest of Europe, this population is ageing due to a declining birth rate from 23.7 per 1000 population in the 1960s to just 8.62 by 1998 [22].

Age structure [23]**:**

0-14 years: 20% (male 517,829; female 497,155)

15-64 years: 67% (male 1,630,814; female 1,755,323)

65 years and over: 13% (male 238,090; female 380,327) (2000 est.)

2.2 History

By world standards, Georgia is a relatively young nation, formed between the 10th and 13th centuries, but then disintegrating, only to reform in the late 18th century. Even before this time however, many nations had realised the importance of this piece of land, strategically positioned between the Black and Caspian Seas. It has been ruled throughout history by the most dominant empire of the time, including the Persians, Macedonians, Romans, Arabs, Byzantines, Seljuk and Ottoman Turks and Mongols. By the 18th century, however, Catherine the Great was transforming Russia into a formidable force, and under her command, Georgia was wrestled from the Persians and Turks. Unrest within Georgia persisted under the Russian repression, and after a brief period of independence in 1918, she was forcibly incorporated into the Soviet Union, also contributing one of Communism's greatest exponents, the nationalist Stalin (meaning "Man of Steel")[24]. Soviet rule persisted until the fall of the iron curtain in the early 1990s. After official independence in 1991, Georgia experienced civil war in the South Ossetia and Abkhazia regions, but following a military coup in 1992, Eduard Shevardnadze was elected president. He has remained in power to this day, following re-election in April 2000 (due

in part to lack of a suitable alternative candidate)[25], and despite occasional clashes still in South Ossetia and Abkhzia, he has succeeded in bringing peace to Georgia[26].

2.3 Politics

Georgia is a presidential republic with a two chamber parliament - the Council of the Republic (some 235 elected and proportionally representative members of 'Parliament') and the Senate (consisting of territorial and Presidential appointments which will be established once regional unrest has ceased). As an independent state, Georgia has made much progress in establishing democratic practices within a legislative framework. However, it is widely believed that human rights violations & corruption are problems that plague the democracy for which Georgia has long fought[27].

The Citizens' Union of Georgia has had an absolute majority since 1999. Their leader Shevardnadze was first elected in 1992, and remains the favourite whose main strength is his vast experience in leading Georgia. The opposition is the Revival Bloc led by the autocrat Aslan Abashidze. Although the political climate has stabilised since the volatility of the early 1990s, street protests such as that held on 26th May 2001 by the Zviadists, supporters of the late President Gamsakhurdia, contribute to sporadic outbursts of violence.[28]

2.4 Culture

The Georgian culture has emerged as one of honour, chivalry and hospitality, the result of a blend of the cool mountains mixed with hotter blood of the Persian and Arab cultures. A number of Muslim elements within this are apparent: the style of architecture, role of women and the outstanding tradition of hospitality. Even in today's difficult economic climate, the rituals of lavish 'Supra' style dinner parties are maintained and a strong code of conduct is evident in Georgian etiquette.

Nonetheless, it is clear that Georgia is a mainly Christian nation and the Georgian Orthodox Church has a strong role in the everyday lives of modern Georgians. Like England, St George is the patron saint of the country and there are a number of other European links in, for example, Caucasian and religious archaeology as well as Greek and Roman mythology. The word 'Georgia' is not however linked to Saint George but is interestingly taken from the Perso-Arab 'gurj'[29].

Although one of the earliest nations to convert to Christianity in AD 337, the Georgian people maintain their links with the more esoteric regions of Asia. It is said that when one asks a Georgian whether he is European or Asian, he will often think with his European mind, and then answer with his Asian heart, which will depend more often than not who is doing the asking. The people of this nation are also physically unlike their former Soviet counterparts: olive skinned, as they have been accustomed to a hotter climate than that of the snowy north, with features resembling those of the striking Persians and Arabs.[30]

The rich history of the country has led to a number of thriving languages other than the current national language, which are shared by the vast array of peoples living in Georgia today. The ancient Georgian language has its unknown roots in the Ibero-Caucasian family whilst the modern language and script are known to date back to the ninth century.[31]

2.5 Economy

In Soviet times, although the Georgian republic had one of the highest standards of living, the economy was considered to be politically driven and inherently weak, and was in a state of crisis[32]. The collapse of the FSU exacerbated problems with the economy resulting in a steep decline in Gross Domestic Product (falling by 90% between 1991-1994) as shown in the table below. Inflation has also reduced dramatically from a state of hyperinflation, greater than 5000%/year in the early 1990s[33], to a more containable level of 10.5% in recent times.[34]

Economic Indicator	1996	1997	1998	1999	2000	2001
Nominal GDP	57.4	20.6	8.7	12.4	5.1	9.6
GDP at constant prices	10.5	10.6	2.9	3.0	1.8	3.5
Exchange Rate	1.27	1.30	1.79	1.96	1.98	2.05

Economic Trends for Georgia[35]

Georgia's predominant industries include a number of heavy industries such as steel, aircraft, locomotives and trucks; as well as shoes, textiles, wine and wood products[36]. Industry has declined to less than 10% of capacity leading to the displacement of many workers into pseudo-employment or unemployment (the latter standing at 20% in 1992

and falling to 15% in 1997). However, with fertile land, agricultural output has not been as badly affected as that of manufacturing industries, and there has been some growth in the newer trade and communications sectors. Georgia's major trading partners today include Russia, Turkey, Armenia, Azerbaijan, and Bulgaria. [37]

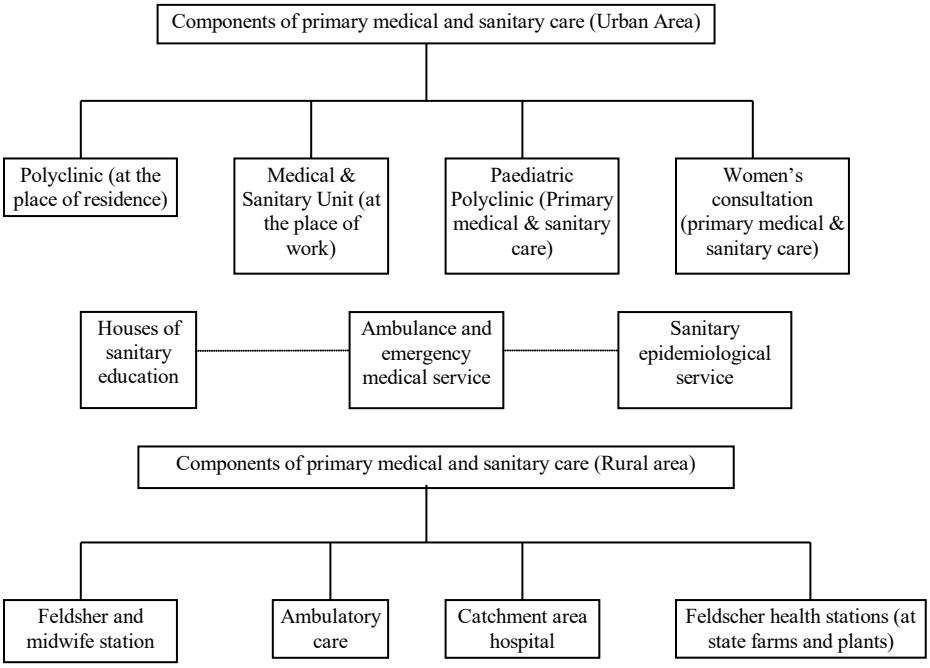
With regards to the role of women in the economy, females represent 48% of the employed population, with 62% of women working in agriculture, industry or education and culture. Although a significant proportion of the workforce, women are not as well represented in administrative and managerial positions and formed only 4% of the supervisors in industry and 8% of those in agriculture in 1989. In addition, on average, women are paid a salary two thirds that of men[38].

The result of recent economic trends on a background of political unrest has aggravated the living circumstances of the Georgian people. With economic turmoil came a collapse in public healthcare expenditure, so much so that in 1994 spending was 10% of that in 1990. Evidently, these economic conditions have been reflected in the health status and mortality rates of the population. Finally, a further burden has been the influx of approximately 270,000 refugees, which have added to the collapse of social services and a deteriorating quality of life[39].

2.6 The Georgian Health Care System

2.6.1 The Georgian Heath Care System prior to independence

Following the World War II, healthcare in Georgia was provided as part of the state-run system of the Soviet Union. Care was free at the point of delivery to all citizens, and was financed largely through tax[40] in a model often called the 'Semashko model'[41]



Ref: American International Health Association [42]

This was a highly bureaucratic, centralised system, the Central Authorities in Moscow having almost compete control over all planning, organisation and resource allocation. Regional authorities, such as that in Tbilisi had very little responsibility and served mainly to evaluate performance and feedback to Moscow. Almost all facilities were owned by the state and staffed by public workers who received a state salary. Pharmaceuticals were provided free of charge to inpatients and as a subsidised co-payment to outpatients [43].

In addition, there existed several parallel healthcare systems for other large public sectors such as railway workers and the military. This meant that healthcare services were highly accessible and affordable to all, however 'under-the-table' or 'out-of-pocket' payments were still commonplace, and became increasingly important as the Soviet Union began to disintegrate in the early 1990s.

Whilst the Semashko model was highly accessible and offered a broad range of services, including well integrated, high coverage public health programmes such as immunisation (estimated at over 95%)[44], it also had several potential weaknesses. Being so highly centralised, the ability to respond to the varying needs of populations was limited and as such the allocation of resources and management was inefficient. There was also considerable excess capacity: 'Too many hospitals, too many beds and too many hospital based specialists.'[45]In addition, some authors felt that the manner of implementation of the model caused inpatient services to be over prioritised above primary care, health promotion and preventative programmes[46]. The quality of care provided was also variable, thus creating inequity amongst the population.

2.6.2 The Georgian Heath Care System Post Independence (Transition 1991-1995)

Following the break up of the Soviet Union in 1991, the system of healthcare in Georgia entered rapid decline. The organisational structure of healthcare collapsed when the supply

chain from the old centralised system was severed upon the declaration of independence. There was little time to institute an alternative route for medical supplies and no way to finance them even if one was established. At times there were no supplies at all.

The deterioration of the healthcare system became seemingly impossible to stop. With the break away from Moscow's authority came a reduction in funding, which in turn led to the 'total collapse of the state-owned model of healthcare in Georgia.'[47] With independence came a fall of 90% in the GDP of Georgia between 1991 and 1994[48]. Such a major decline in financial resources meant that there was no longer the ability to maintain the delivery of free healthcare.

These same events were not limited only to Georgia, however, and were noticeable in many other former Soviet countries. In every republic the soviet-based healthcare system was collapsing.

The established vaccination programmes under the old regime was not continued due to inadequate availability of the appropriate vaccinations from Russia, which in turn lead to a resurgence of communicable diseases such as diphtheria, measles and tuberculosis. There was also an increase in the Maternal Mortality Rate at this time due to the increasing number of home deliveries occurring and in the period of 1990 - 1995 the age-adjusted mortality rate rose by 13% [49].

Georgia also had the highest density of doctors in the world with over 120,000 persons employed in the health sector and 1 physician per 197 inhabitants[50]. However, there was gross misuse of these human resources and a large proportion were under-trained, under-utilised and poorly managed[51].

At this time, there were excess doctors, excess facilities and the populace still had some ability to purchase medical care 'over the counter', yet there were no supplies or facilities by which to administer treatment. 'The lack of necessary medical equipment became an acute problem in the pre-reform years.'[52]

During this time of transition from the Soviet medical system to the present system, Georgia was also involved in civil war and internal disruption. These civil and military conflicts were not only financially costly, but they also lead to an increase in refugees and internally displaced persons (IDPs) from the war torn areas. The increase in IDPs, mostly in Tbilisi, prompted the international community to become involved. The aid agencies that arrived, initially to help in the treatment of these IDPs, also helped in the treatment of the resident Georgian populace.

2.6.3 The Georgian Health Care System Post Reform (1995 - Present)

At the core of the Georgian Government's programme of health reform, initiated in 1995, was decentralisation. The Government aimed to increase private sector participation, and

limit the state's role to a few key areas, such as health promotion, disease prevention, accreditation and licensing, and research and education. The responsibility to fund care for the most vulnerable population groups also remained with the state.

The major directions of the health reforms were as follows [53]:

From: Strategic Health Plan for Georgia 2000-2009

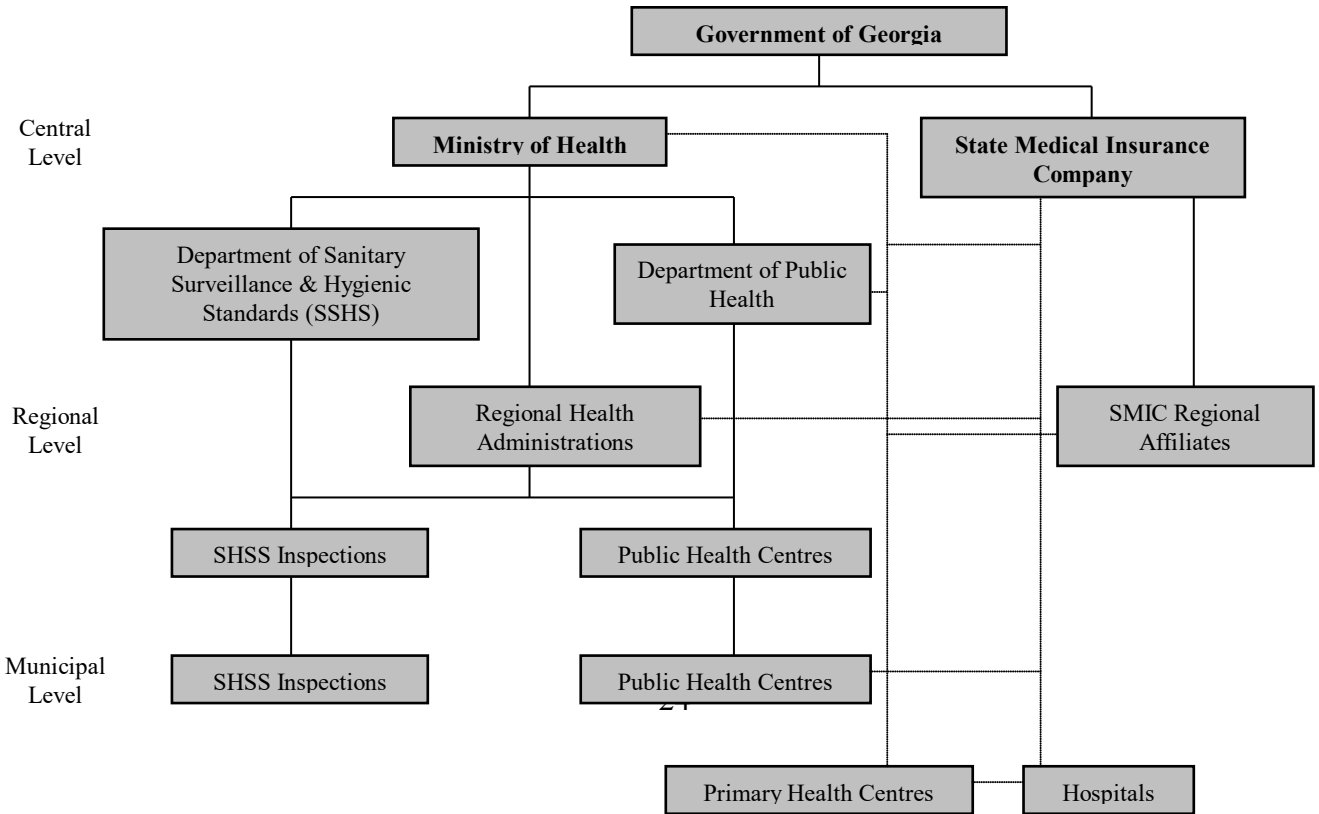
1. Creating the legal basis for a new health system
2. Decentralising health system management
3. Promoting innovation of the financial and economic foundations of the health system, including a transition to programme-based financing
4. Giving priority to primary care
5. Reforming the Sanitary Epidemiological Service
6. Converting to the principles of health insurance
7. Ensuring the social security of health care employees
8. Reforming the pharmaceutical policy
9. Supporting the privatisation process
10. Accreditation and licensing of health institutions and personnel
11. Reforming medical education
12. Reforming medical science
13. Reforming the health information service

The National Health Management Centre (NHMC), with whom the research team was closely involved, are heavily associated in the development of new policy and reform.

2.6.3.1 Structure

Central strategy planning and control is conducted by the Ministry of Health (now known as the Ministry of Labour, Health and Social Affairs) together with the State Medical Insurance Company (SMIC), they fund a select group of healthcare programmes. A great deal of responsibility has been decentralised to 12 Regional Health Administrations and 2 Municipalities (in Kutaisi and Tbilisi) that devise local health strategy and oversee the implementation of state programmes. Within these, hospitals now have outright control over their own finances, Pharmacies and dental services also have been privatised. Primary care in urban areas is still provided through separate adult, women's and children's polyclinics, with the 'Feldsher Ambulatory Posts' performing this function in remoter rural areas. Of course, an increasing number of these clinics and hospitals are now privately owned as the government begins to streamline the state service.

The broad structure of the Georgian health care system today appears below:



From *The Strategic Health Plan for Georgia 2000-2009*

2.6.3.2 Financing[54]

The financing of healthcare services in Georgia is currently from 3 sources: the State, the employers and the patients themselves. The State funds disease prevention and health promotion programmes and provides care for vulnerable groups. In 1998 the total state budget for health was 54.2 million GeL. A proportion of this is used to make up the deficit in funding for programmes from SMIC and the rest is delegated to the Ministry of Health and its departments for use in the State programmes.

In addition to the budget from the State, SMIC receives special obligatory insurance fees from employers (3%) and employees (1%). Programmes financed by SMIC include obstetrics and treatment of infectious diseases.

Further to these central programmes, there are regional, municipal programmes that are financed by and the responsibility of the Municipalities and Regional Health Administrations. Each region allocates 2.5GeL per person. Parallel Health Care Programmes also exist for employees of the Ministries of Transport, Defence, Internal Affairs and Security.

The patient must pay for any care required outside these programmes. In addition, many patients make unofficial out-of-pocket payments to physicians, even for services included in the State/SMIC programmes. This results in the current situation where individuals pay up to 87% of total healthcare expenditure and the state, just 13%.

2.7 Women's Health Care in Georgia

Women's healthcare in Georgia is the focus of much concern from aid agencies and external research organisations from around the world. 'Maternal and Child Health' was given top priority in the Georgian National Health Policy document of 1999. Some figures for women's healthcare issues are given below, although questions about reliability arise with any statistics concerning Georgia, due to significant discrepancies between values from the Centre for Medical Statistics and Information (CMSI) and the State Department for Statistics (both of which are internal data collection organisations).

- 45% of women have had one previous induced abortion[55]
- Maternal mortality rate was 51.25 in 1999 compared with Japan at 6.5 [56]
- Incidence of syphilis was 43.5 per 100,000 in 1998 [57]
- Incidence of gonorrhoea was 34.0 per 100,000 in 1998 [58]

In 1996 the government set out to reduce maternal mortality by 50% by July 2000, to be financed by a grant from the World Bank. In order to achieve this aim, a basic benefit package (BBP) of antenatal care and delivery was introduced, which was to be financed

from the municipal budgets and the State Health Fund (now SMIC). Also planned were the development of protocols for treatment and training programmes for obstetric staff.

By 2000, the Strategic Health Plan for Georgia was indicating a new target: to reduce maternal mortality by 15%. As well as the above methods, a programme to improve patient education about contraception was proposed, and the development of a comprehensive family planning and reproduction service system outlined. In addition, targets were set to reduce the level of morbidity caused by STDs (syphilis by 10% and gonorrhoea by 15%) through improvements in active detection.

The SMIC budget allocated to obstetric care was 6 million GeL in the year 2000. Together with the budget for children under the age of three, this totalled 40% of the total budget for healthcare[59]. In 1999, the allocated budget for the national STD programme was around 260,000 GeL.

In the year 2000, there were 71 licensed Women's Consultation Clinics in Georgia, 18 of which were independent clinics, 25 were outpatient departments of Maternity Houses and 28 were in General Hospitals. Deliveries occurred in 78 facilities, of which 47 were independent maternity houses and 31 were maternity departments within general hospitals. 96% of deliveries took place in these facilities[60].

Contraceptives have been provided by the UNFPA free of charge since 1993 as part of an attempt to reduce the number of abortions. A full list of the International Aid Agencies

and Organisations currently active in Women's Healthcare in Georgia and details of their programmes can be found in Appendix C.

Section 3: **METHODOLOGY**

Prior to departure for Georgia, a structured questionnaire was designed with the intention of gaining a basic level of insight into the current provision of women's reproductive healthcare in Tbilisi, from the Health Professionals' perspective. A literature search was performed as background research to enable the identification of best practice guidelines in this area and to ensure that relevant investigation pertaining to the situation was conducted.

3.1 Conducting the Literature Search

The methods used to obtain appropriate literature were given considerable thought and planning. This was a direct attempt to ensure that the information collected had relevance

to the field of investigation, and was precisely directed to prevent deviation and side-tracking.

Systematic methods to locate and search the various databases and sources would ensure that no areas were missed and that the research remained focused. The scarcity of printed information on the health care within Georgia meant that traditional means of tabletop or laptop research would require supplementary searches for grey literature that only experts in the field possessed.

Firstly, basic parameters of the search were discussed and then set. Literature searches were limited to those that had been published within the last ten years. This ensured that the dynamics and development of the Georgian healthcare system could be understood and appreciated, whilst excluding literature that was no longer appropriate since independence from the Soviet Union. In addition to this, there was no restriction in the source of publications that were researched, attributed to the fact that there were many foreign institutions, organisations and charities that have researched, worked or become affiliated with the State Health System of Georgia.

As numerous articles were found in Russian and no translators were available in the preliminary stages of the project this was a major restriction in the search criteria,. In addition to this, time restrictions meant that there was a greater emphasis on laptop-based research, rather than the more time consuming tabletop research. This is significant, as

Georgia does not have the information systems in place to transfer literature into computer abstracts or electronic formats, and may have limited the literature that was available.

The first stage of the literature search was to breakdown the investigation into components or areas of interest. These categories were:

1. Health Care Reforms of Georgia, pre/post independence.
2. Socio-economic, political and cultural influences on the health of the nation.
3. 'Antenatal Care' in Georgia, the Caucasus's and within the WHO.
4. 'Rubella' in Georgia, the Caucasus's and within the WHO.
5. 'Contraception' in Georgia, the Caucasus's and within the WHO.

For each of the foci a series of searches were carried out, initially using electronic methods. This involved the use of *Medline*, *BMJ.com*, *PubMed*, *findarticles.com* and the *Cochrane Library*. The first two categories were not medically related, so the search sources were extended to more traditional search engines such as *google.com*, *askjeeves.com*, *ixquick.com* and *infoseek.com*. To obtain local information a field portal for information used was *georgia-gateway.org*. The aim was to retrieve references, indexes and abstracts of books and journals, which constitute secondary sources of information. In addition, relevant primary information such as whole articles, government reports, and institutional documents were also in the search criteria.

The keywords used in the search were those mentioned in the list above. Documents were only investigated if they contained at least two of the words entered or their synonyms, and subsequent selection was dependent on the collective opinion of the group. This subjective method of selection was based on broad criteria of relevance to the specific category it was searched under, and its association with the other four areas of interest.

Discussion with experts in the Georgian Healthcare system and the research group's previous work in the topic area had already identified citations of articles and literature published. Of these, the electronic abstracts were collated to ascertain whether their abstracts mentioned the keywords (used in the laptop search). Those that did not use the keywords were promptly dispensed with.

Once a list of references was obtained, the full articles were retrieved. Imperial College has an extensive library, and membership of the Athens database ensured that there was no limitation to the accessing of information. Other journals offered free electronic trial subscriptions, so online versions were readily available.

The next phase of the literature search focused on the “grey” information that was in circulation with experts in the field. Informal approaches to various academics and researchers, both in the UK and Georgia, produced a wealth of unpublished documents.

All the obtained articles and documents were then subjected to an initial assessment to ensure that the source and content of the information was reliable and of value. The crieria

included consideration of the reputation of the source and the creditability of their findings and pertinent points. Further to this, documents in this project are only cited if they meet most of the important points in Bowling's literature review checklist[61].

3.2 Questionnaire

3.2.1 Formulating the Questionnaire

The questionnaire was then formulated. Care was taken to avoid leading or ambiguous questions, and open-ended together with closed questions were used. Items to elicit both quantitative and qualitative responses were included. An english copy of the questionnaire can be found in Appendix D.

It was decided that for ease of translation and coding, the questionnaire would be divided into distinct topic areas. These areas were as follows:

- Availability and use of guidelines/protocols
- Antenatal Care provision and utilisation
- Contraceptive Services provision and utilisation

– General analysis of the current Georgian women's health care system

The availability and use of treatment protocols and guidelines was entirely assessed using nominal yes/no styled questions and ordinal scales such as,

What do you think of the quality of these guidelines? (Tick one box)

□ *Excellent* □ *Good* □ *Satisfactory* □ *Poor* □ *Very poor*

Some responses to stems in this section led to subsequent questions becoming not applicable to the respondent and so this option was built into the coding of responses, distinguishing the non-applicable response from having been not answered.

Do you have access to government guidelines for women's health services? (Tick one box)

□ *Yes* □ *No* □ *Don't know*

If yes, do you use these guidelines in your clinic? (Tick one box)

□ *Yes, they are mandatory.* □ *Yes, they are voluntary* □ *No*

Antenatal care provision and utilisation was assessed using nominal yes/no questions, questions to elicit approximate quantities, and open-ended qualitative questions. So, examples of the latter two types are:

On average, in your polyclinic, how many antenatal clinic appointments will a pregnant woman attend?

What factors do you think may prevent a pregnant woman visiting you or the polyclinic more frequently?

Contraceptive service provision and utilisation was examined in the same way as the antenatal care provision and utilisation, with the addition of a ranking/scoring question for the forms of contraception most commonly used.

The final section was assessed with both qualitative and quantitative questions to assess the general of the current state of women's healthcare in Georgia.

Care was taken to ensure that clear language was used and complicated sentence structures avoided to minimise the risk of confusion or loss of meaning in the translation process. The researchers were aware that the translation process would create two possible sources of error in the data. Firstly, that the meaning of the questions would be altered in translation from English to Georgian, leading too incorrect answers being given. Secondly, that the meaning of the answers given would be lost in translation back from Georgian to English, leading to false interpretation of the sentiments of the respondents.

In addition, the researchers were aware from the beginning that Georgia is a strictly Orthodox country, and as such, questions regarding contraception and abortion had to be

carefully considered. Although in theory, the Orthodox religion disapproves of both, the researchers were unsure as to the attitudes of the Georgian people in practice, hence care was taken to structure questions in a culturally sensitive manner.

Once formulated, the questionnaire was adjusted with advice from Dr. Rifat Atun, Dr. Dorothy Griffiths and Professor Ewan Ferlie (Healthcare Management at Imperial College). All of these gave constructive criticism and feedback, resulting in the finalised questionnaire. This was sent to Dr Irina Karosanidze (Director of Medical Diagnostic and Family Medicine Centre) in Tbilisi for translation and distribution prior to our arrival in the field. Also included was a covering letter, explaining the nature of the research, assuring the confidentiality of any responses and asking for the co-operation of potential respondents.

3.2.2 Choice of Sample

The choice of those to whom the questionnaire would be distributed was conducted in collaboration with the National Health Management Centre of Georgia in Tbilisi. 'Adult' and 'Child' Consultations were not included, as they do not handle problems related to obstetric and gynaecological care. Questionnaires were thus distributed to a total of 18 Women's consultations in polyclinics, hospitals and institutes within Tbilisi (including both state and private healthcare providers). If greater time and resources had been available, the researchers would have liked to extend their sample to include consultations in other cities and/or rural locations.

In addition, a variety of stakeholders were sampled. These included: specialist obstetricians and gynaecologists, academics in the field, general district and family doctors, head doctors, nurses, midwives and other potential stakeholders, such as receptionists, specialist doctors in unrelated fields and managerial representatives. The aim was to obtain as representative and as comprehensive a view of the current situation as possible, and attempt to eliminate any bias from one group of stakeholders that may influence the impressions formed.

3.2.3 Collection and Translation of Responses:

The distribution of 300 questionnaires to various polyclinics and specified stakeholders was greatly aided by the full support and co-operation of Dr Irina Karosanidze and Dr Levan Kobaladze, both members of the National Health Management Centre of Georgia. Thus on arrival of the researchers in the field, around 100 questionnaires had already been returned and the responses translated, and by the end of the first week, 220 were ready for data processing. This allowed the remaining time available to be utilised for conducting qualitative and clarifying interviews with key respondents and stakeholders.

As well as these interviews with respondents to the questionnaire, unstructured and semi-structured interviews were conducted with other key actors in the Georgian Healthcare system as a whole, the Women's Healthcare system and the current reforms in both.

These interviews were conducted with the aim of gaining both a greater general knowledge and understanding of the political, economic and social context of Georgia and more specifically how these conditions affect the current provision of women's reproductive health care. It was felt necessary to understand both the historical and recent events within Georgia so as to gain a better perspective of how the current level of services for women's healthcare had been attained.

As greater understanding was achieved, then these initial interviews were supported by a series of more focused interviews with other stakeholders whose positions were discovered to be important in the context of women's health. These included representatives of the major aid organisations and research bodies currently active in this field, as well as governmental and non-governmental organisations that contribute to the actual provision of care.

3.2.4 Coding of the Questionnaire Responses

3.2.4.1 Assumptions in Interpretation

All assumptions were discussed, agreed and noted down by the research team prior to questionnaire interpretation.

I. With all qualitative questions, a maximum of 4 answers will be accepted, those being the first four listed in the response.

II. In Q5 (antenatal checks), a '–' rather than '+' response will be taken as a 'never performed'. A blank response will be taken as 'not answered'. These two responses will be coded separately.

III. In Q6 (number of antenatal appointments), if a range has been given rather than a single number, the mean number to one decimal place will be taken as the response.

IV. In Q9 (percentage of women with access to contraceptive services), as with Q6, if a range is given, the mean value to one decimal place will be taken as the response.

V. Not applicable and not answered will be defined and distinguished within by the research team and coded separately as options for each response.

VI. With all qualitative answers, if the response does not appear to be applicable to the question asked, further discussion with an interpreter will ensue. If there is not satisfactory clarification, a code for 'not understood' will be applied.

3.2.4.2 Coding

Once all of the completed questionnaires had been returned, they were compiled and each coder took a specified number of questionnaires at random for coding. The coders were the 5 members of the research team and each person was assigned a number (for example: Sophie = 1, Philippa = 2 and so on), in order that their questionnaires could be identified and their coding assessed for bias at a later date. The individual responses were then coded in the following manner:

- For nominal/ordinal items: possible responses were coded numerically in ascending order from left to right as they appeared on the page. In addition, codes were assigned for 'not answered' and for 'not applicable' as appropriate. The exception to this was the question requiring respondents to rank forms of contraception from most common (= 1) to least common (= 8). Here, the code applied was that of the rank given, for example: if 'Coil/IUD' was ranked 3rd, it received the code '3', and so on.
- For the responses to initial enquiries such as 'Job Title' and 'Place Of Work': all possible responses were gathered and a numerical label assigned to each, again with an additional code for 'Not Answered'.

- For quantitative items: such as 'Approximately, what percentage of women have access to contraceptive services?', the value given was taken as the code, and where a range had been given, such as from '20-30%', the researchers calculated and used the mean value.

- For qualitative questions: 'Not answered' and 'Not applicable' were coded initially, and possible responses were coded as they appeared numerically. Due to the large number of potential answers for such questions and the degree of overlap in these individual answers, responses were coded up and grouped as appropriate. For example, all responses pertaining to financial problems and constraints for the patient, clinic or the country as a whole were classed as 'Financial issues' and qualified accordingly. The research team discussed and decided together what these categories should be as each question was analysed.

If it appeared that a question had not been understood, and that therefore the answer given could not be feasible, it was decided by the team as a whole, that the response could be discarded and given a code for 'not understood'. It became apparent during the coding process that this was especially a problem for certain questions (see section 4.3).

All codes were entered into a Microsoft Excel Database, and as this occurred the master coding key was kept on a parallel Microsoft Word document allowing all coders access to the most up-to-date version at all times. If no existing code appeared appropriate for the given response, an additional code was unanimously agreed and the Master Document updated accordingly.

Although each person coded and entered their own questionnaires individually, any queries, ambiguities or uncertainties were agreed by consensus with the entire group.

Each questionnaire could be identified by a number assigned, at the time of entry, onto the database. This was done so that the original could be referred to at a later date, if required.

Once all of the responses had been entered onto the Excel database, they were transferred to SPSS (Statistical Package for the Social Sciences) for analysis. Issues arising could then be further investigated in the first round of interviews.

3.3 Interviews

After coding and inputting of all the returned questionnaires the interview process was commenced. Interviews were carried out by two interviewers working together, one asking the questions, the other transcribing the interview as a backup to the tape recording and noting other important factors such as gross body language and intonation that may affect interpretation. Both interviewers had the opportunity to ask questions. Also present was a language interpreter, if required. These individuals tended to be associated with either the NHMC or the individual polyclinics being analysed, and their lack of impartiality cannot be discounted. For example, often when a question was posed, a discussion would follow between the interpreter and the interviewee for some time, before an abbreviated response was given. The researchers had no way of understanding what was discussed in the additional dialogue, whether it was just clarification of the question posed or discussion of the response to be given. However, due to the lack of understanding of Georgian amongst the researchers and the limited English of the majority of the interviewees, it was decided that whilst the situation was not completely satisfactory, it was acceptable within the limits of the resources.

The format for the questioning was that of a semi-structured interview, that was developed initially before any interviews had been carried out, and was based upon areas in the questionnaires that required further information or explanation. After each day of interviews there was a group meeting to discuss the day's events and to modify and improve upon the general structure of the interview for further use. During the interview,

if further areas for discussion arose or required additional explanation, then the central interview structure could be deviated from to encompass these issues.

The interviews were carried out at a variety of clinics that had responded to the questionnaires and were selected with assistance from colleagues at the NHMC. A representative sample of healthcare professionals was selected by the clinic staff upon arrival of the researchers so as to encompass a broad range of specialities.

Upon completion of the day's interviews, the tape recordings and written notes were transcribed on to Microsoft Word documents by the interviewers, so as to be available to the whole group for further analysis and discussion at the evening meeting.

Each member of the group carried out approximately the same numbers of interviews, and each day's pairings of interviewers was altered so as to reduce bias. In total 27 interviews were carried out by the group encompassing 6 head doctors, 11 gynaecologists, 2 reproductologists, 5 midwifes, 2 nurses and 1 family physician.

3.3.1 Coding the Interviews

Interviews were coded upon completion of the fieldwork. All members of the research team participated throughout this process in order to minimise bias.

The topics within which the results are presented were developed from the interview transcripts. This method is known as 'coding up' [62]. There were also several predetermined subject areas that the researchers wished to investigate.

One member of the research team inputted the data in to a Microsoft Word document, whilst the other four members each examined a random selection of the transcripts for relevant information. The inputter chose a gross area for coding and the transcripts were scanned for statements and themes pertaining to that area. If it became apparent that a single response bore relevance to more than one category, it was entered into all of those categories in order to allow cross-referencing and development of multiple hypotheses. All transcripts were examined in this manner and hence all data was utilised.

Once this process was complete, each gross area was further sub-divided in to key themes and the responses assigned accordingly. This allowed subsequent analysis of the interviews to be comprehensive and exhaustive.

Once the research team unanimously agreed that a gross area had been fully investigated, the members of the team rotated and a new inputter and examination team was formed. A new gross area was selected and the interview transcripts were collated and reassigned at random. In this manner it was felt that any bias introduced by the research team into the coding process would be minimised.

Throughout this procedure, new topics were uncovered and introduced into the coding framework as they arose.

The gross areas of investigation were then linked to form a framework of 5 macro areas. The results within each of these macro areas were then formulated into prose, with each member taking one area, and their work read and discussed by the remaining four.

Care was taken to ensure that responses did not become divorced from the context in which they were made and therefore that the potential wealth of qualitative data would not be lost. This was performed by taking care to ensure that details such as intonation and body language were included within the transcript, and that the team member who performed that interview was given the opportunity to qualify any expressional statements made.

Section 4: RESULTS

4.1 Results Of Questionnaires

The results of the survey have been shown in table form and represented diagrammatically in a range of charts as appropriate. There are 5 sections to the questionnaire, which will each be reviewed in turn:

1) Characteristics of respondents
2) Guidelines
3) Antenatal care
4) Contraception
5) General state of women's health care

It should be noticed that not all respondents gave an occupation, and not all occupations given were translated. Whilst this is shown in *section 4.1.1*, it should also be remembered when considering the break down of other responses by occupation

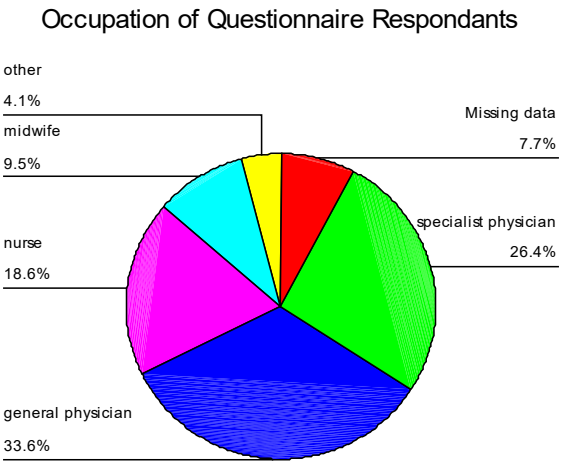
In addition, the terms *'system'* and *'missing'* in the tables and figures below. *'System'* indicates that a code for this response was not inputted. '*Missing'* applies to cases where the response was not answered or not translated and includes the *'system'* data also.

4.1.1 Personal Details of Respondents

Questionnaires were collected from a total of 220 respondents from various occupational backgrounds: 74 generalists, 59 specialists, 41 nurses, 21 midwives and 9 others. This was calculated to be a response rate of 73.3%, given that 300 were distributed initially.

Figure and Table 4.1.1.1 shows the distribution of respondents by occupation. When classifying the occupation of the respondents, the research team decided that gynaecologists and reproductologists were experts in the field of study, and hence classified as specialist physicians. General Physicians included family doctors, internists and general hospital physicians. The majority of respondents originated from primary care. The 'Others' category included many occupations such as receptionists, health care managers, and physicians not directly involved in women's health, such as paediatricians. It should also be noted that 11 respondents declined to answer this question, and that 6 responses were not translated.

Respondents originated from one of 18 healthcare facilities as shown in *Table 4.1.1.2*. These centres ranged from primary healthcare providers (13 Women's Consultations, the paediatric clinic and the Zhordania Institute of Human Reproduction) to secondary care hospitals and tertiary providers (the Chachava Institute of Perinatal Medicine and Zhordania Institute of Human Reproduction). Most responses were obtained from Women's Consultations. *Figure 4.1.1.2* shows the distribution of occupations of the respondents from each facility involved in the survey.



occupation	specialist	58
	generalist	74
	nurse	41
	midwife	21
	other	9

Figure 4.1.1.1 Occupation of the Questionnaire Respondents

occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	specialist	58	26.4	28.6	28.6
	generalist	74	33.6	36.5	65.0
	nurse	41	18.6	20.2	85.2
	midwife	21	9.5	10.3	95.6
	other	9	4.1	4.4	100.0
	Total	203	92.3	100.0	
Missing	not answered	11	5.0		
	untranslated	6	2.7		
	Total	17	7.7		
Total		220	100.0		

Figure 4.1.1.1 Occupation of the Questionnaire Respondents

		occupation				
		specialist	generalist	nurse	midwife	other
clinic	wcc 1	6	15	8	5	
	wcc4	5	5	9		
	wcc 5	7	3	3	2	
	wcc 6	1	2	6	2	1
	wcc 7	2	1	3	1	
	wcc 8		2		2	
	wcc 10	1	11	4	1	1
	wcc 11		6	1	4	
	wcc 13		1	2		
	wcc 17	10				
	inst of repro.	4	8			1
	inst. of perinatal med.	2	2			
	hospital/ 38	5	2			1
	maternity hosp 101	2	3			
	wcc 3	3	6	2	4	
	wcc 15		4	3		
	wcc 28	4				
	paed clinic 9	2	1			3

Table 4.1.1.2 Distribution of Respondents across the Investigated Institutions and Organisations

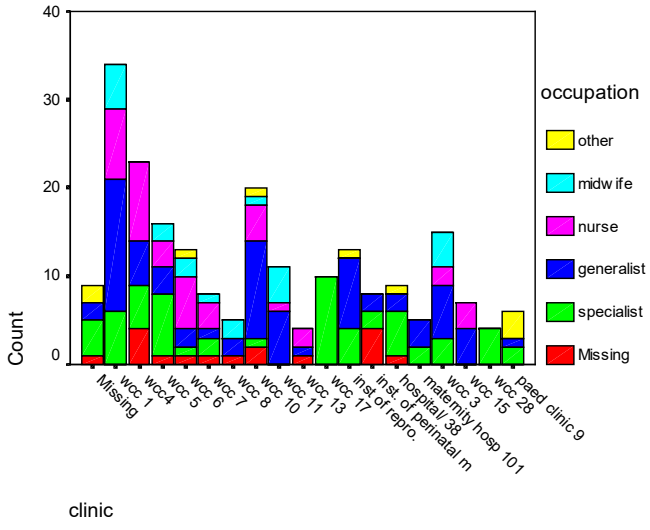


Figure 4.1.1.2 Respondents by Clinic and Occupation

4.1.2 Guidelines

Respondents were asked whether or not they were aware of any guidelines that were available to them. This question received a response rate of 96.8%. Of this, only 20.25 were aware of any guidelines that they could use (*Table 4.1.2.1*). The availability of guidelines varied with occupation; 29.8% of specialists, 16.4% of generalists, 7.9% of nurses, 15% midwives, and 56% of others, as illustrated in *Figure 4.1.2.1*. Clearly, the majority of specialists, generalists, nurses and midwives stated that they did not have access to guidelines.

78.4% of those without guidelines said that they would like to receive them, as displayed in *Table* and *Figure 4.1.2.2*, where 'not applicable' refers to those who did not answer this question as they had previously stated that they were aware of guidelines already in place.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	43	19.5	20.2	20.2
	no	170	77.3	79.8	100.0
	Total	213	96.8	100.0	
Missing	not available	6	2.7		
	System	1	.5		
	Total	7	3.2		
Total		220	100.0		

Table 4.1.2.1 Awareness of Guidelines

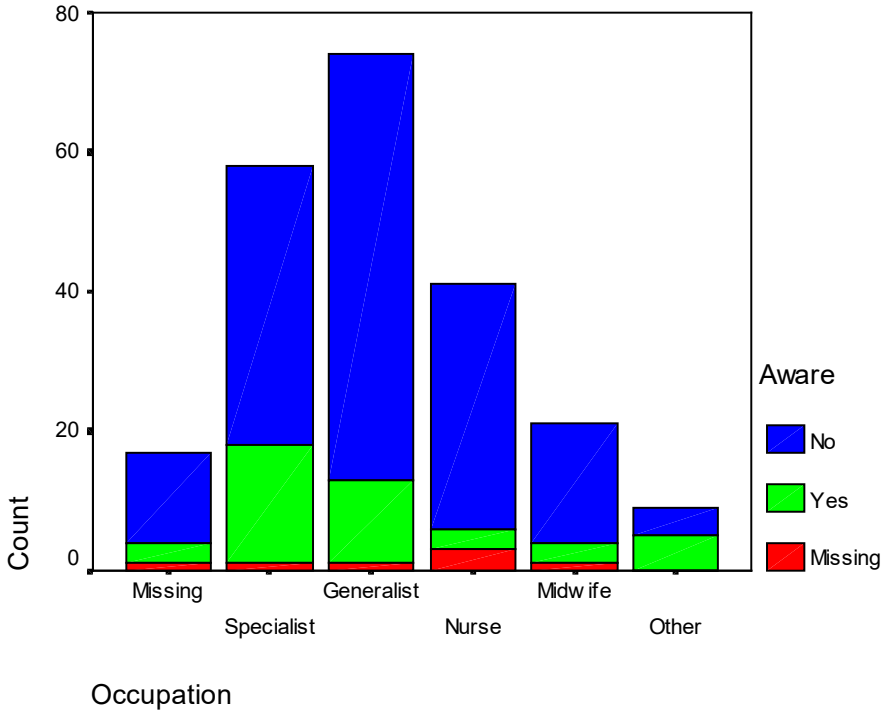


Figure 4.1.2.1 Availability of Guidelines by Occupation

wish guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	156	70.9	78.4	78.4
	no	6	2.7	3.0	81.4
	dont know	7	3.2	3.5	84.9
	not applicable	30	13.6	15.1	100.0
	Total	199	90.5	100.0	
Missing	not answered	20	9.1		
	System	1	.5		
	Total	21	9.5		
Total		220	100.0		

Table 4.1.2.2 Desire to Receive Guidelines

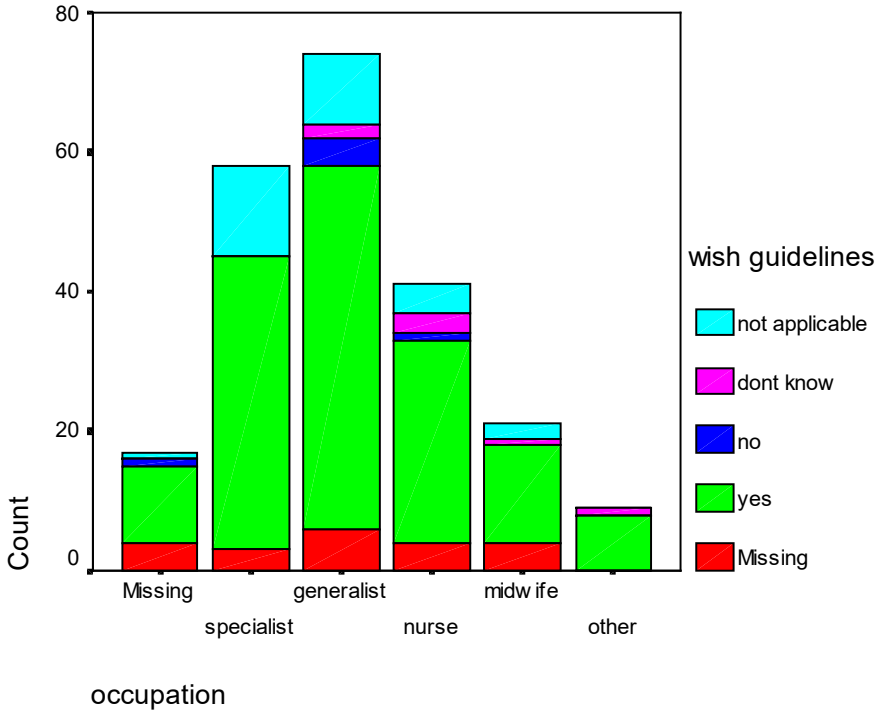


Figure 4.1.2.2 Desire to Receive Guidelines by Occupation

4.1.3 Antenatal Care

4.1.3.1 Number of Visits

This part of the questionnaire was two-fold. Respondents were asked firstly how many antenatal clinic appointments women would attend on average at their facility, and secondly, whether or not they felt this to be adequate. Respondents most frequently stated that women attend 4 antenatal visits (*Figure 4.1.3.1.1*) but only 5.3% of them considered this number of visits to be sufficient. However, of those who estimated the average number of visits to be between 7 per pregnancy, 72.7% of respondents felt that this number was adequate (*Table 4.1.3.1.1*).

There are varying degrees of agreement amongst respondents from single healthcare facilities regarding the average number of antenatal visits that a pregnant woman attends. For example, at one Women's Consultation, only 9.1% of respondents stated that 4 visits was the average (6 visits being the most frequent answer here), whilst at another Consultation, 81% of respondents answered '4 visits'. Although '4 visits' was most frequent overall, some facilities reported no consensus between the majority of its respondents. The most frequently stated average number of visits varied enormously within as well as between individual facilities.

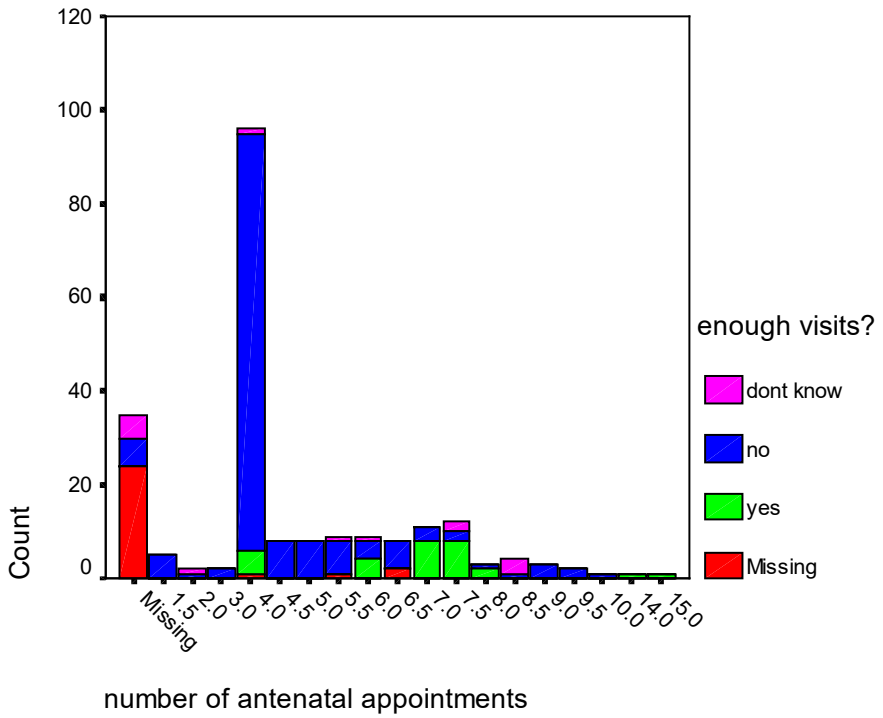


Figure 4.1.3.1.1 Average Number of Antenatal Appointments

		enough visits?					
		yes		no		dont know	
		Count	Row %	Count	Row %	Count	Row %
number of antenatal appointments	1.50			5	100.0%		
	2.00			1	50.0%	1	50.0%
	3.00			2	100.0%		
	4.00	5	5.3%	89	93.7%	1	1.1%
	4.50			8	100.0%		
	5.00			8	100.0%		
	5.50			7	87.5%	1	12.5%
	6.00	4	44.4%	4	44.4%	1	11.1%
	6.50			6	100.0%		
	7.00	8	72.7%	3	27.3%		
	7.50	8	66.7%	2	16.7%	2	16.7%
	8.00	2	66.7%	1	33.3%		
	8.50			1	25.0%	3	75.0%
	9.00			3	100.0%		
	9.50			2	100.0%		
	10.00			1	100.0%		
	14.00	1	100.0%				
	15.00	1	100.0%				

Table 4.1.3.1.1 Opinion Regarding Number of Antenatal Visits

4.1.3.2 Physical Examination

The results to the question regarding the performance of a physical examination gave and 84.5% response rate (*Figure 4.1.3.2.1*). 95.7% of responses received indicated that a physical examination is performed at every antenatal visit. 2.7% perform it at some visits, meaning that 98.4% of respondents to this question perform a physical examination during antenatal care. An alarming 1.6% never perform it (*Table 4.1.3.2.1*). From *Table 4.1.3.2.2* we can see that two of these individuals were specialists and one was a midwife. (NB. The option 'once only' does not appear in the charts as no respondents gave this answer)

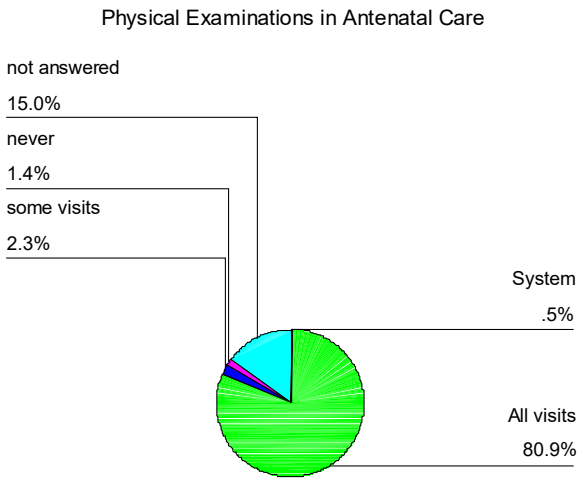


Figure 4.1.3.2.1 When is Physical Examination Performed During Antenatal Care?

Cumulative Physical Examinations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	178	80.9	95.7	95.7
	some visits	5	2.3	2.7	98.4
	never	3	1.4	1.6	100.0
	Total	186	84.5	100.0	
Missing	not answered	33	15.0		
	System	1	.5		
	Total	34	15.5		
Total		220	100.0		

Table 4.1.3.2.1 Cumulative Performance of Physical Examinations

		when Physical Examinations are done			
		All visits	some visits	never	not answered
occupation	specialist	48	3	2	5
	generalist	64	2		8
	nurse	31			10
	midwife	18			3
	other	5		1	3
	not answered	8			3
	untranslated	4			1

Table 4.1.3.2.2 When is Physical Examination Performed During Antenatal Care?

4.1.3.3 Blood Pressure

Enquiry into the measurement of blood pressure gained an 89.5% response (*Figure 4.1.3.3.1*). 94.9% of those responding take a blood pressure at every visit (*Table 4.1.3.3.1*). 98.5% of respondents perform a blood pressure at some point, but one midwife reported that he/she did this only once during the period of antenatal care (*Table 4.1.3.3.2*). 3 respondents (1.5%) stated that they never measure blood pressure during antenatal visits.

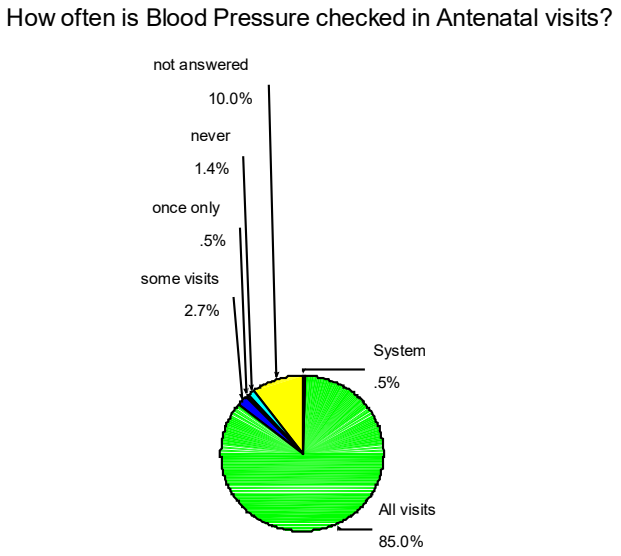


Figure 4.1.3.3.1 When is Blood Pressure Measured During Antenatal Care?

Blood Pressure in Antenatal Appointments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	187	85.0	94.9	94.9
	some visits	6	2.7	3.0	98.0
	once only	1	.5	.5	98.5
	never	3	1.4	1.5	100.0
	Total	197	89.5	100.0	
Missing	not answered	22	10.0		
	System	1	.5		
	Total	23	10.5		
Total		220	100.0		

Table 4.1.3.3.1 Adjusted Blood Pressure Measurement during Antenatal Care

Occupation * Blood pressure in Antenatal Appointments Crosstabulation

Count

		blood pressure in Antenatal Appointments				
		All visits	some visits	once only	never	Total
occupation	specialist	49	1		2	52
	generalist	66	3			69
	nurse	35	1			36
	midwife	16	1	1		18
	other	6			1	7
Total		172	6	1	3	182

Table 4.1.3.3.2 When is Blood Pressure Measured During Antenatal Care?

4.1.3.4 Hepatitis B

This question only received a 67.3% response rate. *Figure* and *Table 4.1.3.4.1* show that 75% of those who did respond never carry out testing for Hepatitis B. 21.6% state that they test once during antenatal care, and 3.4% claim that they do so on more than one occasion. Of these respondents who test more than once during pregnancy, all were specialists or generalists (*Table 4.1.3.4.2*).

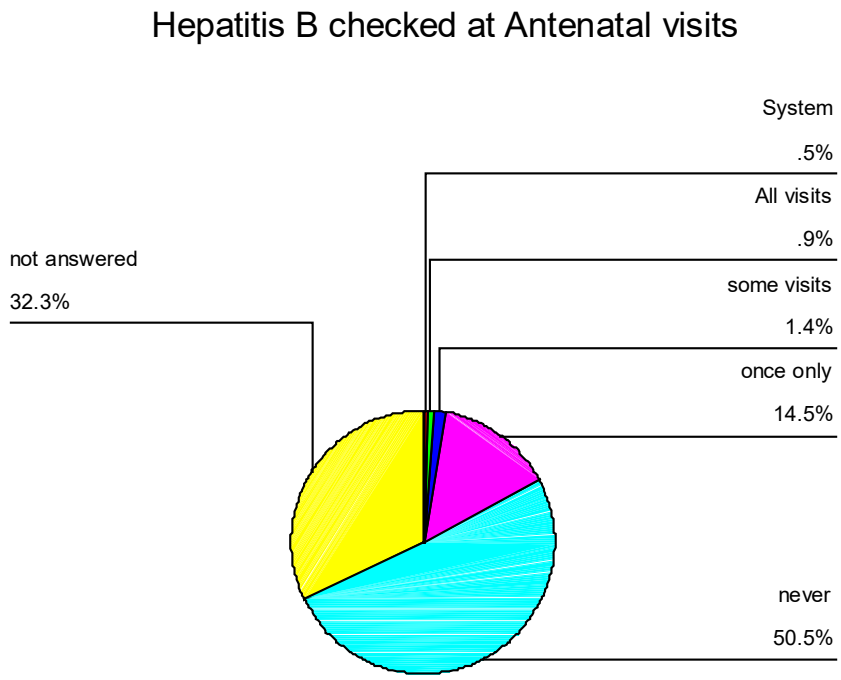


Figure 4.1.3.4.1 When is Hepatitis B testing Performed During Antenatal Care?

Hep B tested for at Antenatal visits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	2	.9	1.4	1.4
	some visits	3	1.4	2.0	3.4
	once only	32	14.5	21.6	25.0
	never	111	50.5	75.0	100.0
	Total	148	67.3	100.0	
Missing	not answered	71	32.3		
	System	1	.5		
	Total	72	32.7		
Total		220	100.0		

Table 4.1.3.4.1 When is Hepatitis B testing Performed During Antenatal Care?

Occupation * Hep B tested for at Antenatal visits Crosstabulation

Count

		Hep B tested for at Antenatal visits				
		All visits	some visits	once only	never	Total
occupation	specialist	1	2	12	27	42
	generalist	1	1	12	40	54
	nurse			3	22	25
	midwife			2	13	15
	other			2	1	3
Total		2	3	31	103	139

Table 4.1.3.4.2 When is Hepatitis B testing Performed By Occupation?

4.1.3.5 Full Blood Count

Respondents were asked how frequently they measured the full blood count during antenatal care. This question gained a response rate of 85%. (*Figure and Table 4.1.3.5.1)* 19.3% of respondents perform a full blood count at every visit, whilst the majority (73.8%) do so at some visits. 97.9% perform a full blood count at some point in the pregnancy. There appeared to be little occupational differences here (*Table 4.1.3.5.2*).

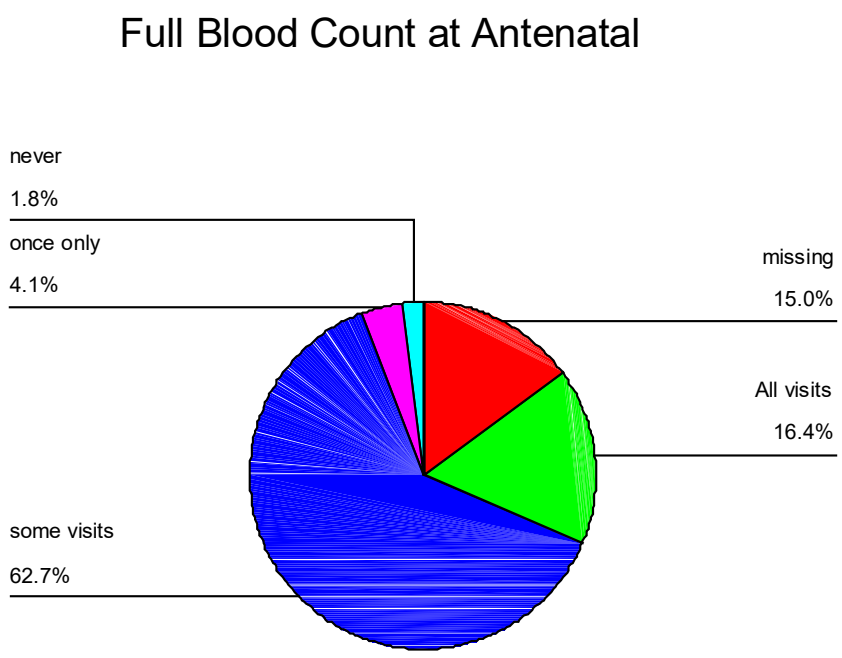


Figure 4.1.3.5.1 When is Full Blood Count testing Performed During Antenatal Care?

Full Blood Count at Antenatal visits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	36	16.4	19.3	19.3
	some visits	138	62.7	73.8	93.0
	once only	9	4.1	4.8	97.9
	never	4	1.8	2.1	100.0
	Total	187	85.0	100.0	
Missing	not answered	32	14.5		
	System	1	.5		
	Total	33	15.0		
Total		220	100.0		

Table 4.1.3.5.1 Adjusted timings of Full Blood Counts During Antenatal Care

occupation * FBC at Antenatal visits Crosstabulation

Count

		FBC at Antenatal visits				
		All visits	some visits	once only	never	Total
occupation	specialist	8	42	1	2	53
	generalist	14	47	2	1	64
	nurse	3	23	5		31
	midwife	4	14	1		19
	other	2	4		1	7
Total		31	130	9	4	174

Table 4.1.3.5.2 When is Full Blood Count Testing Performed by Occupation?

4.1.3.6 Urinalysis

The item regarding urinalysis gave a response rate of 84.5% (*Figure 4.1.3.6.1*). 45.7% respondents indicated that they perform urinalysis at all visits, and a similar proportion does so at some visits (33.9%). 91.9% do urinalysis at least once (*Table 4.1.3.6.1*). 8.1% of respondents never conduct a urinalysis test at any antenatal appointments, over half of who are doctors (*Table 4.1.3.6.2*).

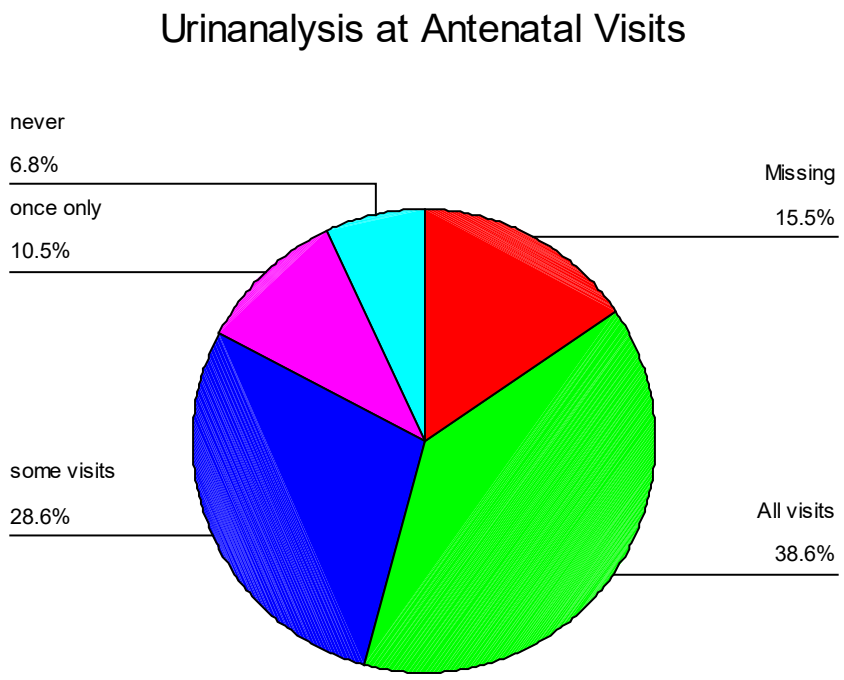


Figure 4.1.3.6.1 When is Urinalysis Testing Performed during Antenatal Care?

Urinalysis at Antenatal visits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	85	38.6	45.7	45.7
	some visits	63	28.6	33.9	79.6
	once only	23	10.5	12.4	91.9
	never	15	6.8	8.1	100.0
	Total	186	84.5	100.0	
Missing	not answered	33	15.0		
	System	1	.5		
	Total	34	15.5		
Total		220	100.0		

Table 4.1.3.6.1 Adjusted Urinalysis Testing during Antenatal Care

occupation * urinalysis at Antenatal visits Crosstabulation

Count

		urinalysis at Antenatal visits				
		All visits	some visits	once only	never	Total
occupation	specialist	22	23	3	2	50
	generalist	26	21	12	6	65
	nurse	21	8		5	34
	midwife	6	5	6	1	18
	other	2	3		1	6
Total		77	60	21	15	173

Figure 4.1.3.6.2 When is Urinalysis testing Performed by Occupation?

4.1.3.7 Ultrasound

The question concerning the frequency with which pregnant women were scanned generated a response rate of 82.7% (*Figure* and *Table 4.1.3.7.1*). A large proportion, 83.0% of respondents stated that they conducted an ultrasound scan at some antenatal visits with 1.1% saying that they did so at every visit. A total of 93.4% of respondents perform an ultrasound at least once during pregnancy, the 6.6% that did not being largely specialists. One midwife and one other healthcare professional said that they conducted scans at all visits (*Table 4.1.3.7.2*).

Ultrasound at Antenatal visits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	2	.9	1.1	1.1
	some visits	151	68.6	83.0	84.1
	once only	17	7.7	9.3	93.4
	never	12	5.5	6.6	100.0
	Total	182	82.7	100.0	
Missing	not answered	37	16.8		
	System	1	.5		
	Total	38	17.3		
Total		220	100.0		

Table 4.1.3.7.1 When is Ultrasound Scanning Performed During Antenatal Care?

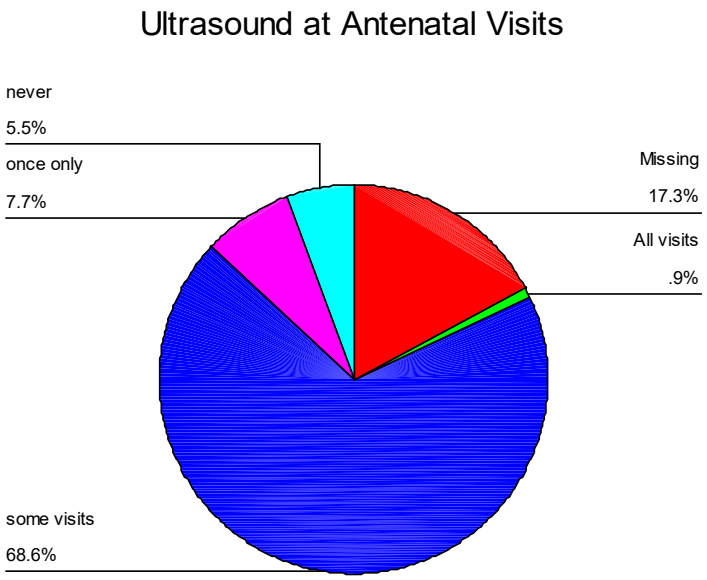


Figure 4.1.3.7.1 When is Ultrasound Scanning Performed During Antenatal Care?

occupation * Ultrasound at Antenatal visits Crosstabulation

Count

		Ultrasound at Antenatal visits				
		All visits	some visits	once only	never	Total
occupation	specialist		38	6	6	50
	generalist		60	4	3	67
	nurse		25	4	1	30
	midwife	1	14	2		17
	other	1	3		1	5
Total		2	140	16	11	169

Table 4.1.3.7.2 When is Ultrasound Scanning Performed By Occupation?

4.1.3.8 Syphilis

The questionnaire asked respondents to state how often they tested for this during pregnancy. A response rate of 85.5% was obtained. 59.6% of respondents stated that they performed such a test once only (*Table* and *Figure 4.1.3.8.1*). The second most frequent testing practice was 'at some visits' which was reported by 35.6% of respondents. 2.1% never tested for syphilis. Generalists were split almost 50:50 between testing on 'some visits' and testing 'once only', whereas the majority of specialists tested once only and only (*Table 4.1.3.8.2*).

VDRL/TPHA tests for syphilis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All visits	5	2.3	2.7	2.7
	some visits	67	30.5	35.6	38.3
	once only	112	50.9	59.6	97.9
	never	4	1.8	2.1	100.0
	Total	188	85.5	100.0	
Missing	not answered	31	14.1		
	System	1	.5		
	Total	32	14.5		
Total		220	100.0		

Table 4.1.3.8.1 When is Syphilis Testing Performed during Antenatal Care?

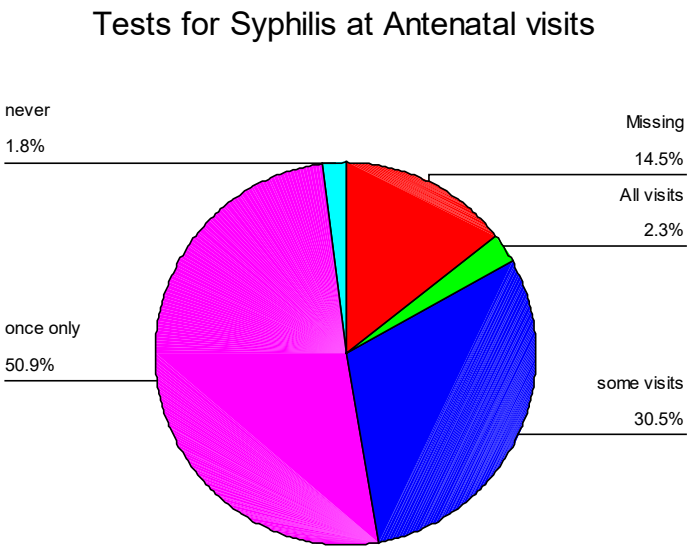


Figure 4.1.3.8.1

occupation * VDRL/TPHA tests for syphilis Crosstabulation

Count

		VDRL/TPHA tests for syphilis				
		All visits	some visits	once only	never	Total
occupation	specialist		9	40	3	52
	generalist	3	31	32		66
	nurse		13	19		32
	midwife	1	8	9		18
	other	1	1	3	1	6
Total		5	62	103	4	174

Table 4.1.3.8.2 When is Syphilis Testing Performed by Occupation?

4.1.3.9 Rubella

When asked whether they screened pregnant patients for rubella immunity, respondents almost exclusively answered 'no'. At a response rate of 92.3%, only 8.4% of those who answered said 'yes', they do screen pregnant woman for rubella immunity. Of these, 6 were doctors, 9 nurses or midwives and 1 'other' healthcare worker (*Table 4.1.3.9.1*). More interestingly, unlike any other facility, respondents from one Women's Consultation in particular gave the 'yes' answer in 38.4% cases, significantly higher than the overall proportion of this response.

Of the 16 respondents who test pregnant woman for rubella, 12 declined to comment on their criteria for doing so. Of those that did, all indicated that the patient's history with regard to rubella was the most important factor in their decision to test.

All respondents were asked whether they have a follow up procedure for women who they know to lack immunity to rubella. Once again, a majority of 71.8% of respondents to this

question had no such procedure in place (*Figure 4.1.3.9.1).* However, of those who stated that they do follow up non-immune women, this usually involves advising on the avoidance of contacts, counseling regarding termination of pregnancy and immunisation, but over 47% of these did not explain their follow up procedure. (*Table 4.1.3.9.2)*

Of those who do not have a policy for following up pregnant women not immune to rubella, 93.9% felt that such a procedure is necessary (*Tables 4.1.3.9.3 and 4.1.3.9.4*). The majority of these respondents, 64.6% thought that it was necessary to have a procedure for follow up without giving reason, with a further 14.1% who answered 'yes' to prevent consequences for the foetus. Other reasons for a follow up procedure included: for referral to an infectious disease specialist, to allow informed decisions regarding termination to be made and to protect the mother from foetal pathogen.

		occupation				
		specialist	generalist	nurse	midwife	other
Test every pregnant woman for rubella	yes	2	4	5	4	1
	no	53	66	32	13	7

Table 4.1.3.9.1 Testing of Every Patient for Rubella Immunity by Occupation of Respondent

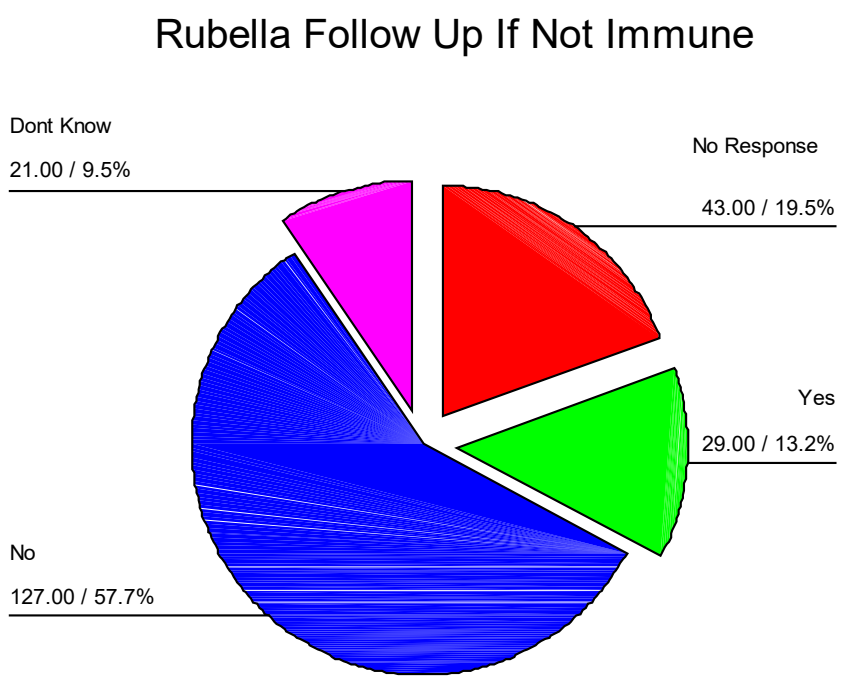


Figure 4.1.3.9.1 Procedure For Follow Up of Women Not Rubella Immune in Place?

		procedure for follow up in Rubella							
		not applicable	not answered	avoid contact	Counsel/discuss termination	discuss disease	immunisation	urgent consultation	general supervision
Rubella follow up procedure if not immune?	yes	2	8	3	2	1	2		1
	no	105	20				1	1	
	dont know	18	3						

Table 4.1.3.9.2 Procedure For Follow Up Where No Rubella Immunity

Should there be a follow up procedure for non immune Rubella Patients? Why?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, forearly diagnosis	4	1.8	4.0	4.0
	Yes, For generation of better Health	2	.9	2.0	6.1
	Yes, for referral to Infectious Disease Specialist	4	1.8	4.0	10.1
	Yes,for prevention of fetal consequences	14	6.4	14.1	24.2
	Yes,for informed decisions about terminations	2	.9	2.0	26.3
	Yes, to protect the mother from fetal pathogen	3	1.4	3.0	29.3
	Yes, but not financially viable	2	.9	2.0	31.3
	Yes, it is neccesary	62	28.2	62.6	93.9
	NO	6	2.7	6.1	
	Total	99	45.0	100.0	100.0
Missing	Not applicable	48	21.8		
	not answered	71	32.3		
	System	2	.9		
	Total	121	55.0		
Total		220	100.0		

Table 4.1.3.9.3 Necessity For A Procedure For Follow Up Where No Rubella Immunity

			occupation						
			specialist	generalist	nurse	midwife	other	not answered	untranslated
If you do not have Rubella follow up,Is it required?	not applicable, already have follow up procedures		15	11	12	5	2	2	1
	not answered		16	32	6	6	4	5	3
	yes	yes, for early diagnosis	2	1	1				
		for generating better health			2				
		to enable further Inf. diseases specialist referral			1	1	1	1	
		yes, to prevent fetal consequences	1	9	3	1			
		yes, to enable informed decision about termination	1	1					
		yes, to protect the mother from fetal pathogen	2		1				
		yes	19	17	14	8	2	2	2
	no		1	3	1			1	

Table 4.1.3.9.4 Necessity for A Procedure for Follow up by Occupation of Respondents

4.1.3.10 Access

Issues surrounding access to antenatal care were raised when respondents were asked to state any factors they believe might prevent pregnant women from attending either their

polyclinic or themselves. This question obtained 245 responses from the 85.3% of those who completed the questionnaire, in other words a number of individuals stated more than one factor as an obstacle (*Table 4.1.3.10.1*). It was observed that 5 respondents 'do not know' of any factors which may prevent women from attending. Numerous areas of potential barriers were stated as shown in *Figure 4.1.3.10.1*

Of the valid responses, the most frequently observed reason for non-attendance was economic or financial constraints of the patient, accounting for 49.6% of reasons given. Information and educational issues were the next most frequently stated factors, 27.2%. For example, some healthcare professionals thought there to be a lack of education, information, responsibility and understanding amongst patients, as well as a degree of reluctance and patients not perceiving the importance of their condition. Other patient-orientated factors include the social issues which patients may face, for example, poor social conditions, transportation problems, unemployment, and marital status were noted in 7.5% of responses.

Table 4.1.3.10.2 shows the other categories of factors, given in response to this question. Governmental issues include reasons such as a lack of government help, reform limiting the number of visits and unjustified reforms. Finally, the quality of the service provided was described by a small proportion of respondents as being inappropriate and ineffective, and doctors as being incompetent.

	What prevents women visiting polylinic (response 1)		What prevents women visiting polylinic (response 2)		What prevents women visiting polylinic (response 3)		What prevents women visiting polylinic (response 4)	
	Count	%	Count	%	Count	%	Count	%
not answered	32	14.7%						
do not know	5	2.3%						
financial issues	103	47.2%	14	26.9%	2	33.3%		
informational/educational issues	35	16.1%	26	50.0%	4	66.7%		
Governmental issues	33	15.1%	3	5.8%				
social issues	9	4.1%	8	15.4%			1	100.0%
quality of services and care	1	.5%	1	1.9%				
Total	218	100.0%	52	100.0%	6	100.0%	1	100.0%

Table 4.1.3.10.1 Number of Respondents Giving More than One Factor

:

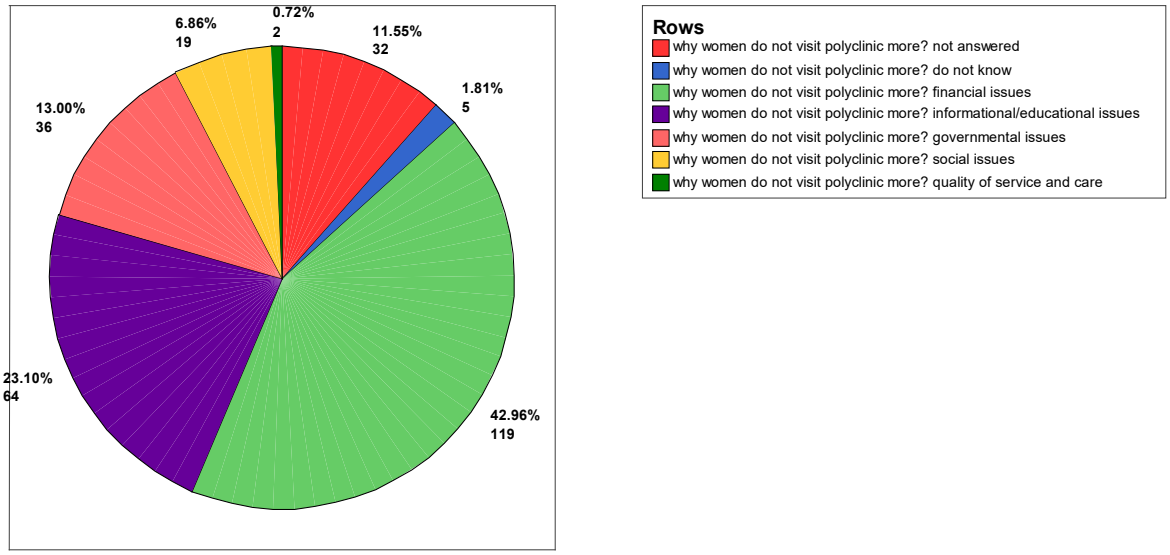


Figure 4.1.3.10.1 Potential barriers to Accessing Antenatal Care

Why do women not visit polyclinic more?	not answered	32
	do not know	5
	financial issues	119
	informational/educational issues	65
	Governmental issues	36
	social issues	18
	quality of services and care	2

Categories of Factors Which May Prevent Pregnant Women From Attending Providers More Frequently

Table 4.1.3.10.2

4.1.4 Contraception

4.1.4.1 Access to Contraceptive Services

Respondents were asked to estimate the percentage of women who currently have access to contraceptive services. A total of 160 responses were received, and responses varied widely between 2% and 80%. (*Table 4.1.4.1.1*). However as can be seen in *Figure 4.1.4.1.1*, over 49% of respondents considered that between 25-45% of women have access to current services. Statistically, the mean response was 35.93% with a standard deviation of 18.14%.

Statistical analysis shows that the 95% confidence intervals (+/- 1.96 Standard Deviations from the mean) do not include zero (0.35 to 71.48). However, if 99% confidence intervals are taken (+/-2.58 SD) the range of significance is inclusive of zero (-10.87 to 82.73).

When the responses are examined, taking the occupation of the respondent into account, it can be seen (*Table 4.1.4.1.2*) that the mean for each occupation falls with +/- one standard deviation from the mean in *Table 4.1.4.1.1*. No occupational group appears hold an opinion significantly different from the others.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
percentage access to cont. services	160	2	80	35.93	18.14
Valid N (listwise)	160				

Table 4.1.4.1.1

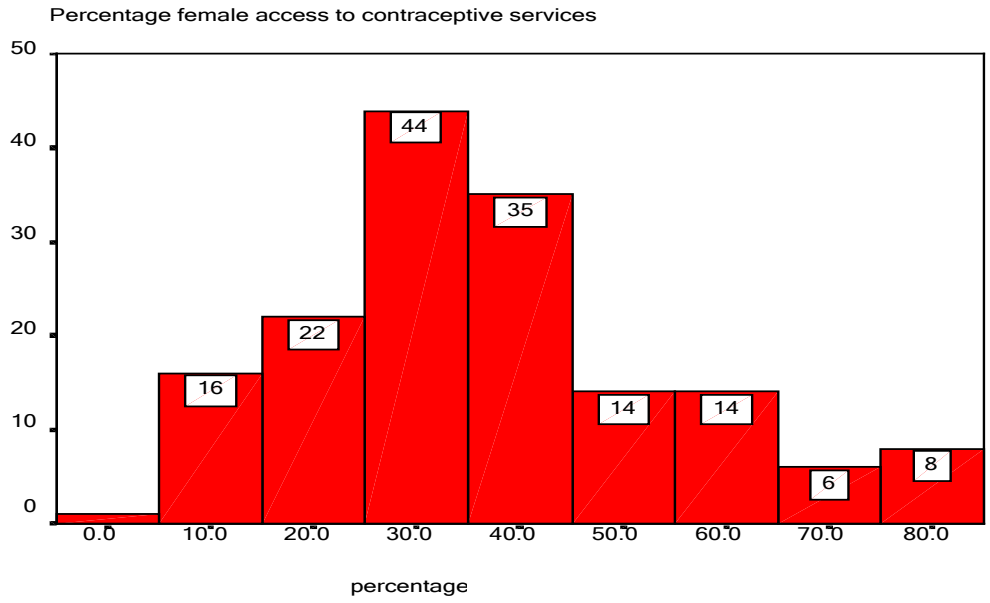


Figure 4.1.4.1.1

Report

percentage access to contraceptive services

occupation	Mean	N
specialist	30.61	37
generalist	35.33	63
nurse	36.70	27
midwife	47.50	16
other	47.50	5
Total	36.12	148

Table 4.1.4.1.2

Questions were asked regarding how patients are able to access contraceptive services and which patients are entitled to free contraception, but the researchers considered that the

responses indicated that these questions required further qualification at interview and hence these issues are discussed in the interview results section.

Table 4.1.4.1.3 and Figure 4.1.4.1.2 show that respondents gave a wide range of responses indicating anywhere from 2% to 89% of the population may have access to the contraceptive services available. These results show such a variation in respondent's opinion that no conclusions can be accurately drawn from this data.

Centiles of access to contraceptive care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	7.7	10.6	10.6
Centiles of Contraceptive access	2	16	7.3	10.0	20.6
	3	20	9.1	12.5	33.1
	4	28	12.7	17.5	50.6
	5	12	5.5	7.5	58.1
	6	22	10.0	13.8	71.9
	7	5	2.3	3.1	75.0
	8	26	11.8	16.3	91.3
	9	14	6.4	8.8	100.0
	Total	160	72.7	100.0	
Missing	System	60	27.3		
Total		220	100.0		

Table 4.1.4.1.3

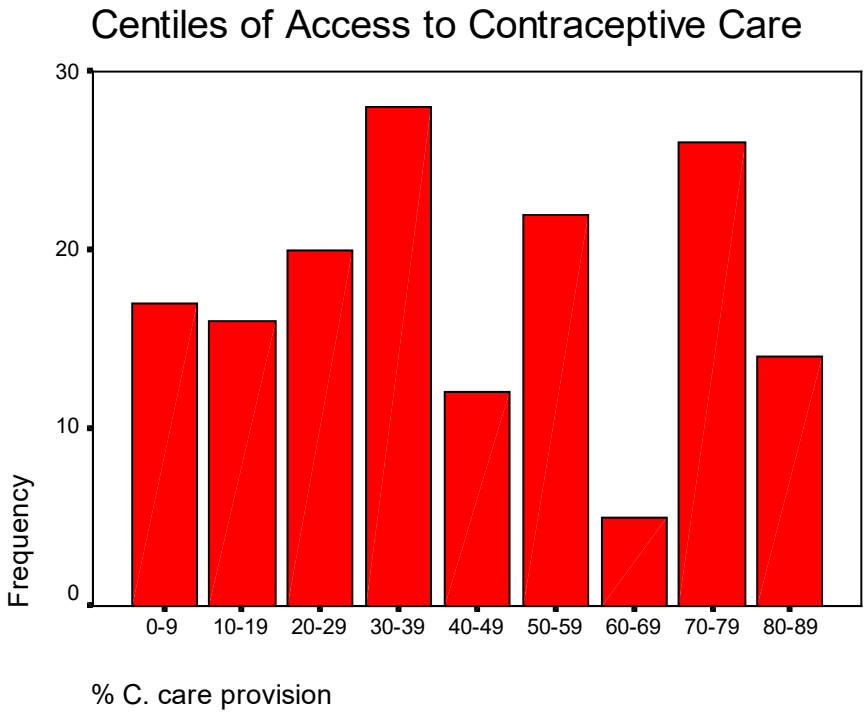


Figure 4.1.4.1.2

Respondents were also asked whether they felt that contraception should be provided free of charge to all patients. A total of 202 out of 220 responses were give, a response rate of 92%. The remainder were left unanswered or not entered by the coder. 69.8% of those answering the question felt that contraceptives should be provided free of charge for all patients, 27.7% believed that free provision for all was not necessary, and 2.5% indicated a 'don't know' response. (*Table 4.1.4.1.4 and Figure 4.1.4.1.3*).

A 'yes' response was given by a majority of respondents across all occupational groups. (*Figure 4.1.4.1.4*). It should be noted however that a significant proportion of generalists considered that contraceptives should not be free to all patients.

Free Contraceptives for all?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	141	64.1	69.8	69.8
	no	56	25.5	27.7	97.5
	dont know	5	2.3	2.5	100.0
	Total	202	91.8	100.0	
Missing	unanswered	17	7.7		
	system	1	.5		
	Total	18	8.2		
Total		220	100.0		

Table 4.1.4.1.4

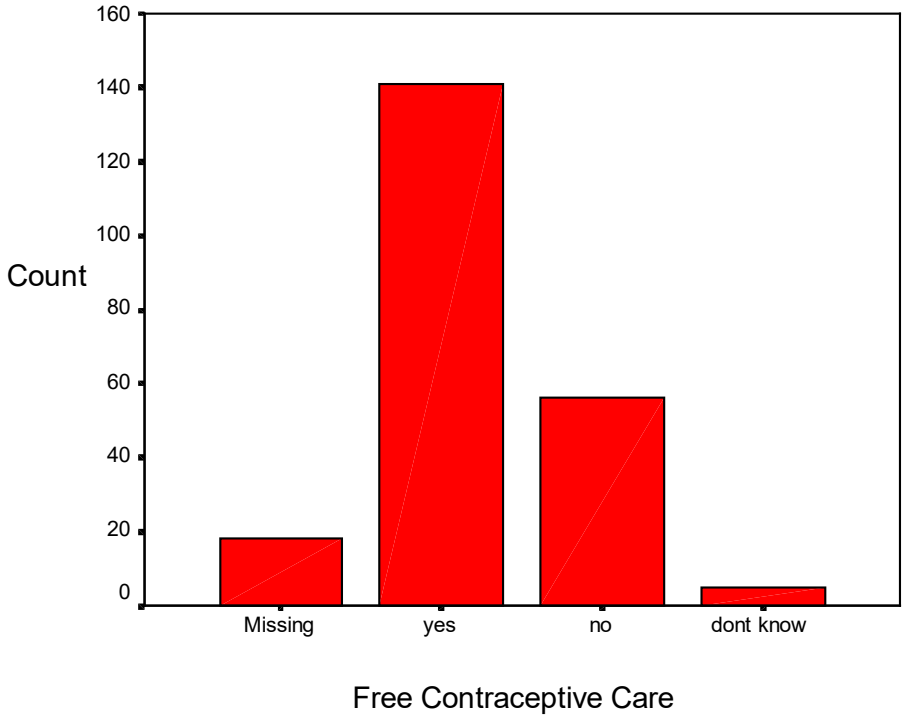
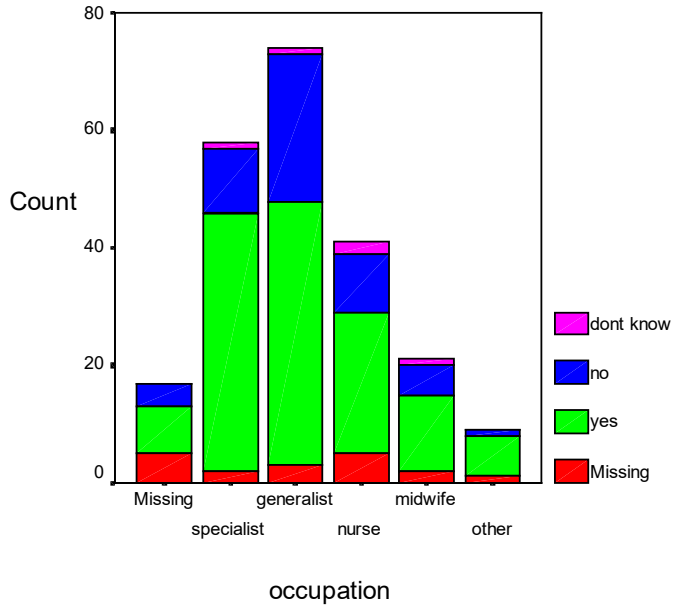


Figure 4.1.4.1.3 All Respondents View on Free Contraceptive Provision



Breakdown of Opinion on Free Contraceptive Provision across Occupations of Respondents.

Figure 4.1.4.1.4

The questionnaire next asked respondents to rank eight forms of contraception from 1 to 8, where 1 was the most popular method and 8 the least commonly used. It is important to note that respondents did not always award a rank to each method of contraception. Of the 220 respondents to the questionnaire, 29 were either left blank or the responses given were judged to be completely nonsensical by the research team. Only 145 of the respondents applied ranks 1-8, the remainder either left one or more entries blank, or entered the same rank more than once (*Table 4.1.4.1.5)*. These responses have been included, but limit the potential significance of the results.

Figure and Table 4.1.4.1.6 show the relationship between method of contraception and the frequency with which it was awarded a particular rank by respondents.

From the *Figure 4.1.4.1.6* it is possible to see that both Condoms and Terminations of Pregnancy were both most frequently ranked in first position and at almost an equal number of times, 59 out of 190 responses (31.1%) and 57 out of 179 (31.8%) respectively. It should be reported, however, that a number of respondents indicated that 'this [abortion] is not a form of contraception', and hence a rank was not awarded.

The Coil/IUD method was most frequently ranked as the 2nd most common contraceptive method (66 of the 191 responses - 34.6%). 51 of the respondents who ranked this method ranked it as the 3rd most common method of contraception (26.7%); therefore also awarding it the position of 3rd most commonly used method.

Rhythm/Natural/Withdrawal methods were ranked as the fourth most common method the greatest number of times. 56 out of 187 respondents answering (29.9%) awarded position 4.

The Oral Contraceptive Pill (OCP) was ranked 5th by 43 of the 187 respondents for this method. 40 of the 187 also rated it 3rd however, and 34 believed it to be 4th.

The Cap/Diaphragm/Sponge methods were placed 6th by most respondents, a total of 64 of 154 responses (41.6%).

It should be noted that the hormone injection method of contraception was ranked seventh the greatest number of times (73 out of 159) by those who completed for this method. 63 out of 159 respondents also placed it in sixth position, however.

The least common method of contraception was unquestionably that of surgical sterilisation, with 82 of 154 of respondents (53.2%) ranking this method in eighth position.

Missing Values for Ranking of Contraceptive. (Highligh
Failure to Understand Ranking)

	Missing Patterns[a]							
Number of Cases	1	2	3	4	5	6	7	8
145								
7					X			
5							X	X
25						X	X	X
3					X	X	X	X
29	X	X	X	X	X	X	X	X

Patterns with less than 1% cases (2 or fewer) are not displayed.

a. Variables are sorted on missing patterns.

Figure 4.1.4.1.5 Most Common Combinations of Items Completed

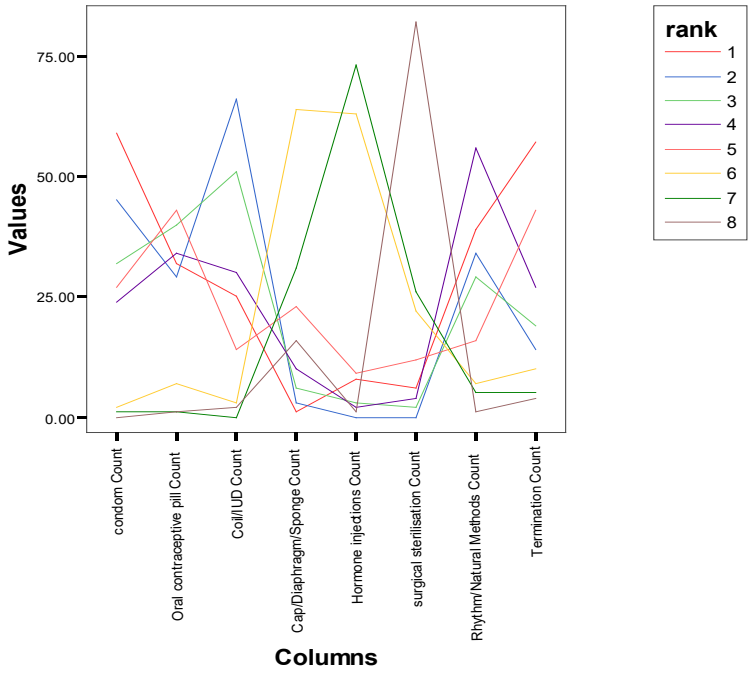


Figure 4.1.4.1.5 Ranking Contraceptive Methods by Frequency of Use

Rank	Condom	OCP	Coil/IUD	Cap/ Diaphragm/ Sponge	Hormone injections	Surgical sterilisation	Natural/ Rhythm/ Withdrawal	Termination
1	59	32	25	1	8	6	39	57
2	45	29	66	3			34	14
3	32	40	51	6	3	2	29	19
4	24	34	30	10	2	4	56	27
5	27	43	14	23	9	12	16	43
6	2	7	3	64	63	22	7	10
7	1	1		31	73	26	5	5
8		1	2	16	1	82	1	4

Table 4.1.4.1.6 Ranking Contraceptive Methods by Frequency of Use

4.1.5 General State of Women's Health Care

Respondents were asked to give a general rating of the current provision of women's health care in Georgia on a five-point scale from 'Excellent' to 'Very Poor'. 198 responses were received out of a potential total of 220. This gave a response rate for this question of 90%. Of this 90% only one respondent rated the current provision as 'Excellent'. However, 80.3% of responses rated provision as 'Satisfactory' or 'Poor'. (*Table 4.1.5.1 and Figure 4.1.5.1*)

It was noticeable that more nurses answered that they felt the service provided was 'Satisfactory' than 'Poor', the only occupation in which this was observed. In addition, a greater proportion of generalists and nurses felt that the service was 'Very Poor' compared to that of specialists and midwives (*Figure 4.1.5.2*)

rating of health care system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	1	.5	.5	.5
	good	5	2.3	2.5	3.0
	satisfactory	73	33.2	36.9	39.9
	poor	86	39.1	43.4	83.3
	very poor	33	15.0	16.7	100.0
	Total	198	90.0	100.0	
Missing	unanswered	20	9.1		
	System	2	.9		
	Total	22	10.0		
Total		220	100.0		

Table 4.1.5.1

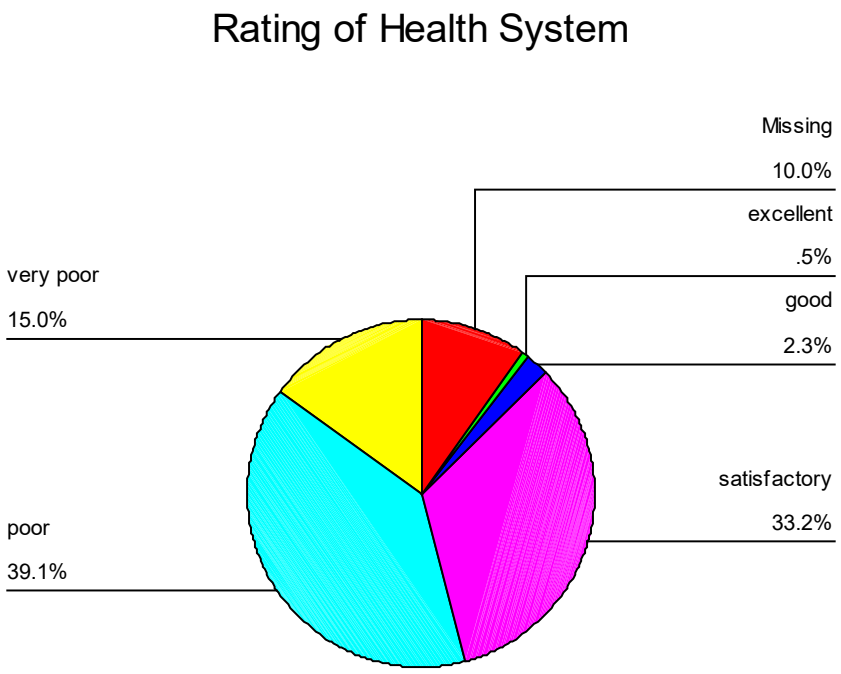


Figure 4.1.5.1

		rating of health care system					Total
		excellent	good	satisfactory	poor	very poor	
occupation	specialist		1	22	28	5	56
	generalist		2	23	25	15	65
	nurse			17	10	9	36
	midwife	1	1	5	10	2	19
	other			2	6		8

Table 4.1.5.2

In response to the question of 'what are the 3 main problems in the provision women's health care in Georgia?' there were a total of 520 responses, which were grouped into 8 larger categories (*Figure 4.1.5.2*). There were 30 respondents who chose not to answer

the question and from the remaining 490 responses the most frequently listed problems were financial issues (52.4%).

These included: poor financing of the health system, no relationship between patient's income and fees, screening system based upon the state finance system, lack of additional insurance, salary of doctors, economic problem for the patient, lack of free service, no discounts for drugs and unemployment. Low socio-economic conditions were also included in this category and received the greatest number of responses.

Of the reasons given 18.1% were related to informational/educational issues such as: lack of patient information and education, poor quality information and guidelines, poor information management and problems with research and statistics.

The other categories were less frequently mentioned all only receiving around 10% or less of the responses. However, there were two respondents who cited 'everything' as being a major problem in women's healthcare provision.

General Opinion of Problems with Georgian Health Care system

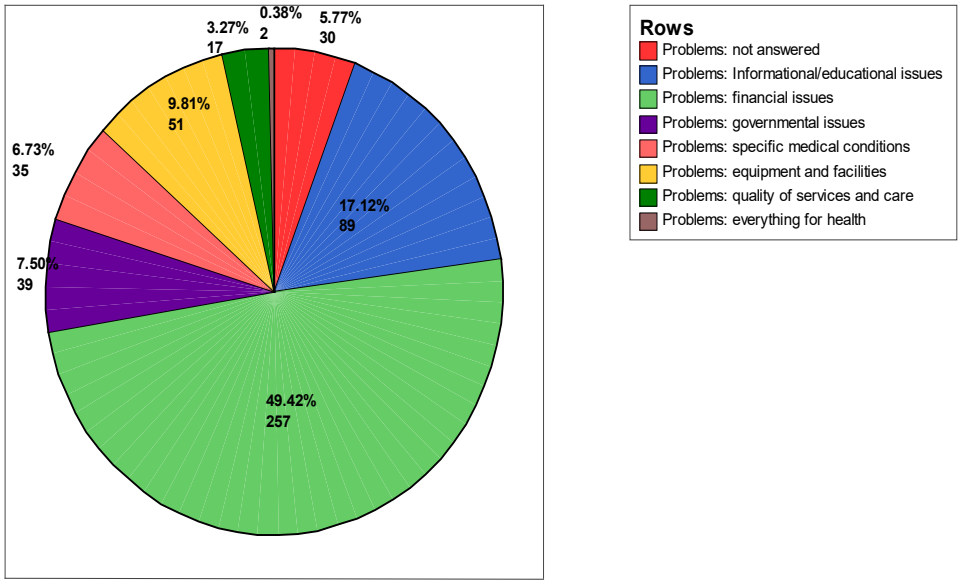


Figure 4.5.1.2

4.2 **Results Of Interviews**

4.2.1 Guidelines

Initially, it was felt necessary to clarify the interviewees' interpretation of the term '*guidelines*' and it was discovered that there was a wide range of different interpretations. Whilst some head doctors thought that the guidelines referred to were those financial guidelines provided to them for women's healthcare treatment costs, others understood this term to mean treatment protocols. For example:

'I understand that you meant guidelines for treatment',

'A plan how to work',

'It is guidance of how to practice',

'We call it management planning'

Dependent upon the response given, the subsequent questions asked were directed to further understand the specific details of the type of guidelines being discussed.

4.2.1.1 Financial Guidelines

This was only discussed by the head doctors of the clinics, and in relation to the costs of antenatal care, these were provided by SMIC and were both standard and compulsory. However, in regard to the financial guidelines for gynaecological services provided by that clinic the responses differed, the opposing views expressed were that they were either governmentally provided, or internally developed.

Whilst these guidelines are generally considered to be of good quality, it was felt by one head doctor that their formulation required greater co-ordination and should not be solely dictated from the top.

4.2.1.2 Treatment Guidelines

Gynaecologists: Amongst these doctors the availability varied with some reporting that guidelines were available, and others opposing this opinion. One doctor stated that whilst guidelines were available, it was only to the head doctors, and that dissemination did not occur.

Where guidelines did not exist it was universally stated that they would like them to be provided.

In the absence of governmental guidelines doctors found additional treatment information either from books and journals, or in one case, by searching out guidelines for their own use.

Regarding the formulation of guidelines in the future there was the opinion that:
'they should be theoretical and practical and should be made by the local physicians, district level guidelines.'

Reproductologists: For this group of doctors it was generally stated that guidelines were available, however, these were not government directed but provided by the John Hopkins University Hospital's contraceptive programme from the United States.

Here it was felt by some that the higher institutes should formulate the guidelines as those in the clinics see them as experts.

Midwives: For midwives there were two main opinions, that there were guidelines (provided by the government) and that guidelines were absent.

Some felt that current guidelines are easier to follow that those previously in place.

4.2.2 Antenatal Care

4.2.2.1 Current Basic Package

The boundaries of the insurance funded antenatal care were clarified through enquiry at the level of the provider.

When questioned regarding the content of the basic package, that is those items which are provided free of charge to a pregnant woman, all interviewees stated that 4 consultations were the standard. However, there was a degree of variation in the timing of these appointments. Some consultations were carried out before 12 weeks, then at 20, 32, & 36 weeks of pregnancy, whilst others preferred consulting at 16, 20, 30, & 36 weeks. The

first visit was generally before 16 weeks and was followed up at 20-22, 30-32 and finally 36 weeks gestation.

While providing antenatal care, all doctors carried out history and examination at every visit, as well as regular measurements of height, weight, blood pressure, and cardiovascular and respiratory checks. Investigations as part of the package were usually a full blood count, and urinalysis, with smears, the Wassermann (syphilis) test, blood grouping and rhesus testing once. Some doctors mentioned that a second syphilis test was carried out at no extra fee in the past but that this was no longer free to patients. Similarly, the HIV test is no longer free to patients. All of these investigations were carried out on-site at each of the establishments visited.

All doctors who were interviewed do not routinely test for either Hepatitis B or rubella; both are not included in the basic package, and a few doctors never performed such tests. These tests were only carried out if indicated by the patient's history e.g. stillbirths or known contacts. One midwife stated that,

'rubella is rare, I have never seen it in 15 years but advise patients to avoid kissing and crowded places'.

Ultrasound was not a free service provided within the basic package by any clinic where interviews had taken place. A number of doctors felt that ultrasound was a particularly important screening investigation in antenatal care. One gynaecologist qualified this, stating that they felt it was essential to include an ultrasound scan before 20 weeks.

4.2.2.2 Developing the Basic Package

Interviewees were asked whether they would make any change to the content of the package within the constraints of the current budget. All doctors stated that the current set of procedures and investigations were the best possible combination in light of the financial situation.

Most professionals, in an ideal world, would like to have the number of free visits increased to 6 in order to reduce the intervals between visits, although there were some in favour of the former Soviet system where women were seen every two weeks. Most gynaecologists felt that viral screening, such as that for Hepatitis B, should be included in the basic package. One felt that 4 viral tests should be included; stating that these are currently available at a cost of 4 GeL per test, hence the service would cost 16 GeL to the patient. One institute was aware of the TORCH screen, providing this to women at risk for an extra cost of 8 GeL.

Many doctors felt that free deliveries for pregnant women was one of the most important areas to be included in the basic package, one stated that this was more important than the provision of free contraception. At present, delivery should be free as part of the basic package. Some doctors stated that delivery was not free and that a small proportion of women will deliver at home due to financial circumstances. There was a consensus amongst interviewees that most women currently deliver in the maternity hospitals, and that gynaecologists providing antenatal care rarely deliver or follow-up patients during the postnatal period. The Chachava Institute of Obstetrics & Gynaecology and Perinatal

Medicine was also reported to manage some deliveries. Interviewees stated that the insurance company did not cover postnatal care but that some doctors would follow up patients of interest without reimbursement.

4.2.2.3 Continuity of care

Interviewers elicited opposing views on the continuity of antenatal care. Most gynaecologists who were interviewed said that they id not perform deliveries, but a small number did. All doctors are trained to deliver but in practice obstetrics is a post-graduate subject and only some doctors have experience in delivering babies. When asked whether one doctor should provide antenatal care and then deliver for the same patient a variety of responses were obtained as described below.

Gynaecologists: Generally, they thought that it was important to have the same doctor managing antenatal care as well as the delivery. Doctors most in support of such continuity of care were generally those who were qualified to do both. One more junior doctor, who had worked in Moscow and Hungary, stated that patient care would be improved if only one doctor managed both antenatal care and delivery. Another stated that such continuity of care was observed during Soviet times and that this was better than the present system. However, one senior gynaecologist strongly felt that it would be better to keep these two aspects of care separate in order to receive specialist care in both fields.

Midwives: This group were split over this question, with most thinking that on the whole one option was no better or worse than the other, and there was no consensus of opinion.

4.2.2.3 Antenatal Patient Education

When discussing patient education and health promotion as related to antenatal care, most interviewees said that women did receive advice on health during pregnancy. One midwife felt that although patients received leaflets on healthy pregnancies, breast-feeding and child development, that patient education during pregnancy is currently insufficient.

4.2.2.4 Utilisation

Interviewees were asked about their views regarding women who do not receive antenatal care.

Gynaecologists: A number of doctors stated that women often have difficulties in accessing antenatal services due to low levels of patient education, poor finances, and a lack of transport from rural areas. One doctor commented that there is *'not free access to free antenatal care'*. Some stated that the non-utilisation of antenatal services could cause increased problems with delivery, diseases in pregnancy and childhood and child disability.

Midwives: *'This not occur often but is maybe because it is lack of information on what it is and that it is free'* (sic). Some felt that there was a lack of education about the services available and pregnancy in general. Finally, concerns were expressed regarding the financial implications of pregnancy and medical care.

4.2.3 Abortion, STDs & Contraception

4.2.3.1 Abortion

4.2.3.1.1 Abortion rates

After termination, some clinics follow up their patients with and consultations on contraceptive use, but the Government does not obligate them to do this.

Doctors: Opinion was divided as to whether the rate of abortion had declined or remained stable in Georgia over the last 6 years. It was agreed by the majority however, to be at an unacceptably high level, and this was thought to be due to lack of uptake of contraceptive services.

Raising the price of abortion as an option for reducing the uptake of the procedure also revealed opposing views. Whilst some considered that it would,

'*increase the criminal element…(abortions) would be done at home'*,

others felt that it would result in increased uptake of contraceptive services as an alternative. The latter view was particularly held by reproductologists who had the opportunity to advise women on contraception from a young age.

Midwife: Several midwives claim to have observed the rate of abortion fall in the last few years. They unanimously attributed this decline to the increase in profile and utilisation of contraceptives in the population.

4.3.2.1.2 Potential methods for lowering the abortion rate

Gynaecologists: Patients who want an abortion were considered to be price insensitive, with the procedure costing 21 GeL in state run facilities. Some facilities charge 30GeL to include tests and investigations required for the procedure. One gynaecologist said:

'Women want abortions. They will pay 100GeL if the need an abortion. They are more afraid of contraceptives…and happier getting a termination than becoming fat and hairy'.

Nurses: Many nurses considered that the price of abortion was too high and that this price should be lowered as many women who desired an abortion could not afford one and so give birth to unwanted children. They did not feel that lowering the price of abortions would decrease the utilisation of contraceptives however.

4.2.3.2 STDs

STDs are perceived as being a problem of the young, especially amongst drug users, the promiscuous and their partners. Homosexual men were not considered to be a high-risk group, or indeed to exist at all in the minds of some interviewees. The spread of STDs was attributed mainly to men as,

'all husbands are going to other women. Women have only one partner…but men go to many women and then return to their wives'.

Condoms are promoted by health care providers for both contraceptive and STD prevention purposes. However some believe that the population currently has

'*no fear of HIV…no education about HIV…no money for STD treatment. There needs free access for viral infection and STD investigations (sic)'.*

One doctor admitted that their knowledge of STDs and AIDS was not good and that the money and resources to test for them are frequently unavailable.

4.2.3.3 Contraception

4.2.3.3.1 Provision

All types of contraceptives are provided free at all facilities, both State and private. The United Nations Population Fund (UNFPA) provides the contraceptive supplies to clinics in Georgia, via the Government, as humanitarian aid. However, the patient must pay for the cost of the consultation to access this contraception, and the price of this varies between 2GeL – 5GeL in State consultations, and up to 12GeL in private facilities. However, we were also informed that this fee should not, in actual fact, vary between the state clinics, as the John Hopkins University, provider of the contraceptive advice, has advised that it is set at a standard 5GeL. One clinic visited lowers the price of contraceptive consultations from 5GeL to 2.5GeL after five months of attendance at the reproductive cabinet to encourage long term utilisation of contraception.

In addition, women must also pay at many facilities for the insertion of an IUD, although the device itself is free, and this procedure costs around 20GeL.

All Gynaecologists are permitted to dispense condoms but reproductologists are the most common providers of other forms of contraceptives. They must also have received special training in order to do so.

One head doctor told us that at his clinic all doctors were currently being trained to deliver contraceptive care and advice during the antenatal period.

4.2.3.3.2 Utilisation

Utilisation of contraceptive services in Georgia was perceived as poor by many interviewees. Patient education was cited as one of the major reasons, with many indicating that patients hold fundamental misconceptions about potential side-effects of contraceptives.

'Patients do not come for contraception because they think that it [OCP] is bad for them'.

Furthermore, contraception was said to be not yet established in Georgia, and hence many patients are unaware of its potential benefits over the potential harms of abortion. Others felt that the religious beliefs of the population were preventing them from using contraception. Natural and rhythm methods are preferred amongst such patients. One gynaecologist commented,

'*15-20% of the population will not use contraception due to religion'.*

The cost of the consultation to the patient was also perceived to be a barrier to utilisation. Many felt that this should be free.

On doctor hypothesised that the reason many women do not use contraceptives is because, either they have a contraindication to OCP use, or they have an STD, which must be treated before other forms of contraceptive are administered (such as the IUD/Coil). Women cannot afford this treatment and so remain not using contraception at all.

Staff at a private clinic however felt that contraception usage was not a major problem, but that the STD level and the resultant infertility was.

4.2.3.3.3 Methods for Improving Contraceptive Utilisation

4.2.3.3.3.1 Education

The low level of patient education was highlighted as a major area for future action.

'We are trying to change this by educating every woman from the beginning when she comes into the clinic'

At one clinic, advice was given out to women about contraception and services available in the form of leaflets. However this only occurred when the Ministry of Health had provided these leaflets, and supplies were not reliable. One doctor also commented that it was important that the population was made aware that their services are anonymous and confidential.

It was almost universally agreed that sex education in schools and universities is important as the interviewees felt that the main problem with the increasing STD levels lay with young people. However, the issue was raised that the parents would, more than likely, oppose such education, as sex before marriage is not tolerated in Georgia. One interpreter informed us of a programme that was initiated three years ago. In this programme, a book for 9-14 year olds on sex education was distributed throughout two schools and:

'parents reacted very badly to this. In the Georgian culture, the children must not know these things. The young are not the problem; it is the older teachers and parents who cannot accept such education'.

It was recognised that patient education should not just be limited to women. The attitude of Georgian men to wearing condoms was highlighted as a major influence on the high rates of pregnancy and STDs in the country.

4.2.3.3.3.2 Advertising

One of the major barriers to a nation-wide contraception campaign was felt to be the Georgian people themselves *('Georgian Mentality').* Although the church was considered to be in opposition to the idea, most interviewees felt their resistance would not be insurmountable. One Doctor felt that education should come solely from the medical profession and that the Government would not and should not get involved. They also considered that the education should be aimed not just at children of school age but also, and more importantly, at their parents and the population as a whole.

Others believed that the only way to raise the profile of contraception would be to run a co-ordinated media advertising campaign, alongside the introduction of sex education in schools, something that at present does not occur.

One head doctor interviewed was very specific about how this type of campaign should be run and financed:

'Programme should be from Government and public health department, but gynaecologists should run it. The public health department should plan and finance it.'(sic)

4.2.3.3.4 Problems with the Contraceptive Services

'At the moment no investigations are done before the patient is put on the OCP and this is dangerous because of the side effects… more investigations are required'

There are only two types of oral contraceptives available and these are of the older variety. The doctors are aware of better ones available.

4.2.4 General Issues:

4.2.4.1 Education, Medical School & Training

4.2.4.1.1 Basic Training

Doctors: Doctors graduate from medical schools that are either state or privately run. The privately run schools fall into two categories, those that are perceived to provide an

acceptable education and those that do not. In the opinion of some doctors and managers there are only about two or three good private medical schools and they hope that by hiring only from these and the state schools that they will help to close down the poorly run private medical schools. One head doctor of a Women's Consultation clinic stated,

' I would prefer to recruit from the state and Government medical schools, every head doctor tries to take from the state school first.'

*A*n ex head doctor and still a practising gynaecologists added that *'the private medical schools should close as they have no facilities or equipment and a lack of teaching materials. The doctors education is dropping in quality, there are too many and the qualification is poor.'*

There is at present an excessively large number of doctors practising in Georgia, It was stated by a head doctor that,

'there are approximately the same amount of doctors in Georgia as in the United Kingdom but serving a population of only about 5.5 million.'

This was confirmed at all state clinics where interviews were performed, as in many cases doctors saw only 5-8 patients per day. As one head doctor commented,

'in the past we would each see about 20-25 patients each day. Now the best doctors see a maximum of ten a day and the other doctors maybe only 5…some may see no patients at all.'

The physicians interviewed were unable to offer any practical solutions as to how this excess of doctors might be solved. The Head Doctor at one severely over-staffed state clinic observed,

'It is very difficult for them to have any other job, as that is what they are trained for. Most of the doctors will work for very little salary, just for their pride in their job and for their family. I am head doctor and I have only 40 Dollars per month. Even if I would sack all the doctors here, I could still only have 200 Dollars. It is hardly enough to eat.'

Many interviewees seemed in little doubt as to how the long-term problem of excess physicians should be solved. Several were dubious, however, that the desired regulation or closure of the many private medical schools would ever occur, as they believe that the government takes backhand payments from these schools. All felt that it was the responsibility of the government to ensure that the present situation was resolved:

'It is necessary to press from the top down because the medical schools are very many…they have no pensions, the social system is a problem…it is the Governments fault'.

Midwives: Many titled midwives have graduated from midwifery school, whilst others hold the title but appeared to have received no extra specific training other than a standard nursing education.

The role of midwives was discovered to vary greatly between different clinics with some midwives carrying out tasks assigned by doctors i.e. weight, height, blood pressures,

injections, home visits. Others carrying out specialised tasks such as being theatre nurses for abortions and others examine pregnant women. There are still some that perform administrative tasks e.g. delivery of blood samples to laboratories, collection of results and explanations to patients regarding access to services and rights of care.

Nurses: Some nurses' training is from a 3 year course at nursing school, encompassing both bookwork and practical study. There are nurses that continue to specialise in specific areas of women's medical care and others that remain as general nursing staff.

It was the opinion of one doctor that *'nurses have very little basic knowledge…poor training…they largely learn on the job whilst some participate in self learning'*

4.2.4.1.2 Continuous Education

Gynaecologists: Some gynaecologists stated that there was only self-learning, via reading books and journals and that no Government system was currently in place. All those interviewed, however, were enthusiastic about a possible co-ordinated continuous education programme.

At one private clinic there were computers provided for Internet access, plus foreign journals available for the doctors use. The clinic also utilised the post graduate university to keep their doctors up to date with training. These additional post graduate courses have to be paid for by the individual doctors, but more recently some contraceptive courses

have been funded via the government from humanitarian aid. External agencies or organisations, such as the John Hopkins University, usually provide these lectures and seminars. Some of these appear to be compulsory whilst others are voluntary, but all are free of charge for the doctor's attending.

If gynaecologists encounter problems in their daily practice, then advice is generally sought from books, their peers and the maternity hospitals.

Reproductologists: John Hopkins has established a system for those working in clinics and the Zhordania Institute of Human Reproduction is in charge of monitoring the clinical development. If there are problems, and additional advice is required, it is gathered from either the other clinic doctors or the Institute if expert opinions are needed.

Midwives: There are a variety of further educational courses available including those in: instrument sterilisation, breast feeding, emergency care, etc. One midwife indicated that she would like to receive information and updates on diseases and undertake further educational courses in viral infections and basic knowledge.

One indicated that she was a member of a nursing association, which organises training courses and issues certificates. There are also some programmes conducted by foreign agencies.

The opinion was expressed that if problems were encountered during an appointment then the midwives tended to seek advice from either other midwives or the head doctor of the Consultation.

4.2.4.2 Resources and Equipment

Facilities and equipment available were felt to be poor by many of the interviewees. Largely it was perceived to be the quality of the equipment rather than a lack of it that was the fundamental problem, with one gynaecologist stating that all her equipment was *'outmoded and outdated'*. Several people highlighted the lack of disposable equipment as an area of particular concern; currently they have to sterilise and reuse all surgical instruments. One head gynaecologist commented that:

'We have no electricity in winter and sterilisation is not 100%. So women are getting infections during the abortion'.

Issues concerning the lack of resources available to carry out diagnostic tests were also raised, in particular: hormone diagnostic equipment and diagnostic ultrasound. However all tests which are required are available at other facilities, and patients can be referred as necessary.

4.2.4.3 Referrals and Record Keeping

Every facility visited kept written notes on their patients. However, a midwife at one Consultation kept separate notes on her own patients and did not write in the main notes.

When referral to another higher care centre was required, a letter or form (*Form 27)* was given to the patient, and it was then their responsibility to arrange an appointment. Several acknowledged that there is a problem with patients not following up these referrals, largely due to the patients inability to pay for the additional treatment or investigations, or alternatively due to a failure of the patient in realising the seriousness of their condition.

4.2.4.4 Privatisation of State facilities and the 10 Year Commitment

It became apparent during interviews that when the Government sells off non-strategic state consultations, it requires them by law to remain as a healthcare facility for 10 years. Many doctors were not supportive of this restriction, with one commenting:

'*...I don't think that it is right. If they are not strategic in the first place, why should they continue as a health facility. It is not right.'*

However, several other doctors commented that the optional or enforced closure of any facility would render its staff totally unemployed and that,

'*the doctors who now own these private clinics do not know any other business. A doctor is all they know.'*

One doctor felt that the Consultations should not have been sold off at all, but should have remained within the State, because privatisation in this manner was '*compulsory decentralisation'*.

4.2.4.5 Salary and Morale

Some staff from all levels and specialities admitted to dissatisfaction and disillusionment with the current state of the Georgian healthcare system. One Head Doctor commented that he and his colleagues were working for such a low salary because of the pride they felt in their job, but also because there was nothing else that they knew how to do. He was particularly concerned about the decreasing number of patients that his Consultation was seeing, due to a new polyclinic that had opened nearby, attached to the local maternity hospital, and that soon he would no longer be able to support his family.

At another clinic, the Head Doctor commented that motivation amongst her staff to provide contraceptive care was low as SMIC had not paid them for their work in this area for 8 months. At a third clinic, nurses had not been paid for 6 months.

Several nurses and midwives also commented that they felt confused as to their role and responsibilities, and that they had no structured system for supervision in place. One doctor commented that the Municipality, the Ministry of Health and the Department of Maternal and Child Health all supervised her, a situation that she felt was excessive and confusing.

4.2.4.6 Changes in Women's Heath Care in Georgia

When asked what their one wish would be in order to change the current situation in women's healthcare, virtually every interviewee declared that more money was required from Government. However, most realised that this was an impossibility in the short term at least, and some practical suggestions were raised. One Deputy Head Doctor thought that the Ministry of Health should be streamlined (*'optimised')* and the money saved sent to the Polyclinics. Several felt that any money that could be saved or raised should be spent on providing more investigations free of charge to try and catch more diseases at an earlier stage. One nurse commented that the most important area to be financed was that of disposable equipment and/or better sterilisation as she was fearful of a serious Hepatitis epidemic in the future.

With regards to the changes that have already been made to women's healthcare in Georgia in the shape of the reforms since 1995, most were enthusiastic. However, one Head Doctor commented that,

'some reforms are not appropriate at the moment, as the need is very big and the reforms are not meeting the demands'.

4.3 Questionnaire and Interview Interpretation and Limitations

The questionnaire was designed to be used as a tool for gaining an insight in to the current state of provision of women's reproductive health care in Georgia, and to be used as a basis for further investigation of the situation through the use of structured, semi-

structured and informal interviews. Many would say that by using a questionnaire alone, it is impossible to provide a realistic picture of the state of practice. Ideally a participatory observational study with triangulation of methods involving observations, videos and evidence from medical records should be used to reach the ends stated. However, within the research team's constraints of time, money and their limited of understanding of the Georgian language and culture, this ideal method was not feasible and the stated questionnaire was used, but with an appreciation and understanding of its limitations and drawbacks.

During the literature search, the research team looked for a proven and tested questionnaire to adapt and use in the study. As has been stated, little research has been done in this area and so it proved impossible to find such a questionnaire. It was from this position that the questionnaire used was formulated. The information available to the researchers, primarily that of WHO definitions of best practice, as well as papers and statistics found during the literature search, was utilised.

Ideally a pilot study should have been performed to identify and remove any problems that may have arisen in completing the questionnaire, before it was sent out to Georgia for distribution to the respondents. This pilot study should ideally have been performed in Georgia or alternatively in England, or in both countries for elimination of potential problems. However, due to time and geographical constraints of the research team, this did not occur.

As an alternative to reduce the occurrence of such problems, opinions of experts in the field of research, in both England and Georgia, were consulted. This resulted in the questionnaire being refined and re-refined before it was sent to Georgia for translation and distribution.

The research team also had to be aware, when designing the questionnaire, that the questions asked were not too complex or ambiguous, and that the questionnaire itself was not too long. This aimed to reduce confusion and misinterpretation of the questions, and also to hold the respondent's interest long enough so as to complete the questionnaire honestly and thoroughly. However, this may have resulted in the questionnaire not covering all the areas desired by the research team and hence not be as thorough as wished.

Once this was appreciated and understood by the team, it enabled these questions to be remembered and asked later in the interviews.

The research team worked closely with the National Health Management Centre whilst in Georgia. They facilitated translation of the questionnaires into Georgian and the responses back into English, organised appointments with Polyclinics and Institutes as requested and required by the research team, and they organised transport and translators for those interviews. The extent of their positive influence in facilitating the research in the field cannot be underestimated. In fact, the high response rate to the questionnaire could probably be directly attributed to their backing of and assistance with the research.

However, their presence at all stages in the research cannot be discounted as adding an element of bias to the results obtained.

Some healthcare professionals may have seen the research as an '*audit tool'* for assessment of their performance. Many were aware that the NHMC and the Ministry of Health were interested in the work and would probably see the results. This may have prevented the healthcare professionals from reporting their actual practice and opinions, in case their responses could be used against them. The Minister for Child and Maternal Health told us that in the past, it was not unheard of for a doctor to loose his/her job if he/she spoke out against the current situation. It became increasingly apparent to the research team that responses may not have been representative of actual practice. They may in fact have been discussed and documented in groups at each polyclinic so to give answers believed to be correct and desirable to the research team.

4.3.1 Problems with Reference to Questionnaire Results

It became apparent to the research team that there may have been some problems with the questionnaire. These problems took several forms:

- Misunderstanding of questions
- Problems with the quality of responses
- Problems with specific questions

Some of the questions appeared to have been widely misunderstood by the respondents. It is hard to decide whether these problems arose from the process of translation (question from English to Georgian or response from Georgian to English), or due to some ambiguity, not previously noted, in the questions asked. Such questions were clarified and asked again in the interviews so as not to loose potential data.

Some responses to the questions were very clear, but seemed to bear no relevance to the questions asked. In these situations, the research team would discuss each response and make a joint and unanimous decision as to how to code the response. In some cases, this took very little time and was straightforward. In others, this procedure was very time consuming and occasionally resulted in the response becoming *invalid*.

Question 3 (the presence or absence of screening tests for rubella) was discovered to have been poorly answered by many respondents. The initial part of the question was a closed, yes/no response, asking whether or not the respondent tested 'every' pregnant woman for rubella. The follow on part of this question asked for the 'criteria' that the respondent used for testing if they had replied 'yes' to the first part. Clearly, if a physician is testing 'every' woman, then they are not using any selection 'criteria' for the test. The confusion on this item can only be attributable to the poor wording employed by the researchers, and the results must be considered with this context in mind.

Questions 5 (the rate of performance of checks and interventions during antenatal visits) and 13 (the ranking of forms of contraception according to how commonly they are used)

caused particular problems. In Q5, it was made clear by the research team that only one box could be ticked for the frequency of each intervention or check. However, the results frequently showed that more than one box had been marked, which led to great difficulty in interpretation and occasionally resulted in the invalidation of data. Q13 was widely misunderstood by the respondents and can only be attributed to poor wording of the question by the researchers. Perhaps the term 'ranking' should not have been used and a score 'out of 10' may have been more appropriate. If the response was unanimously agreed by the researchers to be nonsensical, then the data became invalid and was not included in the results. Within this same question, it was brought to the researchers attention that the term *'contraception'* should not have been used if they wished to include termination as an option. The term *'Family Planning'* would have been more appropriate.

4.3.2 Problems with Reference to Interview Results

One concern expressed by the researchers was in reference to the method with which interviewees were selected. The contacts for interview were made solely via one person. This may have introduced selection bias and the possibility that the views expressed were only the collective thoughts of a faction within the healthcare system, and not therefore representative of all healthcare providers. This source of bias was partially corrected in the interview stage, when the researchers were introduced to the contacts of another source that were willing to participate in the study. Measures could have been taken to ensure that the researchers were not solely relying on one person's judgement to recruit "suitable"

participants and translators. Due to time and budgetary constraints, it was not feasible to approach a random selection of clinics and then arrange private translators.

The presence of members of the NHMC as translators at the clinic interviews may also have affected the results obtained. The presence of relatively senior members of this organisation may have caused some respondents to feel that they were being 'tested' and so to adjust their replies accordingly. This is a phenomenon known as the Hawthorne Effect. Furthermore, in many situations, discussions between the interviewee and interpreter would ensue for some time before an answer could be reported to the interviewers. This may have been as a form of clarification of responses, but as the researchers had no understanding of the Georgian language, it was impossible to fully comprehend the discussions.

Therefore, the possibility of bias or incorrect interpretation must be mentioned and taken into account in the analysis of our results. Despite these drawbacks, it would not have been possible to gain access to the healthcare facilities without the presence of the NHMC and their associates, and so the benefits of their presence far outweighed the negative aspects.

Section 5: ANALYSIS

Results of both questionnaires and interviews were analysed in the following categories:

1: Analysis of personal details of respondents to ensure statistical power

2: Analysis of provision and utilisation of women's healthcare guidelines

3: Analysis of provision and utilisation of antenatal care

4: Analysis of provision and utilisation of contraceptive services

5: Analysis of general issues of concern in the Georgian healthcare system

5.1 Analysis of Respondents

Before analysis could take place, there were some features of the occupational data that required further clarification. Firstly, it became clear during the interview process that many respondents titled 'midwife' did not fulfil the role that the research team expected. Many carried out tasks and procedures more in line with those that the research team would have associated with general nurses or healthcare assistants in the United Kingdom. For example, the researchers found that 'midwives' in Georgia were not universally trained in delivery and that those working in consultations and clinics often contributed solely to the supervision of healthy pregnancy. It appeared that some midwives were primarily occupied in theatre, assisting with terminations of pregnancy (TOPs), a role fulfilled by gynaecological theatre nurses in the UK. It is for this reason that the research team decided to combine the results obtained from nurses and midwives when analysing.

In addition, the role of 'Head Doctor' of a Consultation or facility was not separated from that of a specialist when coding the questionnaire. This was done because all Head Doctors are trained as gynaecologists, and therefore it was felt to be unlikely that their opinions would differ greatly from other specialists. However, at interview it was felt that the Head Doctors might express opinions directly attributable to their position as experts and managers, and hence the source of such opinions was noted in the results.

Although the response rate to the questionnaire was not quite the 75% that had been hoped for, the research team felt that it was still acceptable. It should be remembered that Georgia is currently the focus of much research from both internal and external agencies and organisations, and therefore health care professionals (especially in Tbilisi) may be beginning to suffer from 'questionnaire overload'.

The research covered all occupations directly involved with women's healthcare. In addition, data was collected from personnel in other fields, such as paediatricians and Family Physicians. Whilst not directly relevant to the area of interest, these opinions were considered to be no less valuable and often brought an alternative perspective into the research. The research team were satisfied with the occupational coverage achieved.

Questionnaires were returned from 18 healthcare facilities. Interviews were conducted at six of these with the addition of one private women's clinic to whom the questionnaire had not been distributed.

Information gathered from the nine preliminary interviews held with significant stakeholders in women's healthcare was also included in the data analysis.

5.2 Analysis of the Provision and Utilisation of Guidelines

As previously discussed, there are more than one type of guidelines available for use in women's healthcare in Georgia. It was therefore possible for respondents to interpret the term 'guidelines' in more than one way. For the benefit of the analysis, guidelines pertaining to treatment will be termed 'treatment protocols' and those pertaining to financial reimbursement will be termed 'financial guidelines'.

It became apparent to the research team from initial questionnaire analysis and preliminary interviews, that treatment protocols are not universally available to all health care professionals. However, the research team was informed that the Department for Maternal and Child Health is currently formulating these treatment protocols and they should be ready for distribution by the end of June 2001. These treatment protocols are being formulated in conjunction with international experts and being funded by the World Bank. Local specialists are also contributing to these treatment protocols which will include instructions on referral to secondary and tertiary care facilities, and responsibilities for patient welfare.

It would appear from the questionnaires that these guidelines will be extremely well received by all types of health care professional. It would also seem that the doctors

interviewed support the decision to include local specialists in the formulation of these protocols. They also mention that these protocols must be both theoretical and practical for them to be of use to practitioners.

It does appear, however, that treatment protocols are available in some facilities, where they have been formulated by the physicians themselves. Evidently there is no standardisation of these protocols between facilities and they are based only on the practical experience and theoretical ideas of the senior staff working at these sites.

With regards to financial guidelines, these appeared to be available in two formats within the field of research. The State Medical Insurance Corporation provides antenatal care guidelines that are standardised and their implementation compulsory. They concern the levels of reimbursement that will be given for fulfilling the requirements of the Basic Benefits Package, and the standard of care that must be achieved. Representatives from SMIC ensure adherence to these financial guidelines by means of an audit. They visit the facilities and examine a selection of notes from pregnant patients to check that all tests and procedures claimed are consistent with the medical records. It is recognised that it would be impossible to check all notes and also that this method of regulation does not prevent some doctors claiming from SMIC for procedures and tests not performed.

The tendencies for physicians to adjust data dates back to Soviet times, when there were fixed penalties in place for those who did not meet standards and targets. The MoH recognises this problem and is trying to alter the mentality of practitioners by a process of

feedback and interaction with healthcare providers. The Head Doctors of each facility meet with the head of the Ministry of Maternal and Child Health on a regular basis to discuss their activity, such as number of antenatal cases seen before 12 weeks gestation, and quantitative indicators, such as rate of still birth. At present however, physicians' salary is still dependent on the activity of their facility and until this situation changes, attitudes towards data manipulation will prove difficult to change.

Gynaecological financial guidelines were variously stated as being governmentally provided or internally developed. The researchers felt this implied that they were governmentally provided but that their implementation was voluntary. These guidelines are only received and utilised by Head Doctors, as it is they who have the responsibility for regulating the financial activity of the facility.

For any guidelines or protocols to be effective and accepted, the users must have the opportunity to discuss their content with those who design them. The researchers felt that the Ministry of Maternal and Child Health seemed to be communicating well with the Head Doctors of Women's consultations, both in this and other matters. The environment of feedback and co-operation being established can only be beneficial to the long-term process of implementing reforms. However, the researchers considered that the opinions of more junior staff might be being overlooked, and that it is important to ensure that the Head Doctors are conveying views and ideas representative of their staff and colleagues. This is especially important where Head Doctors are no longer practising clinicians in their

own right, and may well be somewhat removed from the day to day activity of their facility.

5.3 Analysis of the Provision and Utilisation of Antenatal Care

5.3.1 Antenatal Care Provision

The WHO best practice guidelines for the provision of Antenatal care are given in Appendix A.

5.3.1.1 Basic Package

From the Ministry of Health, the researchers were able to establish the official content of the current Antenatal Basic Benefit Package as financed by the State Medical Insurance Company. Every woman is entitled to 4 antenatal visits. At the first visit, at or before 12 weeks, the woman must receive a full history and examination, full blood count, blood group typing, Rhesus test, Wasserman's test for syphilis, protein and glucose urinalysis, PAP and bacteriological smears, and CMV testing. There then follows 2 further general visits both including a full examination and urinalysis, and at the fourth and final visit a further full blood count and urinalysis are performed.

Results from both the questionnaires and interviews confirm that testing to establish immunity to rubella is far from routine practice in Georgia. Unlike the battery of investigations which take place during British antenatal care, Georgian healthcare

professionals rarely test for immunity to rubella when screening for conditions which may adversely affect pregnancy. However, the researchers felt that investigation into the handling of rubella during pregnancy was an important area of research as infection can cause a wide range of foetal malformations such as cardiovascular defects, cataracts, deafness and mental and physical retardation.

Through discussion with the Department for Maternal and Child Health, the responses of interviewees, who had stated that rubella was not a problem in Georgia, were confirmed. Rubella immunity testing is not a priority as it is thought that Georgian women are naturally immune to this virus, therefore making redundant the need for population wide screening. This natural immunity is thought to occur, as vaccination does not take place during childhood.

However, small proportions of doctors do screen for proof of immunity, and general advice is given to women to avoid contact with potentially infectious persons. If however a woman who is not already immune comes into contact with the virus during pregnancy, she is strongly advised to have an abortion.

The researchers were interested to discover whether the components of the Basic Benefits Package were felt by healthcare professionals to be the best that could be achieved within the given financial restraints. Should, for example, an ultrasound scan be substituted for the PAP smear? Whilst many felt that ultrasound was a vital element of effective antenatal

care, there was universal agreement that the BBP content could not be improved upon without greater resources.

It would seem appear that the Basic Benefit Package fulfils the minimum standards of the WHO guidelines. There is room for improvement, but not without significant extra financial support.

When a woman first presents to the antenatal consultation, she must pay for a pregnancy test if required. If pregnancy is confirmed she then has up to 12 weeks' gestation to decide if she wishes to continue with the pregnancy. If she chooses to proceed to term, she is issued with an insurance document from the State Medical Insurance Company, outlining the services that she can expect to receive free of charge. Delivery is largely free of charge to the patient, provided that it occurs within a state facility.

Both interviewees and respondents to the questionnaire appeared to be well informed as to the content of the BBP that they are obliged to provide. However, results suggest that patients may well be unaware of their entitlement as women may not necessarily use antenatal services and also make excessive out-of-pocket payments to doctors.

Nonetheless, the number visits has dramatically fallen from Soviet times when women consulted every two weeks, to the present mode of 4 visits over the course of pregnancy. From the interviews, it was seen that most respondents were unhappy with this number, whereas the majority of those who stated that their patients received 7-8 visits felt that the

higher number was satisfactory. This may reflect the consulting habits of more affluent patients who may be prepared to supplement their basic entitlement. However, it appeared that there are a number of other constraining factors that prohibit women from consulting more frequently, other than purely financial constraints.

SMIC reimburses each facility 30 GeL for providing the BBP. Delivery is not included in this 30 GeL, but is paid separately to one of the 3 Maternity Houses in Tbilisi with which SMIC has a contract at rate of 250 GeL, regardless of the mode of delivery. This fixed fee serves as a method of risk pooling.

The Ministry of Maternal and Child Health decided the contents of the basic package in consultation with the WHO and by examining occurrences in other similar 'transition' countries. Due to financial constraints however, they are unable to provide the full package that they would like. The 'Healthy Start Project', designed in 1999 in conjunction with the WHO, outlined the ideal care package that every woman should receive. The provision of such an antenatal package was estimated to require 41 million GeL per year, some 6-7 times the current budget of 6.5 million GeL. They have in fact been forced to cut down on the investigations included in recent years. HIV, a second Wasserman's in the 3rd trimester and the 3 ultrasound scans have all been removed from the BBP in the last few years, along with a genetic consultation that was held as a routine.

The results from both interviews and questionnaires show that actual provision of the BBP is variable in both the quantity and types of some tests initiated, for example urinalysis is

only performed at all visits by 45.7% of the respondents as recommended. This implies that some doctors may be "cutting corners" or are unaware of the package that they are obliged to provide. This should be in theory, regulated by the SMIC audit process, as outlined above. Again, 38.3% of respondents stated that they test for syphilis on more than one occasion during antenatal care. This may indicate that testing is provided beyond that which included in the BBP as during Soviet times, or when indicated for those at risk, or for extra income for the physicians by them inducing the demand.

Although the provision of Ultrasound scans is no longer in the SMIC package nor recommended by the WHO as part of basic antenatal care, a significant number of physicians are still reporting that they carry out these scans at some visits. This suggests that doctors feel that ultrasound is an important screening and diagnostic investigation where affordable by the patient, an opinion strengthened at interview. Alternatively, doctors may be coercing their patients into having scans, which are not medically indicated, and that the State is unable to finance. A similar picture exists in relation to Hepatitis B testing, where 25.0% of respondents carry out such a check, although in this case medical reasoning behind testing was given. Provision of Blood pressure measurements was shown by the questionnaire to be excellent.

Overall, the research findings of actual practice seem to suggest that a minimalist antenatal service is being provided in line with WHO recommendations, as well as Georgia's own BBP requirements.

5.3.1.2 Continuity of Care

The researchers were surprised to note on arrival in the field, the degree of separation between antenatal and perinatal care. At present, the majority of antenatal care is provided in women's consultations, separate from the maternity houses, although there are some clinics opening within the Hospitals. Combined with the high level of maternal mortality in Georgia (71.1/100,000 births in 1997[63]), the researchers were interested to further investigate the issue of continuity of care.

In addition, a recent report conducted by JICA concluded that,

'*integration of prenatal care and delivery care is ... accepted to improve the quality of care, to share the information and detect the risk as early as possible, though it reduces the accessibility in terms of travelling time.'*

Responses to integration were mixed however. The previous experience of the interviewees appeared to contribute to whether or not they were supportive of a move toward continuous care. Those who had worked previously in Russia or Western European countries seemed to be more enthusiastic for change, and, although many felt that it would not make any significant difference, there was one opinion that it would be detrimental as the doctors degree of specialisation would be diluted.

The research team felt that the quality of care received would not be significantly improved by integrating care alone. As long as comprehensive records are kept of the antenatal period, and that these are relayed to the delivering physician, patient care is not

compromised. The researchers also felt that it would not currently be feasible to alter the present system in any case, as many of the gynaecologists performing antenatal care lack training and proficiency in delivery. A comprehensive programme of retraining and restructuring would be necessary for such a change. The researchers therefore support the WHO recommendations, that state that an individualised care and delivery plan should be formulated from an early stage in the pregnancy, but do not consider continuity of the physician to be significant issue.

5.3.2 Postnatal Care Provision

Postnatal care is not included as part of the BBP. However, several doctors and midwives indicated at interview that they carry out one post-natal visit free of charge as they feel it is important for maternal and child well-being. The Ministry acknowledges this, and in an attempt to encourage physicians to perform this task, they offer informal incentives. These often take the form of equipment and resources acquired from international aid agencies, which are then distributed to facilities that have co-operated with the Ministry.

Any obstetric facility is reimbursed 250 GeL per delivery performed, regardless of the mode of delivery. Hence, while a standard vaginal delivery costs significantly less than this, it is reimbursed at the same level as a more expensive operative intervention such as caesarean section. Whilst this might seem to be wasteful, at the outset of the reforms in 1995, the payment for normal delivery was lowered to 70 GeL and that for Caesarean

section raised to 300 GeL. The rate of Caesarean section rose to 20% of all deliveries in 6 months, and the present method of reimbursement was rapidly introduced.

5.3.3 Utilisation and Access

The Ministry of Maternal and Child Health hold statistics indicating that approximately 32% of women in Tbilisi receive no antenatal care prior to delivery, with women presenting to the Maternity Houses in the very late stages of their pregnancy.

Financial constraints seem the most significant barrier in the access of antenatal care. It accounts for almost half of the reasons indicated in the survey by questionnaire. This problem is worsened by the fact that many sources, including those at interview, suggest that women are not informed enough about their entitlement from the BBP. As one doctor stated, "there is not free access to free antenatal care" as "patients still reimburse the provided services and pay quite solid money[64]". In fact with health care in general, a Curatio Medical Group survey found that "more than half of the respondents don't know about (the) existence of free health services".[65]

Geographical access to antenatal care was an area that the respondents felt was not an issue from the questionnaire. Only 2 respondents mentioned problems with transportation. But this issue came up frequently in interviews, with gynaecologists expressing that women from rural areas have difficulties accessing antenatal care. The Ministry of Health explained that some women present to the Maternity houses from the mountainous

districts where there are no consultation clinics for Antenatal care. In these areas, the nearest health facilities are between 50-100km from the villages, and travelling such distances, especially in the winter is hazardous. In some regions, there is heavy snowfall for 6 months, which cuts off access completely. It is not only antenatal care which faces such problems with transport; 37.4% -38.7% of General Households would consider problems with transportation as a major healthcare issue.[66]

Evidently, there is also a fundamental lack of patient education concerning healthy pregnancy, appropriate antenatal consulting habits, and rights to basic care. Barriers to access seem rather difficult to overcome particularly as the infrastructure for dissemination of information simply does not exist. For example, the Ministry of Health informed the researchers that there are no newspapers or televisions in certain mountain regions. There are also 4000 women and children (IDPs) living in camps in areas of conflict for whom maternity services are insufficient. Patient education at present is inadequate; efforts are made to inform women who utilise the service optimally, however, as many women do not complete the minimum recommended care package, patient education must go far beyond the women's consultations and polyclinics in order to modify traditional practices.

The researchers feel that there are no short-term solutions to the problems of access to services. However a medium term education programme could help overcome the lack of knowledge amongst pregnant women regarding their condition and how to better the outcome of their pregnancy with and without medical assistance. The training of key

individuals in rural areas, such as traditional 'wise old women', would serve as a halfway house to these areas which are inaccessible even to outreach services.

5.4 Analysis of the Provision and Utilisation of Contraceptive Services:

It was the opinion of the research team that the topics of Abortion, STDs and Contraception were intrinsically linked. It can be argued that high abortion and STD rates are indicative of failure within contraceptive service provision and utilisation. It was for this reason that the research team decided to group and analyse these topic areas in one section.

5.4.1 Abortion

Modern methods of contraception have been prohibited for many years, making abortion women's primary method of regulating births.[67]

From the analysis of the questionnaires, it has been shown that heath care providers feel that abortion (Termination of Pregnancy) is the most popular method of family planning currently utilised in Tbilisi. This position is held jointly with condoms. This is concerning due to the inherent risks and complications associated with such a procedure. This data is further supported throughout the interviews. The vast majority of doctors agreed that the abortion rates are at an unacceptably high level and that despite the fact that these rates

may have fallen in recent years, this is still an area that requires further study and analysis for improvement.

It was stated several times during the interview process that a possible reason for a high abortion rate is that Georgian women are suspicious of certain forms of contraception, such as the oral contraceptive pill. Many believe that the complications of hormone supplementation are greater than those associated with terminations of pregnancy. This view seems to be supported by 'old wives tales' and social networks.

Currently abortions can be done in any health care facility according to the law. This legal ruling does not, however, specify standards for the procedure, such as where in the facility the procedure takes place and who performs it. As long as the intervention is conducted within a health care facility, it is legal.

The Ministry of Health is aware of this problem, and so are currently attempting to get this law revised. The Minister of Maternal and Child Health told the researchers that this ruling will establish a specific accreditation for facilities and nominated staff to undertake these TOPs, so as to ensure quality and regulation of care.

From a series of interviews the researchers discovered that terminations cost generally between 21-50 GeL although this price can vary vastly between facilities. Up to the 6^{th} week of pregnancy, a mini (medical) abortion can be performed. Vacuum abortions are possible up to the 12^{th} week. However, after week 12, a disclaimer is required from a

panel of three people, including a lawyer, for the abortion to occur legally. This is done to ensure that the reasoning behind the desired termination is socially and legally acceptable e.g. if the woman's husband is incarcerated in prison, and she is unable to support a child on her own.

The researchers decided to investigate, through interviews, the expected effect of increasing or decreasing the cost of an abortion for the patient, as this subject had been brought up several times before by different stakeholders. Some stakeholders thought that the price of an abortion should be decreased so that more women who wanted the procedure could afford it, whereas others suggested that it if the price were to increase, more women would be encouraged to use other methods of family planning. However, the majority of interviews on this subject revealed that most stakeholders do not believe the price of an abortion is a significant factor in its utilisation. Nevertheless, there is always the possibility that increasing the price could result in abortion being driven 'underground' and increasing the number of unregulated 'back street' procedures.

At present there is a relatively high infertility rate in Georgia. As one of the complications of abortion is infertility, then the high number of abortions being performed can not be ignored. This is even more poignant in the light of the current declining birth rate, and when coupled with the fact that a large proportion of the Maternal Mortality Rate is due to complications of terminations of pregnancy, there is reinforcement for the need for action to be taken.

There are medical professionals who see terminations of pregnancy as a more attractive alternative to contraceptive consultations. This was explained to the research team as being due to the increased opportunity for doctors to supplement their salary by performing terminations (a doctor can pocket the abortion fee and not declare the procedure). Whilst contraceptive consultations reimbursement does occur, doctors often report delay in payment and therefore are disenchanted with this system.

5.4.2 Sexually Transmitted Diseases (STDs)

The WHO/UNAIDS best practice recommendations for the control of STDs are outlined in Appendix B.

'The incidence of STDs in Georgia is increasing rapidly. The 'incidence' of syphilis in Georgia…is lower than in the Russian Federation…but considerably higher than countries in Western Europe.'[68]

STDs are of major public health importance. They cause not only problems due to the acute infection, but also harmful complications and sequelae such as impaired fertility, ectopic pregnancies, urethral strictures, congenital syphilis, foetal wastage syndrome, premature deliveries and dysmaturity. Moreover, high rates of STDs can facilitate epidemics of sexually transmitted HIV infection.[69]

From the interviews carried out by the researchers it was clear that there is a lack of understanding and education regarding the existence and severity of STDs in Georgia throughout the whole population. In fact there was little acknowledgement of the existence of some of the higher risk groups at all e.g. homosexuals. This may be due to the fact that homosexuality is not tolerated at all in Georgia. However, it is clear that the whole population needs educating on the reality of the STD problem and the associated consequences.

It is widely acknowledged that many men are promiscuous and also that they have an inherent dislike for the use of condoms. Therefore it seems obvious to the researchers that there is a basic lack of understanding about the ease of transmission of STDs and the importance of practising safe sex.

For those of the population that are informed about the sequelae of STDs and subsequently want to be tested and treated, there is once again the underlying barrier of financing. The patient has to pay for the tests required for diagnosis and then also for the necessary treatment. This can often be very expensive. In addition to this there is often insufficient resources available for such investigations in the healthcare facilities.

It appears at present that if a patient feels it necessary to seek advice and treatment for such problems they must visit a specialist dermatovenereologist. It is the opinion of the researchers that such advice and treatment would be more effectively delivered to the patients if it were more readily available at primary care facilities.

5.4.3 Contraception and Contraceptive Services

5.4.3.1 Provision

From the questionnaire, the researchers discovered, as expected, that the majority of respondents felt that contraception should be free for all that desire it. In retrospect, this question may have been worded poorly. One cannot be sure if the respondents were answering with respect to free consultation and contraception, or solely free contraception. It is for this reason that this data cannot be completely relied upon. However, it does show that, in general, respondents recognise the need for free provision in this field of care.

Contraception is currently free to all Georgians, provided they can pay for the consultations required in accessing these services. At present a consultation costs the patient 5 GeL if seen by a reproductologist involved in the John Hopkins scheme (this price is recommended as standard). However, if patients attend alternative contraceptive providers this price can vary from between 2 - 12 GeL. It is the opinion of the researchers that whilst free contraception is being provided, the financial barrier to accessing these services is still a major factor in the low utilisation rates.

As was found from interviews, all gynaecologists can dispense condoms to any patients. However, they generally refer patients to a reproductologist for consultation regarding other forms of contraception. Other organisations also provide contraceptive services to

the public. Aid agencies have provided confidential advice services, including telephone services, for any that wish to use them. One Non-Governmental Organisation (NGO) that the researchers visited was the only facility that provided a confidential walk-in service regarding contraception and STDs in Tbilisi.

5.4.3.2 Utilisation

Reproductologists are still a relatively new speciality within the field of women's primary care, despite having been established academically for many years. Due to this, utilisation levels of the service are not yet optimal. It is the opinion of the researchers that education of medical staff and patients on the availability of such services and the treatments they provide will increase this utilisation rate.

From the results of the questionnaire it can be clearly seen that both condoms and TOPs are seen to be the most common methods of Family Planning currently in use in Tbilisi.
As previously stated in section 5.4.1 this high TOP utilisation rate is extremely worrying. In the opinion of the researchers the requirement for education of patients regarding the consequences of TOPs can not be overstated.

Yet again a significant barrier to the utilisation of contraceptive services is finance. It was stated that whilst some patients may have contra-indications precluding them from using contraceptives, others have untreated STDs. This treatment required is at a cost to the patient and so often a vicious circle is established, whereby people have STDs and can not afford treatment, and consequently do not use contraception.

The researchers felt that the most important method for improving contraceptive utilisation and hence reducing abortion and STD rates would be through a mass education and advertising campaign. This should be aimed firstly at the general population and then more specifically at high-risk groups, namely young adults, homosexuals, commercial sex workers and drug abusers. The development of such primary prevention activities will need to be sensitive to the Georgian culture and societal values, as the notion of promiscuity and sex before marriage is not happily accepted by most. Many health care professionals expressed reservations due to the difficulty in overcoming this cultural barrier and the resources that it would require but supported the need for such a campaign.

On a small scale, educational programmes are already in place. Leaflets are available discussing the importance of contraception and safe sex from polyclinics and other health care facilities, but these are in limited supply. Sex education programmes have been attempted in schools but have not been accepted by parents and some staff. The research team felt that instigation of such programmes was of paramount importance in attempting to curb the rates of unwanted pregnancy and STDs in Georgia.

The NGO that the research team visited was one organisation campaigning for the introduction of just such a programme. The 'Tanadgoma Centre', originally established by MSF-Greece, conducts awareness campaigns and distributes advice leaflets to adolescents as well as other high-risk groups of the population within Tbilisi. In addition, they provide

a confidential counselling service and psychological support for the vulnerable. The researchers found it concerning that this NGO appeared to be the only provider of such services in the capital and feel that a co-ordinated campaign, conducted with the full support of government, is essential.

5.5 Analysis of General Issues

5.5.1 Medical Education

One of the major sources of inefficiency within the Georgian Healthcare System is the excess of physicians, 40.3 per 10,000 population in 1998 (4.8 times more than in the UK)[70], even without considering those working in the parallel healthcare systems of the other ministries. As was seen at interview, this results in many physicians being employed at a sub optimal level of productivity with some seeing only minimal numbers of patients in a day. It is the opinion of the researchers that this contributes to low morale, loss of clinical skills and will in time result in reduced professional performance.

This excess has been caused by a proliferation of privately run medical schools, who at present have no formal regulation or standards. Many of them do not have the facilities or staff required to provide a clinical medical education. The variable quality of the education at these institutions was highlighted in 1998 when 2000 students in their final year were offered the option of sitting the state medical school examination. Of the 183 students who opted to do so, only 70 passed[71]. The state has proposed a standardised examination,

formulated jointly by the Ministries of Health and Education, but this is yet to come into effect. One interviewee believed that the occurrence of backhand payments from the private medical schools to the government would prevent such regulation from ever coming into force.

At interview, some senior members of the medical profession believed that such measures would not be required in the long term. Several of them indicated that they were well aware of the quality of individual institutions, and only hired staff from the state or from one or two private schools. Such discrimination is legal in Georgia, and some believe it will solve the oversupply problem as young people realise that an education from certain institutions will render them virtually unemployable. Whilst this may well happen, the researchers felt that it should not be left to chance, and that a compulsory, standardised examination should be introduced. It was also felt that the number of students entering medical school should be controlled and co-ordinated with the number of doctors required to maintain the running of the health care system.

Any action in the area of training will evidently take many years to show its effect. It does not solve the current problems of over-staffing of healthcare facilities. The staff working within the clinics form close-knit communities, and Head Doctors and managers interviewed were acutely aware that to fire a fellow member of staff would remove their livelihood and, with little chance of them finding alternative employment, render them unable to support their families.

5.5.2 Continuous Education and EBM

The accessibility of Evidence Based Medicine resources is severely limited by the lack of information systems in Georgian Healthcare. Internet access and on-line facilities are provided at larger centres such as the Zhordania Institute of Human Reproduction, but many smaller consultations and clinics have only journals and textbooks available. In addition, the issue was raised at interview that many of these journals are in Russian, and the textbooks outdated. Combined with the lack of information and accurate statistics relating specifically to Georgia, the ability of healthcare professionals to access the most up-to-date research is limited.

The recently established centre for Post Graduate Studies offer training courses to healthcare providers that are becoming increasingly well utilised. The new system for accreditation of physicians should further increase its importance. At present, these courses are optional and must be funded by the physicians themselves. Given the low rate of pay of most doctors, this is a significant barrier. Some lectures and seminars are provided free of charge, however, by international institutions and aid agencies such as the John Hopkins University who are providing education into the provision of contraceptive services.

For healthcare professionals who want to further their education and medical knowledge it is largely up to the individual to find the relevant information and ‘self-learn’. To aid this

process there must be greater resources allocated to allow access to the latest medical literature from around the world.

It is the opinion of the research team that a more organised process for continuous education would be of great benefit to the healthcare system and would be greatly welcomed by practising professionals, especially if they were able to access this at minimal cost to themselves.

5.5.3 Privatisation of State Facilities

As part of the current health reform process, the government is attempting to remove some of the over capacity within the system by privatising many facilities considered not to be strategic for the future. Many of the consultations and clinics that have already been privatised are small, and located in inner-city areas. Ownership of the facility is first offered to the staff who are employed there, before being placed on the open market. The researchers visited one such clinic that was now privately owned and run by its team of physicians. Each clinic is bound by law to remain as a healthcare facility for 10 years from the time of privatisation, a regulation that was found surprising by the researchers. In addition, no member of staff is allowed to generate more than 5% of their income from sources other than medicine. This is effectively to prevent a conflict of interests between health care provision and any other business, and to stop the marginalisation of medical services on the site in favour of more lucrative, non-medical concerns. After 10 years, the

facility may, if its owners wish, be dissolved and the buildings and resources used for other purposes.

The researchers were intrigued by this 10 year commitment, as it would appear that this does little to solve the over capacity of healthcare provision, although it does reduce the responsibility of the state. If these sites are ‘not strategic’, then why force them to remain healthcare providers? One potential reason behind the government's decision is that they do not wish to compromise patient access. The private clinic that was visited by the researchers however, was no more than 5 minutes walk away from a state run polyclinic. The majority of the interviewees felt that such a commitment was not necessary, but raised the question of how many facilities would actually convert to other functions if free to do so. Doctors are not experienced in other fields, and as such many may not be prepared to risk change.

Private practice can also be lucrative for physicians. Despite the current program of refurbishment of facilities and re-training of staff, the general public still has an inherent mistrust of the state medical health system, believing its care to be inferior to that provided privately. This seems to be largely untrue, as even the manager of the private clinic admitted that the quality of basic care received in state facilities was no worse than that obtained privately. Private clinics are able to offer superior quality further investigations and treatments than their state counterparts however, and thus the perception of the public would seem to be based largely on appearances rather than actual experience.

5.5.4 Resources and Equipment

In line with the introduction of newly trained medical staff, 'family medicine' and integrated primary care in Georgia, the buildings and equipment are being refurbished and updated. Five pilot polyclinics are currently undergoing this process in Tbilisi, funded by DFID, and will be operational before the end of the year. The scheme has been organised in this manner to try and overcome some of the long held scepticism of the Georgian people in state medical care. A representative of the NHMC explained to the research team that in order for people to appreciate that the quality of health care had improved, and thus encourage them to access services more frequently, the surroundings must be seen to have radically altered as well.

Responses at interview indicated that poor medical equipment was a source of much concern. The research team observed two extremes during their visits to healthcare facilities in terms of the standard of resources in use. Even within the same centre, state of the art and archaic technology was in use side by side. At one centre, the price for an ultrasound varied according to which of the machines was to be used. Whilst the process of updating and replacing out-of-date equipment could be seen to be well underway, such as in the new diagnostic imaging department of the Zhordania Institute, other more basic supplies appear to be lacking. Several staff indicated that disposable medical instruments and/or the means to sterilise non-disposables were not readily available and their absence was seen as one of the major contributing factors to the spread of infectious disease.

It is the opinion of the research team that whilst aid agencies and charities supply sophisticated machines for use by Georgian medical practitioners, an influx of more basic equipment is required and would benefit a larger proportion of the population. The most modern MRI or CAT machines can be extremely useful diagnostic tools but when only a very small portion of the population can afford to purchase the investigations their full benefits can not be realised.

5.5.5 Salary and Morale

The salaries of healthcare professionals in Georgia are of such a low level that they require patients' out-of-pocket payments and backhanded gifts to survive and support their families. The problem with this situation is that a large amount of the money from the patients is not fed back into the healthcare system. As a result, there are insufficient funds available to improve the infrastructure of healthcare delivery and support the long-term reforms required.

Despite these under-the-table supplements to the physician's salary, their level of income is still extremely poor. Morale amongst many of the healthcare professionals interviewed appeared to be higher than could be expected given the current situation, but is still relatively low.

Whilst the majority of interviewees are making the best of the difficult situation and are optimistic for the future, some did voice the opinion that the current system needed to be completely removed and a new system established afresh.

The researchers do not see the situation as being this irretrievable, however. They appreciate that the low morale of many physicians is contributed to by their inability to provide the level of services and care that they feel their patients require. Despite this, a large proportion of those interviewed consider the current situation preferable to being under the communist regime and relish the greater autonomy and responsibility that they now possess. Although support for the current round of healthcare reforms was not universal, the researchers felt that the root of the dissatisfaction was in the manner of the implementation, rather than the content of the reforms themselves. Many Healthcare Professionals feel that their opinions have been overlooked, and that the reforms have been imposed upon them too rapidly and without proper planning.

5.5.6 Referrals and Record-keeping

The researchers found that written records were kept on all patients utilising women's healthcare services. The accuracy of these records could not be assessed however, and the concerns expressed at the Ministry of Maternal and Child Health that physicians may record procedures and investigations not performed in order to receive full reimbursement from SMIC was noted.

The researchers were also concerned to discover that some interviewees do not record visits made by patient who are unable to pay for the care they receive. Several admitted that when a patient who is unable to afford treatment presents at the clinic, they are given the care that they require free of charge. This is not then entered in the notes, as it would appear at audit that the doctor had not declared the fee for the service and kept the money. Whilst the researchers do not wish to criticise the altruism of these physicians, they feel that the practice of not recording visits could only be detrimental to the standard of care received by patients. Whilst the current system of collecting funds is maintained, it would appear that this is unlikely to be resolved.

The practice of note keeping is also seemingly under-performed amongst support staff. One midwife stated that she kept separate records on her patients and did not contribute to the main notes, whilst another kept no notes at all unless a patient was of interest to her. The researchers felt that the integration of records from all healthcare providers was an important change that would benefit patient care and could be relatively easily implemented.

Methods of referral were also investigated at interview by the research team. When a patient requires referral to a secondary or tertiary care facility, a form is given to the patient and it is then their responsibility to arrange the new appointment. In practice, the patient can sometimes not afford the further care and therefore does not attend. It is however, the decision of the patient which higher centre and which specialist to visit. The researchers were also concerned that some practitioners may not be referring patients as

readily as they require, as the referring physician receives no income from that patient once they have left his/her care.

Section 6: CONCLUSIONS AND RECOMMENDATIONS

AIM: To compare the actual provision of women's reproductive healthcare with best practice guidelines from international organisations. If any disparity is found, the researchers will identify possible contributing factors and make recommendations for change.

6.1 Summary of the Main Problems in Women's Reproductive Healthcare

- Lack of financing for healthcare system as a whole
- Lack of patient education
  - Regarding antenatal care entitlements and services available
  - Regarding contraception and contraceptive services
  - Regarding basic sex education
  - Regarding risks associated with abortions and STDs, contributing to high rates of infertility
- Lack of public trust and confidence in the medical profession
- Lack of standardised guidelines and treatment protocols
- Lack of basic equipment and resources
- Excess of physicians, medical schools and healthcare facilities

6.2 Recommendations

The greatest problem that is currently facing the Georgian healthcare system is a lack of finances caused by the weak state of the national economy. Not only is the funding not available centrally to improve healthcare provision and infrastructure but the low socio-economic status of the population as a whole means that few can afford to access the available services. However, without economic analysis of public finances as a whole, the researchers felt that they were unable to recommend any strategies to overcome this issue. It therefore remains the single most outstanding problem facing future reformers.

Guidelines

The researchers recognise that there are two main forms of guidelines available to practitioners. Financial guidelines are widely utilised, although the possibility of data being manipulated to fulfil them is concerning, as it results in misleading and inaccurate statistics as well as being wasteful of financial resources. In the long-term, healthcare providers must realise that such mis-reporting is not necessary, and that accurate data is more important than the fulfilment of targets and objectives. It is the opinion of the researchers that this will take a long time to resolve and that resolution will only occur through continuous assurance from the government that such practices are not necessary.

Antenatal Care

The research team is satisfied that the provision of basic antenatal services is acceptable given the present financial constraints that the Georgian healthcare system faces. It is recommended that with improvement in economic status, the Basic Benefits Package should be extended to cover a wider range of screening investigations, a post-natal visit, and the education of pregnant women. Further, a pilot scheme to evaluate the effects of moving towards a system of continuous antenatal care and delivery should be undertaken. This would assess the advantages and disadvantages of such reform.

The researchers are concerned by the possibility that not all healthcare professionals who consult appear to note such details in medical records. It is felt that this can only be detrimental to both patient care and auditing of service provision and that steps must be taken to eradicate such behaviour.

Utilisation and access of antenatal care is currently hindered by the lack of information and education amongst patients. Therefore, both women who present and the general populace require further education regarding their entitlements in conjunction with the widespread dissemination of information on health promotion.

Abortion, STDs and Contraception

The researchers feel that the abortion rate is still unacceptably high and that the public is unnecessarily afraid of the alternatives. It is clear that increased awareness regarding contraceptive methods and the risks of abortion are required. Therefore, the opinion of the researchers is that a continuous, co-ordinated mass media campaign, in full co-operation with government, is essential to address the extensive deficit in patient education that exists at present. The foundations laid by external organisations in this field must be built upon and their scope broadened.

The researchers have considered the possibility of raising the price of an abortion, in order to decrease the reliance of patients on this as a method of family planning. However, after consultation with practitioners in Georgia, it has been concluded that abortion utilisation is not price related, and that raising the cost to patients would not serve to decrease dependency. Hence it is recommended that there should be no change in the price of abortions.

With regards to the problem of STDs, the researchers felt that patient education in this area should become an integral part of the contraceptive awareness campaign. Confidential advice, diagnosis and treatment need to become more readily available at a primary care level, which may also help to reduce the stigma surrounding such conditions. This would also serve to increase the accessibility and utilisation of such services for high-risk groups of the population such as the young, commercial sex-workers and IV drug

abusers. Although not currently a major problem in Georgia, the rise of HIV and AIDs should not be discounted as a potential threat, and awareness amongst both doctors and patients must be increased.

Whilst the provision of contraceptives free of charge is supported by the researchers, it is felt that the cost of consultation to obtain them is a barrier to patient utilisation. This should be an area of priority as funding becomes available. In addition, awareness of the benefits to the population of providing such consultations must be reiterated to doctors. Incentives could be provided to make the performance of abortions less of a financially attractive option and increase the rate of referral to reproductologists.

The importance of these issues can not be understated to young people and therefore the researchers feel that the introduction of a comprehensive sexual education programme in schools is a matter of great urgency. The barriers created by parents, staff and others must be overcome so as to allow young people to be able to make informed decisions regarding their health.

General Issues

It is the opinion of the researchers that the government must intervene to reduce the number of substandard private medical schools operating in Georgia. Compulsory accreditation of medical schools and standardised examinations for students should help to reduce the number of poorly qualified doctors.

With regards to the continuing medical education of all healthcare workers, a regulatory framework needs to be developed for each speciality to ensure a minimum standard of training and development. The education required to meet these standards must be provided free of charge or at minimal financial cost to the users. The ability to access sources of Evidence Based Medicine is an integral part of the process of continuing education, and will hopefully improve as modern information systems become more commonplace in Georgia.

The researchers believe that the privatisation of non-strategic State medical facilities is an effective method of decreasing the excess State capacity and raising funds for improvement of those remaining. However, it is felt that the 10-year commitment to healthcare provision of newly privatised facilities is unnecessary, and the research team cannot see any reason for this to be continued.

Generally, there appears to be a lack of basic medical supplies in many State run clinics. Disposable equipment is required to decrease the risk of outbreaks of communicable diseases that poor standards of sterilisation threaten to cause. If no other solution is feasible, then the improvement of infection control methods is essential.

Evidently, the low morale of healthcare professionals can be partly attributed to the low salary they receive and the poor conditions in which many of them must operate. As more

resources become available morale will undoubtedly rise, as doctors are able to provide a better standard of care to their patients and their financial situation improves.

6.3 Final Note

Whilst this research has served to highlight many of the problem areas in women's reproductive healthcare, it should be noted that the researchers found many positive aspects in the system. The provision of antenatal care was in line with and often exceeded the best practice recommendations used, and whilst contraceptive services must undergo further improvement, the foundations have been laid. In time the situation will undoubtedly improve.

APPENDIX A

WHO Guidelines produced from a Technical Working Group on Antenatal Care Convention in Geneva, 31st October - 4th November 1994[72]

Original Objectives of the TWG:

1. To review current antenatal care practices and make recommendations for the identification of high-risk pregnancies and their management, taking into account the timing of the pregnancy, resources available, and the skills of the health worker.
2. To draw up recommendations on antenatal care and specifically outline the tasks and procedures health workers are expected to perform at different levels of the health care system.
3. To review the basic equipment, procedures, and supplies used in antenatal care from the point of view of cost, maintenance, scientific validity, and skills required to employ them appropriately.
4. To examine how to optimise antenatal care in terms of clinical tasks and procedures in relationship to the timing of the visits, distance to referral centres, and frequency of attendance.

Due to time constraints and experience and knowledge of members, the focus of attention was placed on objectives 2 and 4.

Three groups were formed with the goal of formulating recommendations for the development of guidelines for antenatal care from a primary health care provider's perspective.

- Group 1 considered normal pregnancy
- Group 2 examined risk factors commonly used as indicators of poor maternal or foetal outcome
- Group 3 examined the most common medical conditions and complications

Normal Pregnancy:

"Promoting health behaviours in women and increasing knowledge about pregnancy complications among women, their families and their communities are always important; they become life-saving, however, in situations where access to health facilities is limited or where women are at higher risk of complications."

Some form of dialogue between the woman and her health care provider is important to help the understanding of, and to supplement the information learned from health promotion messages in the community.

Antenatal care should address both the psychosocial and medical needs of the woman. This must however be delivered within the context of the health care delivery system and the culture in which the woman lives. These visits are also used to provide essential services that are recommended for all pregnant women, e.g. tetanus toxoid immunisation and nutrition education to avoid anaemia.

The TWG recommended a minimum of four antenatal visits for a woman with a normal pregnancy. One should focus on the content and quality of care. This should include the continuous assessment for risk factors and complications associated with pregnancy, labour, delivery and the postpartum period.

Action at a community and health facility level:

Health Promotion: Important messages conveyed to the community through a variety of media as well as through health care workers

Antenatal Visits: To encourage women to begin antenatal care early in pregnancy so services can have the greatest impact on health of the mother and baby.

Essential Services: Community awareness of essential services provided at different health facilities.

Clean and Safe Delivery: Promote messages regarding practices for clean and safe delivery. Encourage the use of an individualised care and delivery plan.

Danger Signs: To inform women, their families and the community of danger signs in the antenatal, intrapartum and postpartum periods. Includes where to seek care.

Coping with emergencies: All women and their families should be made aware of where the nearest emergency care facility is situated. This should include some form of contingency plan for transportation to this facility should an emergency arise.

Newborn Care: Clear messages including early and exclusive breast feeding, prevention of hypothermia, prevention of infections, resuscitation, immunisation and growth monitoring.

Family Planning: Stressing the advantages of family planning and birth spacing. This should include advise on the availability of services.

There should be country specific messages varying according the main causes or maternal and perinatal mortality and morbidity, made within the context of that country's culture and available resources.

Antenatal care should be provided through health facilities that should also provide outreach services to the community. The provision of essential community supplies e.g. iron/folic acid tablets, delivery kits, and family planning methods, should be explored to increase their availability, accessibility and impact in the provision of the healthy behaviour encouraged by the community messages.

Action to be taken at the health facility level (including hospitals):

Frequency and timing of visits: Early initiation of antenatal care for prevention and treatment of anaemia, syphilis and other medical complications. In countries where abortion is legal, this also allows early referral to safe abortion services. There should be a

minimum of four antenatal visits and specific times in the pregnancy, and more if the women's conditions and needs dictate so.

1st visit (by 16 weeks): Screen and treat anaemia and syphilis, screen for risk factors and conditions to be treated early in pregnancy, begin prophylaxis if required and start to develop individual birth plan.

2nd visit (24 – 48 weeks): Screen for pre-eclampsia, multiple gestation and anaemia. Further develop birth plan.

3rd visit (32 weeks): As for 2nd visit.

4th visit (36 weeks): Identify foetal lie and presentation. Update birth plan.

Content of visits:

Assessment – for the rapid identification of problems and criteria, for appropriate decisions about care and services.

1st contact visit (regardless of trimester)

HISTORY to include name, age, parity, LMP, menstrual history, pregnancy symptoms, contraceptive history, "wantedness" of pregnancy, social history and support, PMH and any other complaints and conditions.

EXAMINATION to include general appearance, height, BP, clinical signs of anaemia, signs of previous C-section, uterine size, foetal well-being, signs of physical abuse and for assessment of complaints.

LABORATORY TESTS to include syphilis testing with same day treatment of positive results and follow up of partners.

All subsequent visits

HISTORY to include social support, family and community, any complaints or problems and follow-up on advice, care or referral provided previously.

EXAMINATION to include general appearance, BP, signs of anaemia, fundal height, foetal well-being, signs of physical abuse, foetal lie and presentation and for assessment of complaints.

Health promotion – an opportunity to reinforce maternal health messages on pertinent issues such as, nutritional advice, rest, discomfort throughout pregnancy, hygiene, safer sex, planning for birth, newborn care, family planning and child spacing. Additional country specific protocol may be added, for example on malaria prophylaxis.

Care provision - The minimum to be offered at each visit should be

I. The development of an individualised delivery plan
II. Tetanus toxoid immunisation
III. Iron and folate supplements
IV. Disposable delivery kit if a home visit is planned
V. Home-based maternal records
VI. Country specific protocols e.g. malaria prophylaxis
VII. Psychosocial support
VIII. Timing of next antenatal visit

Identification and management of risk factors and complications:

The TWG made recommendation for both at the community level and for within health centres. These risk factors are listed as they suggest a need for careful monitoring, not because they are predictive of complications:

I. Poor obstetric history – e.g. history of operative delivery, stillbirth or neonatal death, low birth-weight infant, or a history of other medical conditions that could interfere with delivery (APH, PPH, CVD, pre-eclampsia)

II. Very short stature

III. Very young maternal age (< 15 years)

IV. Nulliparity or grand multiparity (parity > 5) – results in increased risk of maternal and perinatal mortality and morbidity.

V. Unwanted pregnancy

VI. Size-date discrepancy

VII. Extreme social disruption or deprivation

VIII. Pre-term labour in previous pregnancies

IX. Multiple gestation

X. Abnormal lie or presentation

These complications are serious themselves and are also predictive of serious complications, therefore treatment is also secondary prevention.

I. Anaemia – very common and serious in pregnancy. Prevention is a major goal of pregnancy

II. Hypertensive disorders – major cause of maternal and perinatal mortality

III. Active or recurrent UTIs – associated with pre-term labour and sepsis

IV. Vaginal bleeding in pregnancy – indicative of another problem. Requires referral and medical attention

V. Syphilis – all should be screened in first antenatal visit

VI. Pre-term labour (previous or present)

VII. Gonorrhoea and chlamydia infections – risk of transmission to the neonate and complications of pregnancy

VIII. HIV/AIDS

IX. Malaria – increases risk of anaemia, abortion, stillbirth, premature birth and low birth rate

X. Intestinal parasites – can contribute to anaemia in pregnancy

XI. Other medical conditions e.g. asthma, tuberculosis and rheumatic heart disease

Conclusions and Final Recommendations:

The TWG recommended the formulation of guidelines for antenatal care taking into account knowledge, skills and resources available to the health care providers. The programme mentioned should be referred to as a minimum level required for adequate care of all pregnant women worldwide. Women with high-risk pregnancies or complications will require additional services.

APPENDIX B

WHO/UNAIDS Recommendations for STD Control[73]

UNAIDS and Who recommend that all countries should have a STD control programme which should be integrated with National AIDS control programmes (WHO/UNAIDS 1997). The following five points are the main components of the programme as advocated by WHO and UNAIDS.

- Deliver primary prevention activities (promotion of safer sexual behaviour, condom provision) in conjunction with National AIDS programmes;
- Promote accessible, acceptable and effective case management of persons with STDs through public and private health care systems, including first-level health care, using simple algorithms based on syndromic diagnosis;
- Include STD prevention and care services in Maternal and Child Health, antenatal and family planning services;
- Target acceptable and effective STD care services to populations identified as being particularly vulnerable to infection with STDs, including the human immuno-deficiency virus (HIV);
- Promote early STD health care-seeking behaviour together with education related to sexual behaviour.

APPENDIX C

The Role of International Aid and Non Governmental Organisations In Women's Healthcare in Georgia.

Georgia has been fortunate to receive a wide variety of international assistance in terms of both the volume and types of donor, foreign governmental and non-governmental programmes. The following are description of just some of the organisations most active in the fields of reproductive health.

1. American International Health Alliance (AIHA)

This non-profit organisation brings together a number of US stakeholders (including providers, academic and health institutes, and personnel involved in healthcare) to try and practically assist countries tackling similar healthcare issues. Such collaboration is particularly important in Georgia where there must be an emphasis on economically viable projects and low-technology solutions must improve productivity and healthcare.

Both Tbilisi (1992) and Kutaisi (1999) in Georgia have been partnered with Atlanta, Georgia, in the US and a number of exchanges and programmes have created promising results. Successful reform has taken place in the areas of health policy, management, nursing, clinical practice & diagnostic capabilities, information management and

emergency training. In 2000, this work culminated in the opening of the first 'Women's Wellness Centre' in Kutaisi, which was opened by the partners to serve approximately 4,000 women annually.

2. **Japan International Co-operation Agency (JICA)**

The Japanese Government has donated a range of modern medical equipment, equivalent to approximately 8 million USD, as part of the Emergency Care Programme, paediatric care and cardiology.

In conjunction with the Ministry of Health, JICA have been working in the field of Child and Maternal Health. With such activity it has been necessary to work to understand the situation which the people of Georgia are facing in terms of health. A survey of predominantly 350 patients was conducted in 2000 and allowed JICA to investigate the real health status of the population of Borjomi. Together with extensive collation of information from key persons involved with Child and Maternal Health, JICA produced their, 'Report on the Maternal and Child Health in Georgia' in 2000.

3. John Hopkins University

This group has worked extensively in the field of contraception and initiated the 'Population Communication Services' (PCS) programme. Many Women's Consultations

and Reproductologists have been trained on the use of modern contraceptives as an alternative to abortion through consultants from the university.

JHU have also recommended the standardisation of reproductive services such as in the setting of a fixed consultation fee across the facilities involved in their programme of education and training.

4. Medecins Sans Frontieres (MSF) Greece

This team initiated the 'Reproductive Health Program' in 1998, which is in line with the recommendations made by the International Conference of Population and Development as well as those of the Fourth World Conference on Women. Techniques such as the extensive training of healthcare professionals cover and improve knowledge of modern contraception, counselling, gender & reproductive rights, and sterilisation & disinfection MSF-G has also donated basic materials for infection control to Women's Consultations, STD facilities in Tbilisi and the Institute of Obstetrics and Gynaecology and Perinatology.

In addition to the improvement of reproductive health services, MSF established a centre to provide confidential and free advice, counselling and information. Members of the public are able to access this service face-to-face or alternatively through their hot-line and specialised library. As part of the task of raising awareness of reproductive health issues, MSF are producing and distributing pamphlets to the general public but also targeting key groups such as students, teachers, parents, internally displaced persons, factory workers,

policemen and high risk individuals (commercial sex workers, homosexuals and intravenous drug users).

Finally, in an effort to improve sexually transmitted infection services, MSF joined forces with the Research Institute of Dermatology and Venerology in opening another confidential and free centre. This 'Healthy Cabinet' is for the diagnosis, treatment, counselling of STDs and once again targets high risk individuals and teenagers but also pregnant women.

5. UK Department for International Development (DFID)

DFID has been primarily concerned with the development of primary healthcare services and thus has established five family medicine demonstration sites within polyclinics in Tbilisi. Through this set up it has been possible to train 2 groups of 8 GPs to become GP Trainers, thereby promoting the development of Primary Healthcare from within the healthcare system. Such facilities are often involved with the provision of reproductive healthcare services and work closely with the Women's Consultations.

6. UNICEF

This organisation has worked towards the achievement of the Year 2000 Goal: Between 1990 and the year 2000, reduction of infant and under five mortality by one third. Together with the Year 2000 World Summit Goals for Children,

'access by all pregnant women to perinatal care, trained attendants during the childbirth and referral facilities for high risk pregnancies…special attention to the health of pregnant and lactating women',

there have been huge implications for women's health.

UNICEF financed a series of four day training courses (32 academic hours) on 'Diagnosis and Treatment of Life Threatening Obstetric Complications', although course also involved education regarding the nutrition during pregnancy, immunisation and breast-feeding. Of 191 midwives who participated in this course, a total of 193 received certification in these subjects.

In collaboration with the Georgian Association of Obstetricians and Gynaecologists, UNICEF set up the Centre of Clinical Efficacy. The role of this centre will be to increase the practice of evidence based medicine within these specialities through the promotion of attitudes and methods with grounding in scientific trials. To this end, 5 training modules for obstetricians/gynaecologists have been constructed.

7. United Nations Population Fund (UNFPA)

Since 1993, UNFPA has worked in Georgia in accordance with national needs and priorities with a particular orientation towards reproductive and sexual health. The organisation has supported the 'Contraceptive Supply Project' at the request of the Government followed by an 'Emergency Supply Project' in 1997. Hence, UNFPA has

emerged as the primary supply channel for 'free' contraception to Georgia, so increasing the practice of family planning whilst attempting to reduce the number of induced abortions.

More recently and perhaps most importantly, UNFPA has been a key player in drawing up 'Strengthening of Reproductive Health Services in Georgia', a project executed by WHO/EURO and implemented by experts at the 'Zhordania Institute of Human Reproduction'. Outcomes of this project include the establishment of reproductive health centres, training of local trainers, training of reproductive doctors and nurses, education of the population and maintaining a supply of contraceptives and medical equipment.

UNFPA plans to continue its work in Georgia for another 3-year programme to improve the reproductive health status of the population through assisting the government in achieving its objectives for women's health, increasing service quality, further promotion of information services and education in family planning and sexually transmitted infections, and by providing free access and choice to these services.

8. World Bank (WB)

The World Bank is supporting the on-going healthcare reform process that Georgia has undertaken. In fact it was through the loan provided by the WB that the Ministry of Health drew up a plan for maternal and child health service titled, 'Modernisation of Public

Health Services, Health Promotion, and Disease Prevention'. There are 4 components to this health project:

A. Health System Reorientation

B. Rehabilitation and Maintenance of Health Facilities and Equipment

C. Development of Human Resources

D. Modernisation of Health Financing System

During the first phase of the project a number of achievements were made; in relation to women's health services, there was basic optimisation of maternal and child care with the establishment of perinatal systems in Tbilisi and Kutaisi and launching of a referral system. However, each area of the framework, such as the establishment of continuous education and development of health insurance, will have an impact on women's healthcare.

With component A, the 'Healthy Children and Safe Motherhood' is specifically focused on reducing infant and maternal mortality by 30% nation-wide, reducing infant, perinatal, and maternal mortality by 50% in the two main cities.

The large-scale health project supported by the World Bank involves a number of other donor agencies, such as UNICEF, UNFPA and WHO, who are all contributing to the 'Safe Motherhood' programme.

With regards to antenatal care, 1999 saw the meeting of the initiative group, training of obstetricians and midwives, updating of treatment protocols, establishment of a transport system, development of statistical registration forms and the elaboration of guidelines on courses of maternal mortality.

9. World Health Organisation (WHO)/EURO

The WHO recommendations for antenatal care, contraceptive services and STD control have been used as a basis for much of the work involved during the development of suitable programmes for implementation within the Georgian healthcare system.

In conjunction with the UNFPA, the WHO has run 6 training courses as part of the 'Enhancement of Family Planning Services to Georgia' project. This made feasible the training of 146 physicians from Tbilisi maternity houses and women's consultations. A further 5 days of training were completed as a module for obstetricians and gynaecologists. Improvements have also been made in terms of obstetric referral systems, obstetric emergency handling and technical equipment within the rural reproductive health service.

Reproductive Cabinets have been set up in 5 regions of Georgia through the effort of both the WHO and the UNFPA. Both organisations have also conducted short-term courses on Reproductive Health for reproductologists.

The WHO has also been crucial to the refining of perinatal indicator collecting methods that are currently in use. Once the data is complete, inputted and analysed with the assistance of WHO consultants at the Centre for Clinical Efficacy, this allows the comparison of indicators across facilities, districts and regions

10. 'Reproductive Health Survey' was the first nation-wide survey of its kind in Georgia. It is the results of a joint effort between multiple donors, including the UNICEF, UNFPA, USAID, NGO-JIHA and the Centre for Disease Control (CDC), Atlanta. Implementation was assisted by the MoH and the National Health Management Centre (NHMC). The study proved to be an in-depth statistical analysis of current family planning and reproductive health issues that undoubtedly will prove useful to all those involved with improving services in these areas.

APPENDIX D

Georgia Women's Health Care Provision Questionnaire

Name:

Position/Title:

Clinic Name:

Clinic Address:

This questionnaire will attempt to discover a few facts about the provision of women's health care within your clinic. Please answer every question as honestly as possible so that we can follow up any problems that you highlight. We would like to reiterate that this questionnaire is completely confidential and that only members of the research team will view responses.

Thank you for your time.

Are you aware of any government guidelines for managing women's health problems? (tick one box)

□ Yes □ No

Do you have access to these government guidelines for women's health services? (tick one box)

□ Yes □ No □ Don't know

a) If yes, do you use these guidelines within your clinic? (tick one box)

□Yes, they are mandatory □Yes, they are voluntary □ No

What do you think of the quality of these guidelines? (tick one box)

□Excellent □Good □Satisfactory □Poor □Very poor

b) If no, would you like to receive and use these guidelines? (tick one box)

□ Yes □ No □ Don't know

Antenatal Care:

Do you screen every pregnant woman for rubella immunity? (tick one box)

□ Yes □ No

a) If Yes, what are your criteria for screening a female patient for rubella immunity?

……

……

4. If a patient is not rubella immune, do you have any procedure in place for following them up? (tick one box)

□ Yes □ No □ Don't know

a) If Yes, please describe this procedure briefly

……

……

b) If No, do you think there should be a procedure for following up these patients? Why?

……

……

5. How often do you perform following checks and interventions during antenatal appointments? (tick one box for each option)

	All visits	*Some visits*	*Once only*	*never*
Physical examination				
Blood pressure				
Hepatitis B				
Full Blood Count				
Urine analysis for sugar and protein				
Ultrasound scan				
VDRL/TPHA for syphilis				

6. On average, in your polyclinic, how many antenatal clinic appointments will a pregnant woman attend? …….

7. Do you think this is sufficient? (tick one box)

□ Yes □ No □ Don't know

8. What factors do you think may prevent pregnant women from visiting you or the polyclinic more frequently?

……
……

Contraceptive services:

9. Approximately, what percentage of women has access to contraceptive services? …….

10. How can women access contraceptive services?

……
……

11. Do you think contraception should be free to all patients? (tick one box)

□ Yes □ No □ Don't know

12. Which patients are entitled to free contraception from their doctor?

……
……

13. In your experience, which form of contraception do patients most commonly use? Please rank the following 1 (most) - 8 (least common):

Type of Contraception	Rank
Condom	
Oral Contraceptive Pill	
Coil/Intra-Uterine-Devices	
Cap/Diaphragm/Sponge	
Hormone Injections	
Surgical Sterilisation	

Rhythm/Natural/Withdrawal methods	
Termination	

14. Are there reasons why women cannot access contraceptive services? (tick one box)

□ Yes □ No □ Don't know

a) If Yes, please describe

……..……

…….

General:

15. How would you rate the current provision of women's health care services in Georgia? (tick one box)

□Excellent □Good □Satisfactory □Poor □Very poor

16. What do you consider to be the 3 most outstanding problems in the provision of women's health care in Georgia?

……

……

……

……

Thank you again for your time. Please complete this by the 14th May 2001 and then we will collect them from the clinic that week.

□ Please tick if you would be willing to let us contact you again.

REFERENCES

[1] Shouten E. Analysis of policy regarding Sexually Transmitted Diseases in the context of health sector reforms in Georgia. London School of Hygiene and Tropical Medicine, London, United Kingdom. September 1999

[2] WHO Europe. Highlight on Women's Health 2000

[3] WHO Europe. Highlight on Women's Health 2000

[4] Strategic Health Plan for Georgia 2000-2009

[5] WHO Europe. Highlight on Women's Health 2000

[6] WHO Europe. Highlight on Women's Health 2000

[7] WHO Europe. Highlight on Women's Health 2000

[8] WHO Europe. Highlight on Women's Health 2000

[9] Schouten E. Analysis of policy regarding sexually transmitted Diseases in the context of Health reforms in Georgia. London School of Hygiene & Tropical Medicine, London, UK. September 1999

[10] Nasmyth P, Georgia: In the Mountains of Poetry, Curzon Press 2001

[11] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[12] Serbanescu F et al (prep), Preliminary Report, Women's Reproductive Health Survey Georgia 1999-2000, . 2000

[13] Strategic Health Plan for Georgia 2000-2009

[14] Tzuladze G, Badurashvili I, Demographic Year Book of Georgia, 1999

[15] WHO, Highlight on Women's Health. Georgia; 2000

[16] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[17] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[18] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[19] WHO, Highlight on Women's Health. Georgia; 2000

[20] http://www.georgia-gateway.org/index.php3?mw=ENG/Society~Culture/Demography/population1.php3

[21] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[22] Highlights on Women's Health, WHO Regional Office for Europe, Denmark. 2000

[23] http://www.odci.gov/cia/publications/factbook/geos/gg.html#People

[24] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[25] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[26] Dawisha K, Parott B, Conflict, Cleavage and Change in Central Asia and the Caucasus. Cambridge Univ. Press 1997

[27] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[28] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[29]Nasmyth P, Georgia: In the Mountains of Poetry, Curzon Press 2001

[30] Nasmyth P, Georgia: In the Mountains of Poetry, Curzon Press 2001

[31] Nasmyth P, Georgia: In the Mountains of Poetry, Curzon Press 2001

[32] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia, Curatio International Foundation.

[33] Schouten E. Analysis of policy regarding Sexually Transmitted Diseases in the context of Health Reforms in Georgia. London School of Hygiene & Tropical Medicine, London, UK. September 1999

[34] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[35] Georgia: Selected Economic and Financial Indicators, IMF 1996-2001

[36] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[37] The Lonely Planet: Georgia, Armenia and Azerbaijan. Lonely Planet Publications Pty Ltd, Australia. 2000

[38] Highlights on Women's Health, WHO Regional Office for Europe, Denmark. 2000

[39] Schouten E. Analysis of policy regarding sexually transmitted Diseases in the context of Health reforms in Georgia. London School of Hygiene & Tropical Medicine, London, UK. September 1999

[40] Marrée J & Groenewegen PP, Back to Bismarck: Eastern European Healthcare Systems in Transition, UK, 1997

[41] Schouten E. Analysis of policy regarding sexually transmitted Diseases in the context of Health reforms in Georgia. London School of Hygiene & Tropical Medicine, London, UK. September 1999

[42] American International Health Association http://www.aiha.com/english/programs/phc/zoya.htm

[43] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia, Curatio International Foundation.

[44] Kokko S. et al. The role of the state in Healthcare Reform, Critical Challenges for Healthcare in Europe. Open University Press UK. 1998

[45] Bladen C. Caucasus Health Sector Assessment Consultancy Report, USAID, 1998

[46] Kokko, S. et al. The role of the state in Healthcare reform, Critical Challenges for Healthcare in Europe. Open University Press UK. 1998

[47] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia. Curatio International Foundation

[48] Schouten E, analysis of policy regarding Sexually Transmitted Diseases in the context of health reforms in Georgia.

[49] Schouten E, analysis of policy regarding Sexually Transmitted Diseases in the context of health reforms in Georgia.

[50] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia, Curatio International Foundation.

[51] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia, Curatio International Foundation

[52] Gzirishvili D & Mataradze G, Healthcare Reform in Georgia. Curatio International Foundation

[53] Strategic Health Plan for Georgia 2000-2009

[54] Strategic Health Plan for Georgia 2000-2009

[55] Report on the Maternal and Child Health in Georgia, JICA 2001

[56] Report on the Maternal and Child Health in Georgia, JICA 2001

[57] Schouten, E. Analysis of policy regarding Sexually Transmitted Diseases in the context of Health Reforms in Georgia, London School of Hygiene & Tropical Medicine, UK. 1999

[58] Schouten, E. Analysis of policy regarding Sexually Transmitted Diseases in the context of Health Reforms in Georgia, London School of Hygiene & Tropical Medicine, UK. 1999

[59] Report on the Maternal and Child Health in Georgia, JICA 2001

[60] Report on the Maternal and Child Health in Georgia, JICA 2001

[61] Bowling, A. Research Methods in Health: Investigating Health and Health Services. Open University Press, 2000

[62] Bowling, A. Research Methods in Health: Investigating Health and Health Services. Open University Press, 2000

[63] WHO, Highlight on Women's Health. Georgia; 2000

[64] Report on the Maternal and Child Health in Georgia, JICA 2001

[65] Gzririshvili D. Report on Health Issues in Western Georgia, Curatio Medical Institute.

[66] Gzririshvili D. Report on Health Issues in Western Georgia, Curatio Medical Institute.

[67] WHO, Highlight on Women's Health. Georgia; 2000

[68] Gromyko. Georgian STD Centre. WHO 1999.

[69] Schouten E. Analysis of policy regarding Sexually Transmitted Diseases in the context of Health reforms in Georgia. London School of Hygiene & Tropical Medicine, London, UK. September 1999

[70] Strategic Health Plan for Georgia 2000-2009

[71] Strategic Health Plan for Georgia 2000-2009

[72] WHO Department of Reproductive Health and Research. Report of a Technical Working Group on Antenatal Care, Geneva. 31st October – 4th November 1994.

[73] WHO/UNAIDS 1997