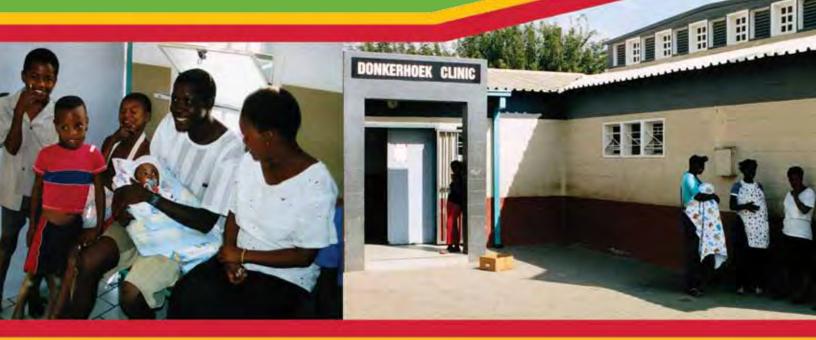


# **NAMBIA** Health Facility Census 2009



Key Findings on Family Planning, Maternal and Child Health, and Malaria This report summarises the reproductive and maternal and child health findings of the 2009 Namibia Health Facility Census (HFC) which was carried out by the Directorate of Special Programmes (HIV/AIDS/TB/MALARIA) in the Ministry of Health and Social Services (MoHSS). ICF Macro provided technical assistance. The 2009 Namibia HFC is part of the worldwide MEASURE DHS project which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programmes. Financial support for the census was received from the United States Agency for International Development, the Global Fund to Fight AIDS, Tuberculosis and Malaria, Government of the Republic of Namibia, and the World Health Organisation.

Additional information about the 2009 Namibia HFC may be obtained from the Ministry of Health and Social Services (MoHSS), Private Bag 13198, Windhoek, Namibia; Telephone: (264-61) 203-2826; Fax: (264-61) 224-155; E-mail: doccentre@mhss.gov.na; Internet: www.healthnet.org.na

Additional information about the DHS project may be obtained from ICF Macro, 11785 Beltsville Drive, Calverton, MD 20705 USA; Telephone: 301-572-0200, Fax: 301-572-0999, E-mail: reports@measuredhs.com; Internet: http://www.measuredhs.com.

Recommended citation:

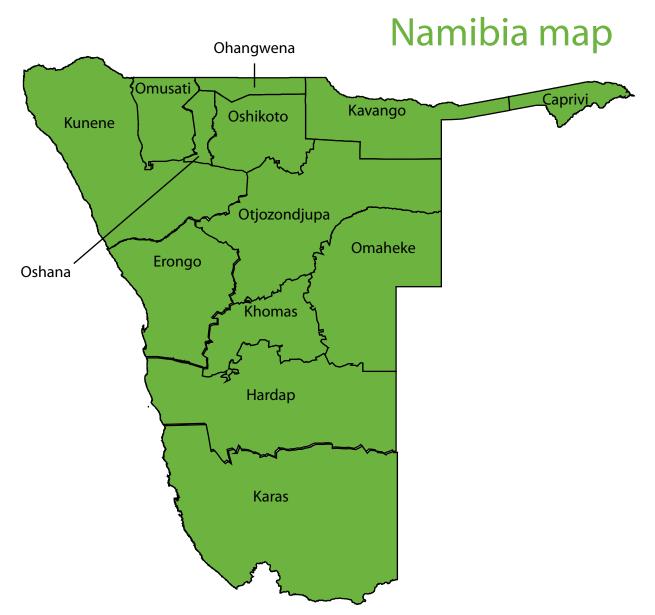
Ministry of Health and Social Services (MoHSS) [Namibia] and ICF Macro 2010. Namibia Health Facility Census 2009: Key Findings on Family Planning, Maternal and Child Health, and Malaria. Windhoek, Namibia. MoHSS and ICF Macro.

Cover photographs, courtesy of Photoshare, left to right: ©2003 Harvey Nelson; ©2003 Harvey Nelson; ©2004 HCP Namibia; ©2005 Alfredo L. Fort.



# Contents

Introduction
Family Planning (FP) Services
Method Availability
Components Supporting Quality FP Services
Infection Control
Equipment and Supplies for Specific Methods
Sexually Transmitted Infection (STI) Services
Observation of Client Visits
Management Practices and Training
Maternal Health Services.
Antenatal Care (ANC) Services
Items to Support Quality ANC Services
Availability of Medicines
Management and Training
Adherence to Standards in ANC
Delivery Services
Domiciliary Care Practices
Elements and Practices to Support Normal Deliveries
Supplies for Normal and Complicated Deliveries
Management and Training
Infection Control
Newborn Care
Child Health Services
Immunisations
Growth Monitoring
Care for the Sick Child
Essential Medicines for Treating Sick Children
Observation of Sick Child Consultations
Treatment by Diagnosis
Management Practices Supporting Sick Child Care
Caretaker's Opinions
Malaria
Treatment of Children
Training
Antenatal Care and Malaria
Conclusions
Key Indicators



Throughout the report, indicators are presented by type of facility, managing authority, and region. The regions, and the districts they comprise, are as follows:

Katima Mulilo
Swakopmund, Walvis Bay, Omaruru, Usakos
Mariental, Rehoboth, Aranos
Luderitz, Karasburg, Keetmaanshoop
Rundu, Andara, Nyangana, Nankudu
Windhoek district
Opuwo, Outjo, Khorixas
Engela, Eenhana, Okongo
Gobabis
Tsandi, Outapi, Okahao, Oshikuku
Oshakati
Onandjokwe, Tsumeb
Otjiwarongo, Grootfontein, Okahandja, Okakarara

# Introduction

The 2009 Namibia Health Facility Census (NHFC) describes how the formal health sector in Namibia provides services for family planning, maternal health, child health, malaria, HIV/AIDS, and other communicable diseases. The NHFC was carried out by the Directorate of Special Programmes (HIV/AIDS/TB/MALARIA) in the Ministry of Health and Social Services (MoHSS).

The major objectives of the 2009 Namibia HFC are to:

•Describe how well prepared facilities are to provide quality reproductive and child health services as well as services for some infectious diseases (HIV/AIDS, STIs, malaria, and TB); •Provide a comprehensive body of information on the performance of the full range of public and private health care facilities that provide reproductive health, child health, tuberculosis (TB), malaria, and HIV/AIDS services;

•Help identify strengths and weaknesses in the delivery of reproductive health, child health, TB, malaria, and HIV/AIDS services at health care facilities, producing information that can be used to better target service delivery improvement interventions and to improve ongoing supervisory systems;

Describe the processes used in providing child, maternal, and reproductive health services and the extent to which accepted standards for quality service provision are followed;
Provide information for periodically monitoring progress in improving the delivery of reproductive, child health, and HIV/AIDS services at Namibian health facilities;

•Provide baseline information on the capacity of health facilities to provide basic and advanced HIV/AIDS care and support services, and on the record-keeping systems in place for monitoring HIV/AIDS preventive, diagnostic, care, and support services.

The 2009 NHFC provides national- and regional-level representative information for hospitals, health centres, clinics, stand-alone voluntary counselling and testing (VCT) facilities and sick bays offering maternal and child health (MCH) and HIV/AIDS-related services. Data were collected from all functioning health facilities in Namibia. These facilities were under various management authorities, including government, private-for-profit, mission, NGOs, ministry of defence (MoD), and the Namibia police. In each facility, data were collected from all or a sample of health service providers available on the day of the visit, as well as from a sample of sick children, family planning clients, and antenatal care (ANC) clients. Trained interviewers collected the data between July and October 2009.

This report summarises the major findings on family planning, maternal health, child health, and malaria based on interviews and observations at 411 health care facilities. Graphs and figures presented in this report include table numbers in parentheses. These table numbers refer to the tables in the 2009 Namibia Health Facility Census Final Report. Table numbers that include an A in the title, e.g. Table A-5.5, refer to tables found in the appendix of the final report, rather than the chapters. To put the results of the 2009 NHFC into context, this report also includes data from the 2006 Namibia Demographic and Health Survey (NDHS) based on data from almost 14,000 (13,719) Namibians. DHS information is provided in red boxes.

Page 2

# 2009 Namibia HFC Results: Family Planning (FP) Services

Overall, 90% of all health care facilities in Namibia offer modern methods of family planning. Almost all health centres and clinics offer modern methods, compared to only half (49%) of hospitals. Facilities managed by the Ministry of Health and Social Services (MoHSS) and Mission/ NGO are most likely to offer modern methods (96% each) while only 69% of private facilities and 31% of Ministry of Defense (MoD)/Police facilities offer modern methods. In most facilities that offer modern methods (81%), services are available five or more days per week.

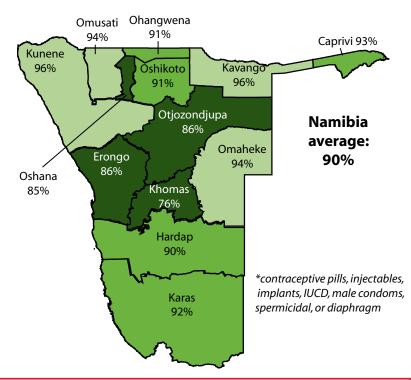
Availability of family planning services varies by region. Only three-quarters of facilities in Khomas offer any modern methods compared to more that 95% on facilities in Kavango and Kunene.

Long-term methods are less widely available. Only 33% of facilities offer male or female sterilisation. Sterilisation is most available at hospitals (44%).

#### **Availability of Modern Family Planning Methods**

(Table 5.1)

Percent of facilities offering any modern method\* of family planning (N=396)



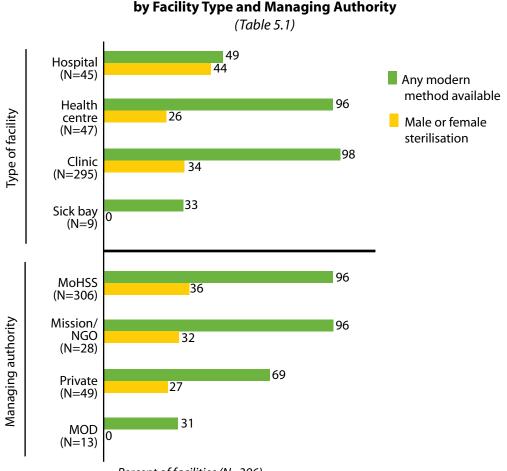
#### Putting the NHFC into Context: Family Planning in Namibia

According to the 2006-07 NDHS, Namibian women have an average of 3.6 children. Fertility has decreased from 5.4 in 1992 and 4.2 in 2000. Almost all men and women know of at least one modern method of family planning, and 46% of all women are currently using a modern method. This is an increase from 37% in 2000, due primarily to the increasing use of male condoms.

Injectables and male condoms are the most commonly used modern methods (17% each) followed by female sterilisation and the pill (5% each). The NDHS reported that 75% of modern method users obtained their methods from a public source, such as a government hospital or health centre, while 10% of users obtained their methods from a private medical source, and another 13% of users from another private sector source, such as a shop or church.

Only 3% of women have an unmet need for family planning—that is, they do not want any more children or want to wait at least two years before having their next child but are not using any family planning. Eightyeight percent of non-users of family planning have not recently discussed contraception with a health worker.

# Current Use of Family Planning, NDHS 2006-07 Any method 47 Any modern method 46 Injectables 17 Male condom 17 Female sterilization 5 Pill 5 Percent of all women currently using a method



#### **Availability of Family Planning Services** by Facility Type and Managing Authority

Percent of facilities (N=396)

#### Method Availability

Family planning services that offer many different contraceptive methods are best able to meet the needs of their clients.

According to the 2006-07 NDHS, injectables and condoms are the most widely used FP methods in Namibia. They are also the most available methods in Namibian health facilities along with combined oral contraceptives. More than 95% of facilities either provide, prescribe, or counsel about these methods. Availability of male condoms is especially important, as they provide dual protection against pregnancy and HIV/AIDS. Nationwide, 98% of facilities offering any family planning services reported that they offer at least four different temporary family planning methods (contraceptive pills, injectables, implants, intrauterine contraceptive devices, condoms, spermicides, or diaphragm). Most facilities actually had these methods available on the day of the survey (see figures on page 4). Ninety-nine percent of facilities offering FP services provide male condoms; male condoms were actually available in 96% of facilities that report providing them on the day of the survey.

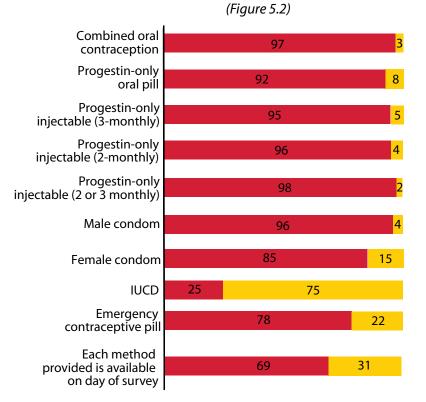


© 2003 Harvey Nelson, Courtesy of Photoshare. Women wait for care at the Donkerhoaek sub-clinic in Katatura Township, Windhoek, Namibia

#### Page 4

Many fewer facilities provide long-term methods. Six percent of FP facilities report that they provide intrauterine contraceptive devices (IUCDs); however, only 25% of these facilities actually had the IUCD in stock on the day of the survey.

Emergency contraception is not a family planning method but instead is used as a back-up method to prevent unplanned pregnancy. Twenty-nine percent of facilities offering FP report that they provide emergency contraception; 78% of these facilities had emergency contraception in stock the day of the survey. The progestin-only pill, which also can be used as emergency contraception, and which is recommended during breastfeeding, is available in 92% of the facilities that report providing the method.



#### **Modern Methods Availablility**

Percent of facilities providing indicated family planning services

Method provided and available — Method provided, not available

The denominator for each method is different. For example, the denominator for combined oral contraceptive is 339 facilities.

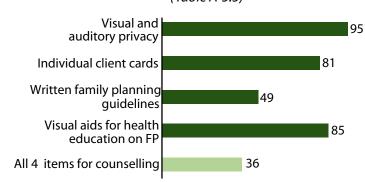
#### Components Supporting Quality Family Planning Services

High quality family planning services may reduce discontinuation and contraceptive failures and help attract new users. Findings from the 2009 NHFC present a mixed picture of family planning services in Namibia. On the plus side, 95% of facilities offering family planning have both visual and auditory privacy for client counselling. In addition, 85% of facilities have visual aids for counselling on family planning, and 81% have individual client health cards. Only 49% of facilities, however, have written family plan-

ning guidelines at the service site to help providers. In all, just over one-third of facilities offering FP (36%) have all of the four components for quality counselling.

Almost 40% of clinics and health centres have all four items for quality counselling, (39% and 38% respectively) while no hospitals have all four items.

#### Items to Support Quality Counselling for Family Planning (Table A-5.5)



#### **Infection Control**

Two-thirds of family planning facilities have all the items needed for infection control, including soap and running water or else hand disinfectant, disposable latex gloves, disinfecting solution, and a sharps

box for safe disposal for needles and blades at the service site. Infection control is most important during provision of injectables, IUCDs, and other methods that pose a risk of viral or bacterial infection to the client. Clinics and sick bays are most likely to have all the items needed for infection control (67% each), while only half of hospitals have all infection control items.

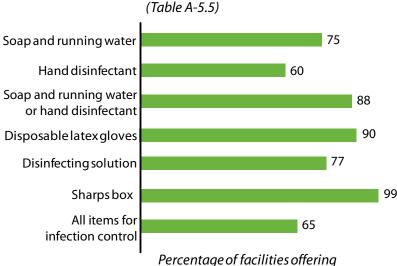
**Infection Control in Family Planning Facilities** 

#### According to the NHFC, in order for a facility to qualify as having all items needed for infection control, the facil-

Percent of facilities offering

family planning services (N=358)

- ity must have: 1-Soap and running water or hand disinfectant
- 2- Disposable latex gloves
- 3-Disinfection solution for reusable objects
- 4-Sharps box



family planning services (N=358)

#### **Equipment and Supplies for Specific Methods**

Only 3% of facilities that offer FP have all the items and conditions needed for a quality pelvic exam (visual and auditory privacy, exam bed, exam light, and vaginal speculum). For example, only 36% of facilities have an examination light (including 64% of hospitals) and only 4% have a speculum (including 27% of hospitals) at the service site. Hospitals are most likely to have all the necessary items (14%).

Some experts advocate that clients receiving estrogen-containing methods should have their blood pressure checked. Namibia is well-equipped in this regard, as 94% of facilities offering methods with estrogen had blood pressure equipment available.

Only 20 facilities in Namibia provide IUCDs. Among these, only one-quarter had the IUCD method available on the day of the survey and only 10% have all basic items for insertion: gloves, antiseptic, speculum, forceps, tenacula and uterine sound or an IUCD kit that includes a tenacula and uterine sound.

#### Sexually Transmitted Infections (STI) Services by FP Providers

Family planning providers in 81% of facilities that offer FP services routinely diagnose and treat STIs. Treatment of STIs by family planning providers is most common in clinics (88%) and least common in hospitals (36%). Of the facilities providing FP and where FP providers routinely treat STIs, 87% have at least one medicine to treat each of the following STIs: trichomoniasis, gonorrhoea, chlamydia, and syphilis. All hospitals and 96% of health centres have at least one medicine to treat each of the four STIs.

Sixty-three percent of facilities offering family planning services where providers routinely treat STIs have visual aids for health education on STIs. More than three-quarters of these facilities have the WHO guide-lines for syndromic approach to diagnosing and treating STIs.

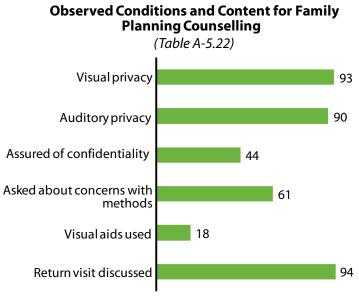


© 2003 Harvey Nelson, Courtesy of Photoshare. Clients wait to be seen at the main clinic in Katatura Township, Windhoek, Namibia

#### **Observation of Client Visits**

The Namibia HFC observed family planning client visits to assess how closely providers adhere to internationally recognised standards for quality service provision. Trained interviewers observed 983 clients of family planning services; 16% of these clients were visiting the family planning facility for the first time, and 84% of the clients came for follow-up visits. Almost all of the clients left the facility with a family planning method; 82% of clients received a 2- or 3-month progestin injectable, 10% received a combined oral contraceptive, and 10% received condoms.

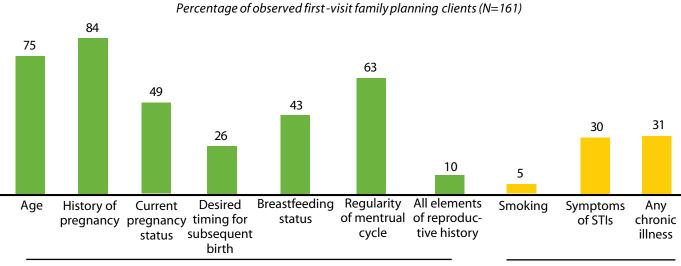
Over 90% of the family planning consultations took place under appropriately private conditions. Less than half of clients were verbally assured of confidentiality. Six in ten clients were asked by providers if they had any concerns about their methods. This is a fairly large per-



Percentage of observed family planning clients (N=983)

centage considering that many of the clients were repeat visitors to the facilities. Return/follow-up visits were discussed with almost all clients (94%).

Observations of consultations with first-visit family planning clients indicate that many recommended assessments are not routinely carried out. For example, only 10% of first-visit clients were asked about all elements of their reproductive history (their age, history of pregnancy, current pregnancy status, desired timing for next child, and regularity of menstrual cycle). Three-quarters were asked their age, while 84% were asked about any history of pregnancy. Three in ten were asked about STI symptoms. This may be a missed opportunity to provide preventive HIV and STI counselling.



**Observed Elements of Client History for First - Visit Family Planning Clients** (*Table A-5.23*)

**Client History** 

#### **Management Practices and Training**

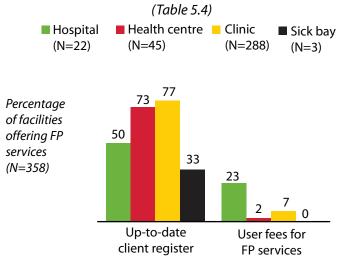
The 2009 NHFC collected data on management practices: availability of up-to-date client registers, user fees, and routine staff training and supervision. Results vary widely by facility type and by region.

Three-quarters (74%) of facilities offering family planning have up-to-date client registers and essential tools for management information systems. Client registers are more common in Mission/NGO facilities than in government or private facilities.

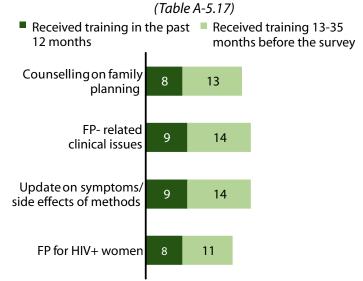
The Namibian government is committed to providing family planning services free of charge. There should be no charge for any MoHSS supplied method. According to the NHFC, 2% of MoHSS FP facilities and 59% of private FP facilities charge a fee. Private facilities often charge fees for consultations, the FP method, and for tests. Overall, 23% of hospitals, 2% of health centres, and 7% of clinics charge some user fees.

The NHFC interviewed 788 family planning providers. Only 11% of interviewed FP service providers received any training related to FP during the 12 months preceding the survey. Another 15% received their most recent training during the 13-35 months prior to the survey. Provider training is consistently low across facility types, managing authorities, and regions. Among those who did receive training, the training covered a range of topics including family planning counselling, update on contraceptive methods, and FP for women infected with HIV.

#### Management Practices for Family Planning Services: Patient Register and User Fees



#### In-Service Training Received by Interviewed Family Planning Service Providers



Percent of interviewed family planning service providers (N=788)

# 2009 Namibia HFC Results: Maternal Health Services

Maternal health services are not consistently available throughout Namibia. Nationwide, 79% of health care facilities (excluding sick bays and free-standing VCT facilities) provide antenatal care (ANC) services, mostly health centres (93%) and clinics (86%). Only 18% of hospitals provide ANC. Seventy-six percent of all facilities provide tetanus toxoid vaccines. Normal delivery services are available in two-thirds (67%) of facilities, while 71% of facilities offer postnatal care.

Four-fifths of all facilities (excluding sick bays and free-standing VCTs) do have a system in place to provide transport to a referral site for maternity emergencies. Only 9% of facilities nationwide can perform a Caesarean section (C-section), including 80% of hospitals. In some regions, only one or two facilities have the ability to perform a C-section.

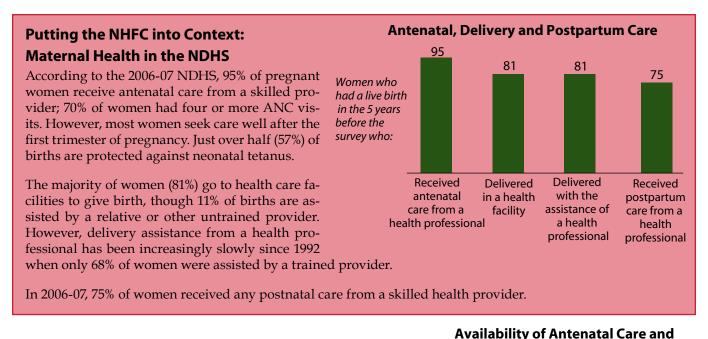


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Malaria during pregnancy can have serious adverse effects on both the mother and the fetus. For malaria findings, see page 23.

		Normal	Transportation support for maternity emergen-	Postnatal	
	ANC	delivery	C-section	cies	care
Region					
Caprivi	96	85	4	100	93
Erongo	56	41	13	72	59
Hardap	85	65	10	100	90
Karas	76	68	16	96	76
Kavango	95	79	5	93	89
Khomas	29	26	13	45	26
Kunene	89	89	11	86	79
Ohangwena	91	63	3	94	66
Omaheke	81	100	13	88	81
Omusati	84	63	4	73	61
Oshana	78	72	11	50	72
Oshikoto	91	64	14	95	86
Otjozondjupa	67	70	19	85	52
<b>Managing Authority</b>					
MoHSS	86	71	7	88	77
Mission/NGO	93	89	18	93	79
Private	29	27	20	47	27
TOTAL	79	67	9	83	71

#### Availability of Maternal Health Services Percentage of facilities offering specific services, by region (N=383)



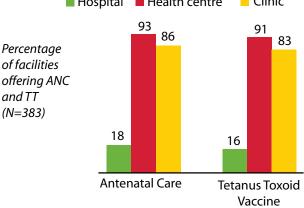
#### **ANC Care**

Nationwide, 79% of facilities offer ANC services, ranging from only 29% of facilities in Khomas region to 96% percent of facilities in Caprivi region. ANC is not typically offered every day. Among facilities that offer ANC services, 64% offer them only one or two days per week. Tetanus toxoid services, however, are offered five days a week in 86% of facilities offering ANC services. In 95% of ANC facilities, tetanus toxoid vaccination is always offered on the same days that antenatal care is offered.

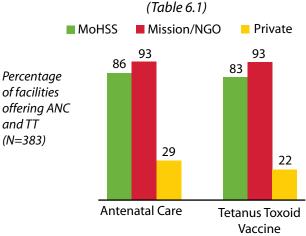
# Items to Support Quality ANC Services

Most facilities have all the basic items for ANC. Threequarters of facilities providing ANC services have all the essential supplies for basic ANC—iron and folic acid tablets, tetanus toxoid vaccine, blood pressure apparatus, and foetoscope. Availability of all elements needed for physical exams among ANC facilities is low (32%), primarily because only 35% of facilities have an exam light. However, almost all (95%) facilities providing ANC have visual and auditory privacy, and 95% have an exam bed or couch. Half of ANC facilities have visual aids for health education and 92% have blank individual client health passports. Only onethird of facilities offering ANC services have ANC guidelines on site.

Tetanus Toxoid Vaccine (Table 6.1) Hospital Health centre Clinic



#### Availability of Antenatal Care and Tetanus Toxoid Vaccine by Managing Authority



Most facilities have laboratory testing capacity for anaemia, urine protein, urine glucose, Rh factor, and syphilis. Most facilities offering these tests also report that they routinely provide these tests to ANC clients.

#### **Availability of Diagnostic Tests**

### Percentage of facilities providing ANC with capacity for conducting the indicated diagnostic test (N=305)

	Anaemia	Urine Protein	Urine Glucose	Rh factor	Syphilis
Type of Facility					
Hospital	89	78	78	33	89
Health Centre	95	100	100	56	95
Clinic	94	98	98	57	92
Managing authority					
MoHSS	95	98	98	55	94
Mission/NGO	96	100	100	65	96
Private	71	79	79	57	64
TOTAL	94	98	98	56	92

#### Availability of Medicines

Facilities providing ANC services in Namibia are fairly well stocked with medications. Almost all (95%) have a broad-spectrum antibiotic (amoxicllin or augmentin or cotrimoxazole), 86% have albendazole an anthelminth to combat parasitic infections (albendazole), and 76% have a first-line antimalarial drug (Coartem). However, only 39% of these facilities have methyldopa (aldomet), used for treating high blood pressure, a common complication of pregnancy; this includes 9 in 10 hospitals and 6 in 10 health centres. Almost all facilities providing ANC have at least one medication for treating syphilis (98%), trichomoniasis

(90%), gonorrhoea (95%), and chlamydia (97%). In all, only 25% of ANC facilities have all the necessary medicines for treating pregnancy complications (at least one antibiotic, albendazole or mebendazole, aldomet, 1st-line antimalarial, and one medicine for treating each of the four STIs).

#### Management and Training

More than two-thirds (69%) of facilities have up-to-date client registers for ANC.

Of all ANC providers interviewed, less than 15% had received training in ANC counselling, screening, complications of pregnancy, or postpartum care in the year before the survey.

Facilities were more likely to provide personal supervision than staff training: in 78% of facilities, at least half of interviewed providers had received personal supervision once or more in the six months preceding the survey.



Percent of interviewed ANC providers with training in specific topics (N=559)

In Namibia ANC services are supposed to be provided free of charge in all government and mission/NGO facilities. Overall, 12% of facilities charge user fees for ANC services. All private facilities charge user fees, compared to 8% of MoHSS facilities. No Mission/NGO facilities charge user fees.

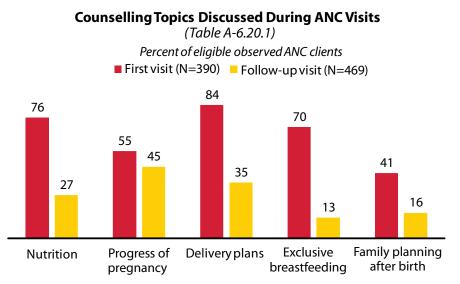
#### Adherence to Standards in ANC

NHFC interviewers observed the client-provider interactions of 859 ANC clients. About half of the clients observed were visiting for the first time in their pregnancy, while the other half were coming for a follow-up visit.

The NHFC findings suggest that health care providers do well with routine activities for monitoring pregnancies but are less alert to complications of pregnancy or to related health concerns. For example, almost all first-visit pregnant clients were weighed, had their blood pressure checked, had urine tests, and had

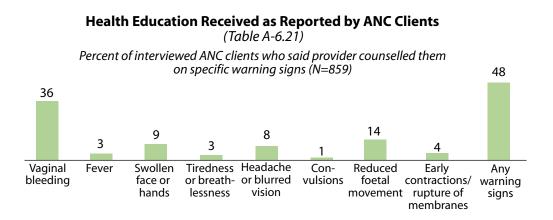
blood tests for anaemia. About 90% of observed first visit ANC clients were given iron tablets and half received the tetanus toxoid vaccine.

ANC providers were not as thorough in counselling and taking client history. Seventy-eight percent of first-visit clients were asked about any medications they were currently taking, and only 60% of first visit clients with previous births were asked about complications of previous pregnancies. Delivery plans were discussed with 84% of first-visit ANC clients, but with only 35% of follow-up visit ANC clients. Only 39% of all ANC clients were counselled about exclusive



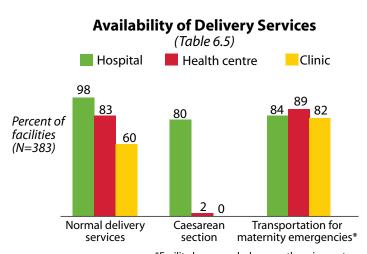
breastfeeding, and only 27% were counseled about family planning after birth.

Counselling and education on specific warning signs of pregnancy are not regularly carried out. Among ANC clients who were interviewed as they left the facility, only half said that their providers had talked with them about any warning sign of pregnancy during the current visit or any prior visits. These results are similar to those found in the 2006-07 NDHS, which reported that 58% of women who received ANC said that their provider had told them about signs of pregnancy complications.



#### **Delivery Services**

As noted on page 9, two-thirds of all facilities (excluding sick bays and free-standing VCT facilities) provide normal delivery services. Availability of normal delivery services ranges from only 26% of facilities in Khomas to 100% of facilities in Omaheke.



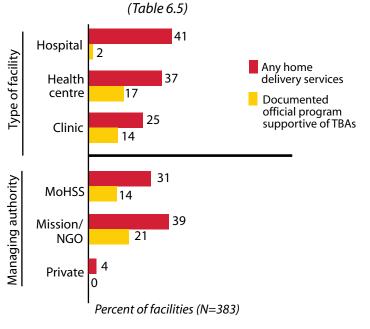
<sup>\*</sup>Facility has an ambulance or there is a system whereby the facility provides some support for emergency transportation to a referral site.

# 

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#### **Domiciliary Care Practices**

According to the 2006-07 NDHS, about onefifth of pregnant women deliver at home, most without assistance from a trained provider. The NHFC findings show that 28% of facilities providing maternity services have services supporting home delivery, either for routine cases or emergencies. Thirteen percent of facilities have programmes with traditional birth attendants. This varies by facility type as well as by managing authority (see figure on right). Support for Home Deliveries by Managing Authority

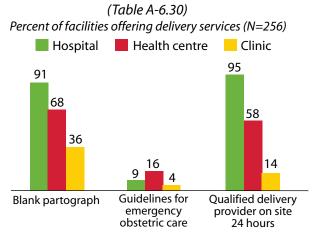


#### **Elements and Practices to Support Normal Deliveries**

Almost all facilities providing delivery services have privacy for delivery, and 84% have delivery beds. Only 47% of facilities including 88% of hospitals have an examination light. Fewer facilities have other necessary items, especially guidelines for both normal and emergency deliveries. The partograph, a standard tool used for monitoring the progress of labour, is available in only half of delivery facilities including 91% of hospitals. Two-thirds of facilities (65%) have all of the items needed for infection control the delivery site (see box on page 5 for a list of infection control items).

Only 7% of facilities have guidelines for emergency obstetric care. One-third (34%) of facilities offering deliveries have a trained provider on site 24 hours a day, including 95% of hospitals and 58% of health centres.

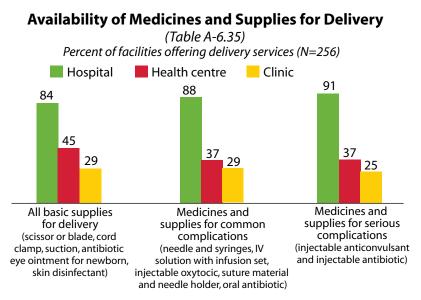
#### **Items to Support Quality Delivery Services**



#### Supplies for Normal and Complicated Deliveries

Only 40% of facilities offering delivery services (including 84% of hospitals) have all the necessary supplies for normal deliveries in the delivery area: scissors or a blade, cord clamp, suction apparatus, antibiotic eye ointment for newborn, and skin disinfectant. Two-fifths of facilities that offer delivery services have all the supplies needed to handle common complications. Roughly the same proportion (38%) have the medicines needed to treat serious complications. Not surprisingly, hospitals and private facilities are most likely to be able to handle common and serious complications.

Nationwide, only 11% of facilities (63% of hospitals and none of other facility types) have a vacuum extractor (used for assisted vaginal delivery), and only 9% (53% of hospitals and none of other facility types) have a dilation and curettage (D&C) kit needed to remove retained placenta. Only 17% have blood transfusion services (95% of hospitals and 3% of health centres). Injectable oxytocin to help the uterus contract after delivery and prevent bleeding is available in the delivery area in only half (45%) of facilities that offer delivery services including 95% of hospitals, and 62% have newborn respiratory support services.



Facilities that provide delivery services are expected to be able to perform signal functions for emergency obstetric care. These signal functions, which include are proven to significantly reduce maternal deaths and improve birth outcomes of newborns. For example, 6 in 10 hospitals and health centres offering delivery services had used parenteral oxytocics in the three months preceding the survey. Almost four in ten had performed a C-section. Use of anticonvulsants (25%), manual removal of placenta (22%), and blood transfusions (25%), were less common.

#### Management and Training

The NHFC interviewed 543 delivery service providers. Only 41% of these providers reported receiving any training during the year preceding the survey. Less than 20% had been trained in any basic obstetric topic (see chart at right). However, slightly more providers received training related to HIV/AIDS than other topics.

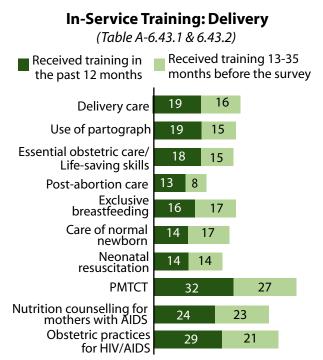
Only 15% of facilities offering delivery services document monitoring of delivery coverage in their catchment area. Monitoring of delivery coverage is highest in health centres (29%). No facilities in Erongo, Khomas, Ohangwena, or Oshana monitor delivery coverage, compared to more than 30% of facilities in Hardap, Karas, and Omaheke.

Careful reviews of maternal or newborn deaths or near-misses help providers recognise problems and prevent future deaths. Nationwide, only 21% of facilities providing delivery services conduct these reviews. Hospitals are most likely to conduct reviews of maternal and/or newborn deaths or near misses (70%) compared to only 32% of health centres, and 7% of clinics that offer delivery services.

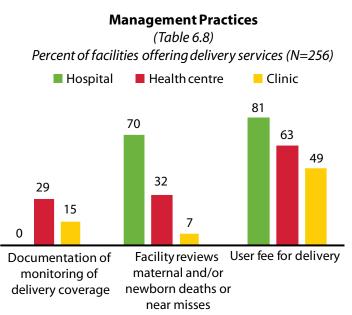
More than half of facilities (56%) charge user fees for delivery. While user fees are most common in private facilities (92%), 54% of MoHSS facilities also charge fees.



© 2005 Alfredo L. Fort, Courtesy of Photoshare. A local physician stands with community volunteer counselors at Katutura Hospital, Windhoek.



Percent of interviewed delivery-service providers with training in specified topics (N=543)



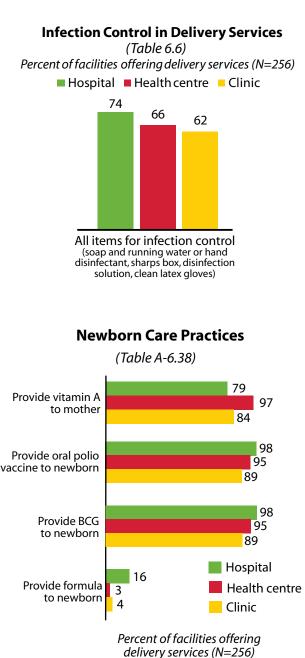
#### **Infection Control**

Six in ten facilities offering ANC and 65% of facilities offering delivery services have all items for infection control (see box on page 5 for a list of items). Running water is available in 83% of ANC sites and 85% of delivery sites.

Among facilities offering delivery services, three-quarters report that they sterilise or high-level disinfect equipment outside the facility. Only 17% do so in the main area of the facility, while 3% sterilise equipment at the delivery service site.

#### **Newborn Care**

Several routine practices can increase newborn and infant survival. Vitamin A supplementation to breastfeeding mothers, for example, is beneficial to both mother and newborn. Eighty-five percent of facilities that offer delivery services routinely provide vitamin A to new mothers, and 95% of facilities have vitamin A either in the delivery room or in the pharmacy. Other recommended practices, such as providing BCG and oral polio vaccines are almost universal. Almost nine in ten facilities practice rooming in. Only 6% of facilities still provide formula or other liquids to newborns before breastfeeding is established.



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A father holds his infant at a Katutura Township sub-clinic in Windhoek, Namibia.



# 2009 Namibia HFC Results: Child Health Services

The NHFC assessed the availability of three basic child health services: curative care for sick children; immunisations; and growth monitoring. The NHFC evaluates health care providers' adherence to the World Health Organization's Integrated Management of Childhood Illness (IMCI) strategy to provide useful baseline measures that can later be used to judge progress in implementing the IMCI strategy across Namibian health facilities.

Nine in ten facilities (excluding sick bays and free-standing VCTs) provide curative care for sick children, 85% provide childhood immunisa-



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tions, and 83% provide growth monitoring. Immunisation services are available in 91% of MoHSS facilities and 96% of Mission/NGO facilities, but only 43% of private facilities. Only 39% of hospitals provide immunisations.

Nationally, about four-fifths of facilities provide all three child health services. Health centres and clinics are most likely to provide all three services compared to only 32% of hospitals. Availability of all three services varies markedly by region, from only half of facilities offering all three child health services in Erongo and Khomas to 100% in Caprivi.

Percenta	ge of facilities of	fering specific	services, by reg	gion (N=383)
Region	Curative care for sick children	Growth monitoring	Immunisation	All 3 basic child health services
Caprivi	100	100	100	100
Erongo	69	56	63	50
Hardap	100	80	85	80
Karas	80	72	80	72
Kavango	100	95	100	95
Khomas	61	61	61	52
Kunene	96	86	86	86
Ohangwena	100	91	91	91
Omaheke	94	81	81	81
Omusati	96	90	90	88
Oshana	89	83	89	83
Oshikoto	100	91	95	91
Otjozondjupa	89	85	78	78
TOTAL	91	83	85	81

#### Availability of Child Health Services rcentage of facilities offering specific services, by region (N=38)

#### **Immunisations**

All the basic EPI vaccines (BCG, polio, pentavalent, measles) are available in three out of four facilities that provide childhood immunisation services.

According to the EPI, vitamin A should be stored with vaccines in order to increase provision of vitamin A. Most facilities (93%) that offer child immunisation in Namibia follow this recommendation.

Several supplies are needed to provide vaccine services. Among the facilities providing child

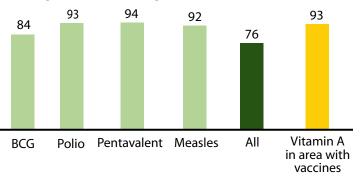
immunisation services, 88% have blank immunisation records, 94% have syringes and needles, and 93% have vaccine carriers with ice packs. About 6 in 10 facilities offering child immunisation have all items needed for infection control (soap and running water or hand disinfectant, latex gloves, sharps box, and decontaminant).

Certain administrative components are also needed. While about nine in ten facilities have a client register and tally sheet, only 49% monitor measles coverage or DPT/pentavalent dropout rates in their catchment areas. Thus, only 49% of facilities offering immunisation have all of the necessary administrative components.

#### Availability of Vaccines and Vitamin A for EPI

(Table A-4.3)

Percentage of facilities offering child immunisation services (N=321)



Quality child immunisation services in Namibia include:

- **1-**Availability of all EPI vaccines (76%) and vitamin A (93%)
- **2-**Equipment: immunisation cards, syringes and needles and vaccine carriers (78%)
- 3-All items for infection control (62%)
- **4**-Client register or tally sheet, documentation of measles coverage or DPT/pentavalent dropout rate (49%)

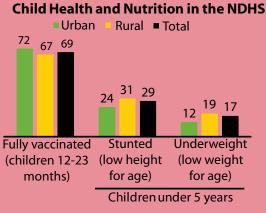
Only 26% of facilities have all these components

#### Putting the NHFC into Context: Child Health in Namibia

Infant and under-five mortality increased slightly between the 2000 and 2006-07 DHS surveys. As of the 2006-07 NDHS, the infant mortality rate was 46 per 1,000 live births, up from 38 deaths per 1,000 in 2000. The under-five mortality rate was 69 deaths per 1,000 live births compared to 62 in 2000. This means that one in every fifteen children in Namibia dies before his or her fifth birthday.

In 2006-07, 69% of Namibian children had received all of the recommended EPI vaccines (BCG, three doses each of DPT/THB and polio, and one dose of measles). Immunisation coverage has improved slightly in recent years, from 65% of children fully immunised in 2000.

Treatment was sought from a health facility or provider for 56% of children with fever in the two weeks before the DHS. Six in ten with diarrhoea were taken to a health provider, and 63% of children with diarrhoea were treated with oral rehydration salts (ORS), although 91% of mothers know about ORS packets. Only 16% of children with diarrhoea were given increased fluids, a critical intervention to



prevent dehydration. One in five were given antibiotics, which are usually unnecessary.

Malnutrition is a serious problem in Namibia. Almost three in ten children under age five are stunted, or too short for their age. Stunting is a sign of chronic malnutrition. Seveteen percent of children are underweight, or too thin for their age.

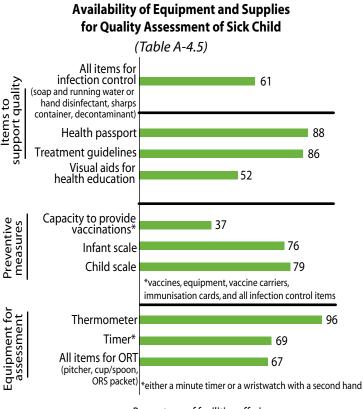
#### **Growth Monitoring**

About four-fifths of facilities provide growth monitoring for children. Almost all of these facilities offer growth monitoring five days a week.

#### **Care for the Sick Child**

Nine in ten health facilities provide curative care for sick children. Three-quarters of these facilities have a scale to weigh infants, and 79% have a scale to weigh older children. Only 45% of facilities providing curative care for sick children have health passports, treatment guidelines, and visual aids. Visual aids are the items missing most often. Many essential items needed for treating sick children are not available in all facilities. For example, only two-thirds of health facilities have all the items necessary to provide oral rehydration therapy (cup, spoon, ORS), and only 61% of facilities have all the items necessary for infection control (soap and running water or hand disinfectant, sharps container, and decontaminant).

In Namibia, 88% of facilities offer EPI services on every day that sick child services are available. This is potentially a missed opportunity, as parents may not bring their children back to the facility later for immunisation.



Percentage of facilities offering outpatient care for sick children (N=347)

#### **Availability of Essential Medicines** (Table A-4.9) 93 First-line (ORS, first-line antimalarial, 84 one oral antibiotic) 72 Pre-referral 100 (one first-line injectable 80 antibiotic, one second-line 70 injectable antibiotic, IV solution with perfusion set) All other medicines 21 (aspirin, vitamin A, iron Hospital 11 tablets, mebendazole, Health centre 11 antibiotic eye ointment) Clinic

Percent of facilities offering sick child services that have each item (N= 347)

#### Essential Medicines for Treating Sick Children

Three-quarters of facilities that offer curative care for sick children have all three first-line medicines identified by the IMCI guidelines—ORS, antimalarial (Coartem), and at least one antibiotic. Hospitals are most likely to have these three items. Pre-referral medications—one first-line injectable antibiotic, one second-line injectable antibiotic, and IV solution with perfusion set and sterile syringes—are also available in three-quarters of facilities offering curative care for sick children. Hospitals are more likely than other level facilities to have all types of medicines and equipment.

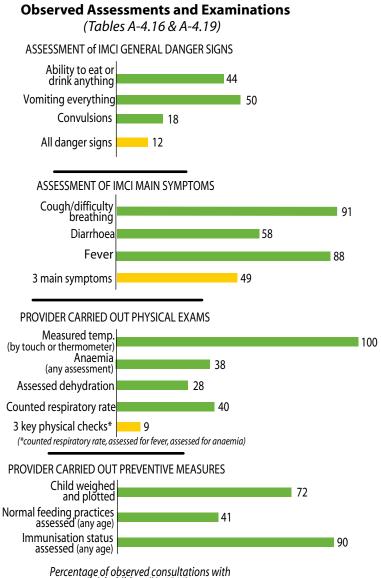
#### Page 20

#### **Observation of Sick Child Consultations**

Namibia HFC interviewers observed sick child consultations to check if providers followed IMCI guidelines. Only during 12% of consultations did providers check for all three general danger signs in sick children: inability to eat or drink anything (44%); vomiting (50%); and convulsions (18%). Various aspects of the physical examination were also missing—62% of observed children were not checked for anaemia, only 28% were assessed for dehydration, and only 40% had respiratory rates counted.

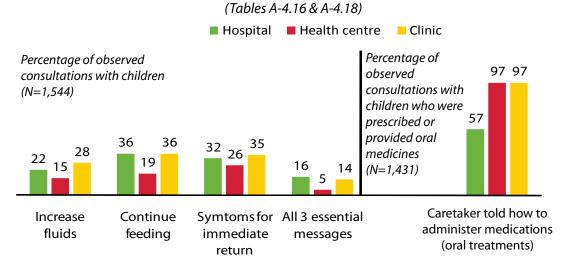
Children's weights were plotted in 72% of observed sick child consultations, immunisation status was assessed in 90% of observations, and feeding practices were assessed in only 41%.

Providers should provide guidance to caregivers on how to care for their sick children. While 47% of caregivers were told what illness their child had, far fewer received the three essential messages about caring for the sick child. Only one-quarter of caregivers were told to increase fluids, and one-third were told to continue feeding. One-third were told what symptoms required a return visit. In all, these three essential messages were given in only 13% of observed visits. However, 95% of caregivers were fully instructed about giving medications.



sick children (N=1544)

#### **Essential Advice Given to Caretakers**



#### Treatment by Diagnosis

All observed children diagnosed with pneumonia, bronchial pneumonia, cough or other upper respiratory illness had their temperatures checked and 83 percent of children diagnosed with cough or other upper respiratory illness were put on antibiotics. With antibiotic resistance growing worldwide, more careful use of antibiotics should be encouraged.

According to the IMCI and MOH policy and national treatment protocol, children with fever or history of fever should receive an antimalarial and a fever-reducing medication such as aspirin. Eighty-one percent of children with fever received an antibiotic, and only 15% received a first-line antimalarial. Nine in ten of these children received medication for symptoms, such as aspirin or cough medicine. Of children who were diagnosed with malaria, 4% were referred or admitted, and 71% received an antibiotic.

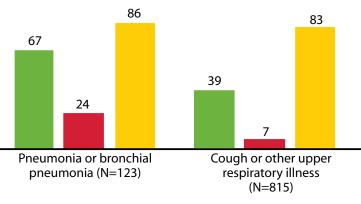
About four in ten children diagnosed with any diarrhoea or dysentery with dehydration were referred or admitted, and 8% of children diagnosed with any diarrhoea or dysentery without dehydration were referred or admitted. About six in ten children with diarrhoea or dysentary with dehydration were given antibiotics as were 76% of children with diarrhoea or dysentery without dehydration. These high rates are of concern because using antibiotics inappropriately can prolong the episode of illness and ultimately lead to drug resistance. These findings further indicate that antibiotics may be over-prescribed in Namibia. ORS was prescribed for 74% of children with diarrhoea or dysentery with dehyration and 83% of those without dehydration.

For all diagnoses, providers failed to assess many of the IMCI main symptoms and danger signs and did not consistently provide the basic physical exams. Antibiotics were prescribed for a wide range of diagnoses, signalling a possible overuse.

#### **Treatment of Children with Respiratory Illness**

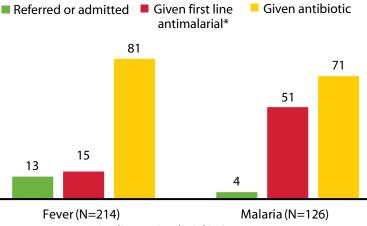
(Table 4.5) Percent of observed children who received specific treatment, among those with indicated diagnosis made by the provider

 $f_{f}$  = Respiratory rate checked = Referred or admitted = Given any antibiotic



#### **Treatment of Children with Fever or Malaria** (*Table 4.5*)

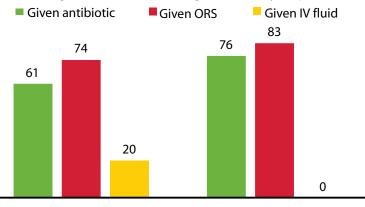
Percent of observed children who received specific treatment, among those with indicated diagnosis made by the provider



\*First line antimalarial is Coartem.

#### **Treatment of Children with Intestinal Illness** (*Table 4.5*)

Percent of observed children who received specific treatment, among those with indicated diagnosis made by the provider



Any diarrhoea or dysentary with dehydration (N=53)

Any diarrhoea or dysentary without dehydration (N=278)

#### Management Practices Supporting Sick Child Care

Most facilities (85%) offering curative care for sick children have an up-to-date patient register. Of the 919 child health service providers interviewed, 32% reported receiving training within the 12 months before the survey. Less than 15% of providers received training in most topics, including EPI/cold chain, ARI and diarrhoea treatment, nutrition/micronutrient deficiencies, and IMCI during this period. Training in malaria treatment was slightly more common (16%). Only 2% of providers received any training in paediatric AIDS management in the three years prior to the survey.

Of child health providers interviewed for the Namibia HFC, 73% reported that they had been supervised in

the six months before the survey. During this supervision, supervisors usually checked records, provided feedback, and discussed problems.

In Namibia MoHSS policy is to charge user fees for all services except preventive services (antenatal care, prevention of mother-tochild transmission of HIV, HIV counselling and testing, postnatal care, family planning, and immunisation). In line with the MoHSS policy on user fees, 99% of facilities that offer sick child services charge some fees for sick child services. All Mission/NGO facilities and hospitals reported charging fees for sick child services. Only 30% of the facilities that charge fees post any fees.

#### **Management Practices Supportive of Quality** Child Health Services by Managine Authority (Table 4.4) MoHSS Mission/NGO Private 99 100 95 96 89 81 80 57 43 33 <sup>29</sup> 26 Up-to-date User fees for Staff training Personal sick child (1/2 of patient supervision register interviewed services (1/2 of staff in past interviewed year) staff in past 6 months) N=346: number of facilities with N=347: number of facilities offering interviewed child health service sick child services

#### Caretakers' opinions

Caretakers had some complaints about the health care services their children received.

blaints about the *providers* hildren received. ained about the bours the facility is open while 27% complained about waiting

One in ten caretakers complained about the hours the facility is open, while 27% complained about waiting time to see provider.



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# 2009 Namibia HFC Results: Malaria

Almost all facilities (97%) offer malaria diagnosis and/or treatment services. Only 74% of these facilities had the first-line antimalarial in the facility. However, hospitals and health centres are most likely to have antimalarials. Only about 2% of facilities offering malaria diagnosis or treatment reported stockouts of first-line antimalarials during the six months before the survey.

Treatment protocols are available in any relevant service site in two-thirds of facilities offering malaria treatment or diagnosis services.

Laboratory capacity for diagnosing malaria using a blood smear is available in 91% of facilities. Most health centres can test for malaria with a blood smear (96%), compared to only 57% of sick bays. Three-quarters of facilities offering malaria diagnosis and/ or treatment have the rapid test for malaria.



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#### Putting the Namibia HFC into Context: Malaria in Namibia

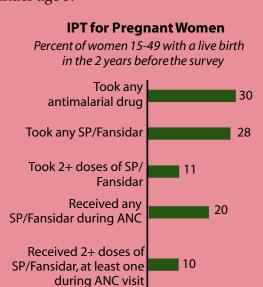
In Namibia more than 600,000 cases of malaria are recorded every year. As noted in the 2006-07 NDHS, malaria was the leading cause of illness and death from 1999 to 2002. Sixty-five percent of the Namibian population lives in malaria endemic regions and thus is at risk of malaria. The rest of the country is virtually free of malaria.

The government of Namibia has instituted a number of initiatives to control malaria, including changing the first-line treatment of malaria from the ineffective chloroquine and sulphadoxine/ pyrimethamine (SP, or Fansidar) to artemisinin-based combination therapy and distributing insecticide-treated mosquito bed nets to pregnant women and children under age 5.

According to the 2006-07 NDHS, one-quarter of households had at least one mosquito net, but only 20% had an insecticide-treated net (ITN). Young children and pregnant women are most vulnerable to malaria, but only 11% of children under five and 9% of pregnant women slept under an ITN the night before the survey.

One in five women received IPT during an ANC visit according to the DHS, but only 10% of pregnant women took the two recommended doses of SP during their last pregnancy.

Fever is the primary symptom of malaria in children. Among children under five with a fever, 10% took an antimalarial drug.



#### **Treatment of Children**

Among the observed children diagnosed with malaria, 87% were given an antimalarial, but only 51% were given the first-line antimalarial. Seven in ten were given an antibiotic. Anaemia was checked in 31% of children diagnosed with malaria. The three general danger signs (inability to eat/ drink, vomiting everything, and febrile convulsions) were assessed in only 26% of malaria diagnosis cases.

#### Training

Only 3% of facilities have at least one interviewed clinician provider (specialists,

medical officers, and medical assistants) of malaria services trained within the 12 months preceding the survey, while 43% of facilities have at least one interviewed nurse-provider of malaria services trained in the year preceding the survey. An additional 2% and 23%, respectively, received this training two to three years prior to the survey.

(Coartem)

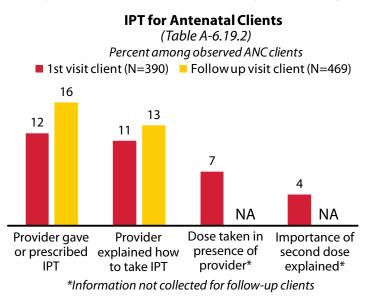
#### Antenatal Care and Malaria

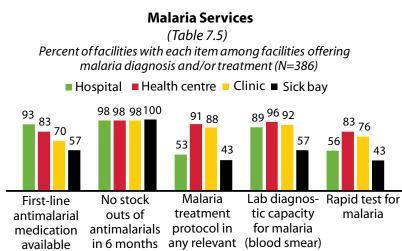
According to government policy, ITNs should be offered free, or at a subsidized price, to all women during ANC visits. The Namibia HFC found that 35% of facilities offering malaria services provide ITNs free of charge to antenatal care clients. Health centres (45%) and facilities in Oshikoto (91%) are most likely to provide ITNs to ANC clients. Only 26% of facilities offering malaria services, however, had ITNs in the facility.

Providers are not promoting ITN use across the country since malaria is a problem only in some regions.

On average, 16% of observed first-visit ANC clients were told of the importance of using an ITN. However, 84% of observed first-visit ANC clients in Caprivi and 64% of observed first-visit clients in Ohangwena were informed of the importance of using an ITN.

The Namibia National Malaria Control Program calls for intermittent preventive treatment (IPT) of malaria by using SP/Fansidar twice during the pregnancy. Only 12% of firstvisit ANC clients and 16% follow-up clients were given IPT or prescribed IPT. About one in ten first-visit clients were given information on how to take the IPT medicine, and 7% of firstvisit clients took their first dose in the facility under the supervision of a provider. The importance of the second dose was explained to only 4% of first-visit clients.





units

# Conclusions

Namibia has experienced some significant health improvements in recent years. According to the 2006-07 NDHS, use of family planning has increased, and more women are giving birth with the assistance of a skilled provider. Still, Namibia faces significant challenges. Childhood mortality increased from 2000 to 2006-07. Most women and children still do not use insecticide-treated mosquito nets to prevent malaria, and many pregnant women do not receive intermittent preventive treatment.

What role do health facilities, policies, and personnel play in the health situation in Namibia? The Namibia HFC findings provide information to help answer this question. The results are very mixed. Key conclusions and recommendations are noted below:

#### **General Patterns:**

- Overall, health care workers are not providing prevention education and counselling to most clients. For example, ANC providers are not informing women about the danger signs of pregnancy, and providers are also not giving caretakers essential advice regarding their sick children.
- Infection control is inadequate in all service areas. Running water and soap or hand disinfectant and disinfecting solution for reusable items are not universally available at service sites.
- Only about one in five providers have received training within the 12 months before the census.
- The majority of facilities are well-stocked with contraceptives, first-line medicines, the first-line antimalarial, and vaccines.
- While two-thirds of all facilities provide childbirth services, these facilitiess are not well equipped to handle routine deliveries or emergencies. Less than half of health centres and clincis have all basic supplies for delivery (scissors or blade, cord clamp, suction apparatus, antibiotic eye ointment, and skin disinfectant).
- •Less than 20% of delivery facilities can do blood transfusions, and only 9% can perform a Caesarean section.
- Providers are not routinely following IMCI guidelines. Providers also appear to be overprescribing antibiotics for sick children. While an antibiotic may be warranted in pneumonia or dysentery cases, it is not necessary for children with minor respiratory or diarrhoeal illnesses.

# **Key Indicators**

#### Type of Facility

Hospital Health Centre Clinic

Family Planning Services			
Availability of any modern method (% of facilities)	49	96	98
Family planning services available 5 days a week (% of facilities)	64	82	82
All items for quality counselling <sup>1</sup> (% of facilities)	0	38	39
All items for infection control <sup>2</sup> (% of facilities)	50	62	67
Conditions for quality pelvic exam <sup>3</sup> (% of facilities)	14	2	2
FP providers routinely treat STIs (% of facilities)	36	62	88
User fees for FP services (% of facilities)	23	2	7
Maternal Health Services			
Facilities offering antenatal care (%)	18	93	86
Facilities offering postnatal care (%)	20	87	76
Facilities offering tetanus toxoid vaccine (%)	16	91	83
ANC facilities with all items for quality counselling <sup>4</sup> (%)	11	30	20
ANC facilities with all items for infection control <sup>2</sup> (%)	44	49	63
ANC facilities with all essential supplies for basic ANC <sup>5</sup> (%)	89	93	74
ANC facilities where ANC providers routinely treat STIs (%)	56	81	94
ANC facilities with all medicines for treating pregnancy complications <sup>6</sup> (%)	78	44	20
Facilities with user fees for ANC (%)	22	14	11
Facilities offering normal delivery services (%)	98	83	60
Facilities offering Caesarean section (%)	80	2	0
Facilities with transport for maternity emergencies (%)	84	89	82
Facilities offering any home delivery services (%)	41	37	25
Delivery facilities with all items for infection control <sup>2</sup> (%)	74	66	62
Facilities offering delivery services with all essential supplies for delivery <sup>7</sup> (%)	84	45	29
Facilities offering delivery services with user fee for delivery (%)	81	63	49
Child Health Services			
Facilities offering curative outpatient care for sick children (% of all facilities)	66	98	93
Facilities offering growth monitoring (% of all facilities)	41	93	88
Facilities offering childhood immunisation (% of all facilities)	39	93	91
Immunisation facilties with all equipment for immunisations <sup>8</sup> (%)	65	79	79
Immunisation facilities with all basic vaccines (BCG, DPT-HB, polio, measles) (%)	59	86	75
Facilities with all first line <sup>9</sup> /pre-referral medicines <sup>10</sup> (%)	93/100	84/80	72/70
Facilities with user fees for sick child services (%)	100	98	99
Malaria Services			
Facilities providing free ITN to ANC clients (%)	7	45	39
Facilities offering malaria treatment with first line antimalarial (Coartem) in the facility (%)	93	83	70
Facilities with lab diagnostic capacity for malaria (blood smear) (%)	89	96	92

1-Visual privacy, client cards, written guidelines, visual aids

2-(Soap & running water) or hand disinfectant, clean gloves, disinfecting solution, sharps box

3-Private room, exam bed, exam light, vaginal speculum

4-Visual aids for health education, guidelines, client card/record

5-Iron and folic acid, tetanus toxoid vaccine, blood pressure apparatus, fetoscope

6-Antibiotic, antimalarial, 4 STIs, anthelminth, and anti hypertensive

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8-Blank immunisation cards, syringes and needles, cold box with ice packs

9-ORS, Coartem, one oral antibiotic

10-One 1st line injectable antibiotic, one 2nd line injectable antibiotic, and IV solution with perfusion set

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## Notes

