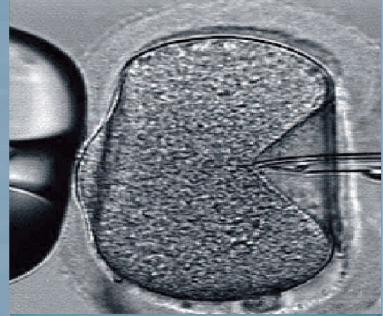
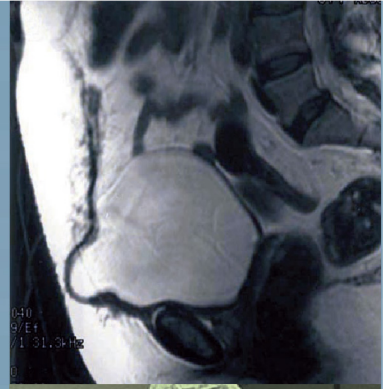




The University of Hong Kong

Clinical Report 2020

Department of Obstetrics and Gynaecology



MESSAGE FROM THE HEAD OF DEPARTMENT

Our Department provides general obstetrics and gynaecology services, as well as in subspecialty services including reproductive medicine, gynaecological oncology, maternal-fetal medicine and urogynaecology. Separate reports are available in reproductive medicine and gynaecological oncology where more details can be found.

In 2020, there was a reduction in the number of deliveries, gynaecological admissions and elective gynaecological operations in view of the COVID-19 situation. Our department continued to provide high quality obstetrics and gynaecological services amidst the challenges and ever changing landscape. I would like to thank everyone in the Department for their hard work.

I would also like to thank the following colleagues for their contribution in the annual report: Dr. Jennifer Ko for compiling the annual report, Mr. Evans Ng for typesetting and technical support, Dr. Diana Chan for the obstetrics and neonatal statistics, Dr. Anita Kan for the prenatal diagnostic and counselling activities statistics, Dr. Charleen Cheung for the general gynaecology statistics, Dr. Gladys Kwok for the gynaecological oncology statistics and Dr. Evelyn Wong for the reproductive medicine statistics.

A handwritten signature in black ink that reads "Hextan Ngan". The signature is written in a cursive, flowing style.

Professor Hextan Ngan

Head, Department of Obstetrics and Gynaecology, The University of Hong Kong

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(from 1st July 2020)

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Dr. T.H.T. Lai M.B.,B.S. (H.K.)

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(from 1st July 2020)

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Dr. V.W.Y. Ng M.B.,B.S. (H.K.)

Dr. P.Y.W. Tong M.B.,B.S. (H.K.); M.R.C.O.G.

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(from 1st July 2020)

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(Edin); F.R.C.P.C.H. (UK); F.A.A.P. (USA)

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Consultant Surgeon :

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Nursing Staff:

Department Operations Manager:

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Midwife Consultant:

Ms. G.G.Y. Ma RN, RM, BSN, MHSM, MAFCFE, IBCLC

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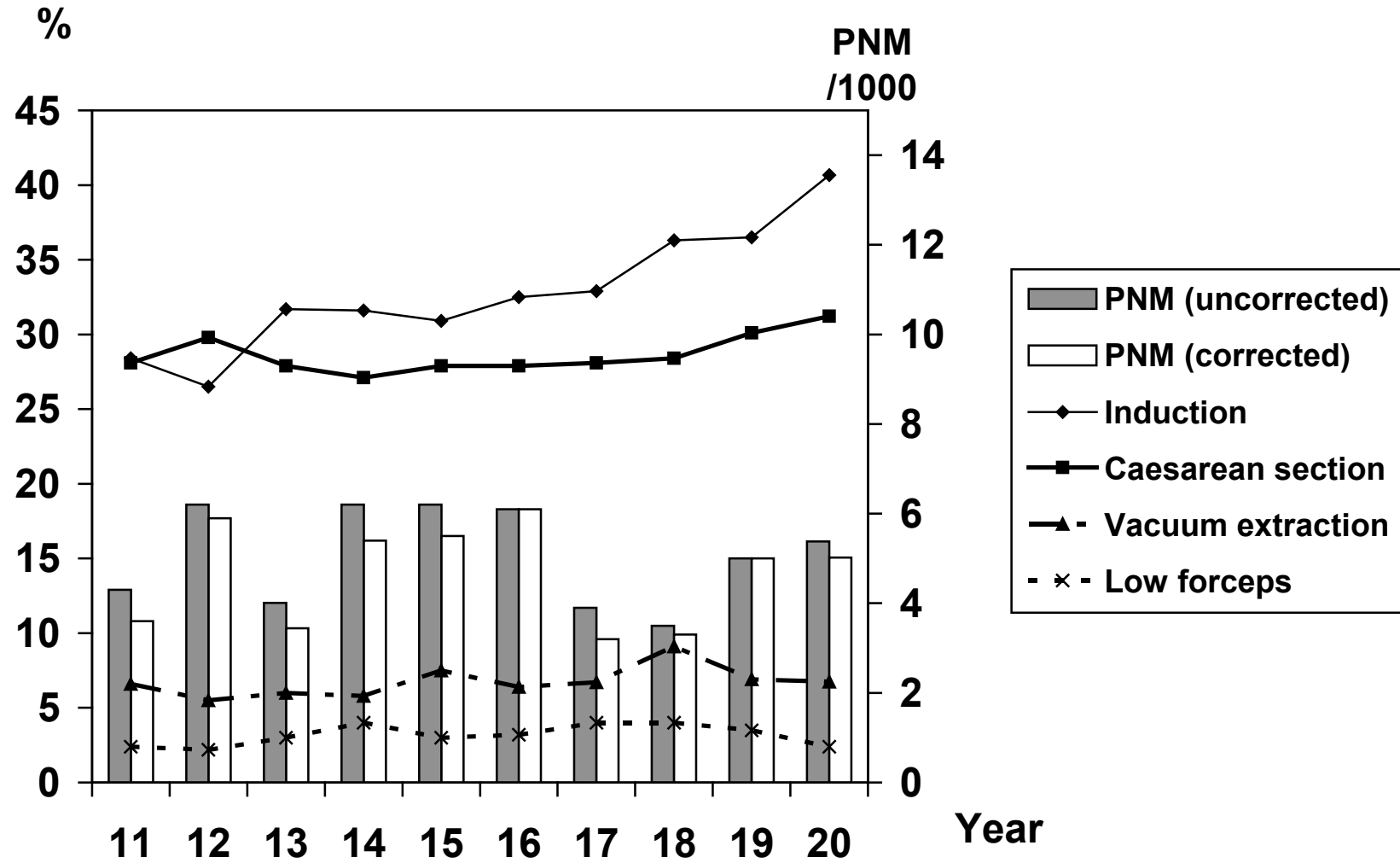
OBSTETRICS

COMPARATIVE STATISTICS (2011 - 2020)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total patients delivered	4260	4390	3367	3752	3724	3842	3679	3585	3528	2715
Primiparae	2340	2488	1975	2145	2174	2227	2149	2016	1979	1473
Multiparae	1920	1902	1392	1607	1550	1615	1530	1569	1549	1242
Pregnancy induced hypertension	175	205	187	226	162	196	144	138	108	113
Eclampsia	0	2	2	2	1	0	0	3	2	3
Accidental haemorrhage	12	20	8	13	5	5	11	10	5	4
Placenta praevia	39	45	31	39	22	40	35	36	25	27
Postpartum haemorrhage	119	100	87	119	126	140	152	137	124	105
Induction of labour(%)	28.4	26.5	31.7	31.6	30.93	32.5	32.9	36.3	36.5	40.66
Vacuum extraction(%)	6.6	5.5	6.0	5.8	7.50	6.4	6.7	9.1	6.9	6.74
Forceps delivery(%)	2.4	2.2	3.0	4.0	3.0	3.2	4.0	4.0	3.5	2.4
Caesarean section(%)	28.1	29.8	27.9	27.1	27.9	27.9	28.1	28.4	30.1	31.22
Maternal deaths*	0	0	0	1	1	0	0	0	0	0
Infants born in hospital	4394	4545	3483	3862	3843	3956	3790	3668	3629	2784
Infants born before admission	4	11	10	11	10	10	13	8	3	6
Total infants born	4398	4556	3493	3873	3853	3966	3803	3676	3632	2790
Stillbirth rate (per 1000 total deliveries)	3.6	4.4	3.4	4.9	3.6	3.8	2.1	3.0	2.5	3.58
Neonatal death rate (per 1000 livebirths)	1.1	2.0	1.2	1.6	3.7	3.2	2.6	0.6	3.0	2.16
Perinatal death rate (per 1000 livebirths)	4.3	6.2	4.0	6.2	6.2	6.1	3.9	3.5	5.0	5.38
Corrected perinatal death rate (excluding non-booked cases with IUD on admission)	3.6	5.9	3.4	5.4	5.5	6.1	3.2	3.3	5.0	5.02

*Within 42 days post-delivery

INTERVENTION RATES & PERINATAL MORTALITY 2011-2020



STATISTICAL SUMMARY

	Tsan Yuk Hospital	Queen Mary Hospital
Obstetric Clinic Attendance		
Antenatal new cases	4088	79
Antenatal follow-up cases	35	7760
Postnatal cases*	0	822
Combined diabetic clinic	-	2164
Combined medical clinic	-	406
Private	-	89
Cardiotocogram	0	134
Oral glucose tolerance test	0	5106
Day Centre Attendance		
Removal of stitches	-	303
Wound assessment	-	181
Breastfeeding supervision	-	289
Miscellaneous	-	25

* Patients without complications were referred to Maternal Child Health Centres for follow up

PATIENTS CHARACTERISTICS

Ethnic origin:	Chinese	Number	%
	Non-Chinese	2211	81.44
Average Age (yr.):	Primiparous	504	18.56
	Multiparous	32.32	
	Total	34.22	33.19
Parity at booking:	Primiparous	Number	%
	Multiparous	1473	54.25
Average height(cm):		1242	45.75
Average pre-pregnant weight(kg):		159	
Education level:	None	Number	%
	Primary	37	1.36
	Secondary	24	0.88
	Tertiary	891	32.82
		1750	64.46
Smoking habit:	Nonsmokers	Number	%
	=<20 per day	2703	99.56
	>20 per day	12	0.44
Non-entitled person:		0	0.00
		8	0.29

CONGENITAL ANOMALY OF GENITAL AND URINARY TRACT

Total number of cases	1
Incidence (%)	0.04

CARDIAC DISEASES

Total number of cases	29
Incidence (%)	1.07

	Number	%
Rheumatic heart disease	0	0.00
Congenital heart disease	13	0.48
Mitral valve prolapse	1	0.04
Arrhythmia	9	0.33
Others	6	0.22

GESTATIONAL DIABETES & PRE-EXISTING DIABETES MELLITUS

	Gestational DM#	Pre-existing DM
Total number of cases	421	29
Incidence(%)	15.51	1.07
Total no of babies	431	29
Incidence of CS	151	16
Incidence of CS (%)	35.87	55.17
Stillbirth	0	0
Neonatal death	2	0
Perinatal death	2	0
Large for date babies	47	6
(%)	10.90	20.69
Small for date babies	54	6
(%)	12.53	20.69

#According to WHO criteria

Previous categories of IGT and GDM are combined according to WHO recommendation

BLOOD DISORDERS

	Number	%
Anaemia	202	7.44
Iron deficiency	136	5.01
Alpha-thalassaemias	82	3.02
Beta-thalassaemias	30	1.10
Iron deficiency and thalasseмии	6	0.22
Others	30	1.10

RENAL DISEASES

Total number of cases	1
Incidence (%)	0.04

LIVER DISEASES

Total number of cases	6
Incidence (%)	0.22

RESPIRATORY DISEASES

Total number of cases	11
Incidence (%)	0.41

GASTROINTESTINAL/GALL BLADDER DISEASES

Total number of cases	0
Incidence (%)	0.00

EPILEPSY

Total number of cases	4
Incidence (%)	0.15

OTHER NEUROLOGICAL DISEASES

Total number of cases	9
Incidence (%)	0.33

PSYCHIATRIC DISEASES

Total number of cases	57
Incidence (%)	2.10

AUTOIMMUNE DISEASES

Total number of cases	11
Incidence (%)	0.41

THYROID DISEASES

Total number of cases	90
Incidence (%)	3.31

SURGICAL DISEASES

Total number of cases	4
Incidence (%)	0.15

MALIGNANT DISEASES

Total number of cases	2
Incidence (%)	0.07

SEXUALLY TRANSMITTED DISEASES

Total number of cases	2
Incidence (%)	0.07

Types	Cases
Syphilis	0
Gonorrhoea	0
Herpes	1
Condyloma acuminata	0
Chlamydia	1
Combination of above/others	0

OTHER INFESTATIONS/INFECTIONS

Total number of cases	393
Incidence (%)	14.48

Types	Cases
Moniliasis	0
Trichomoniasis	2
Combination/others	391

OTHER ASSOCIATED CONDITIONS

	Cases	%
Hyperemesis gravidarum	0	0.00
Skin diseases	2	0.07
Kyphoscoliosis	4	0.15
Incompetent os	11	0.41
Drug addiction	5	0.18
Rhesus negative mothers	62	2.28
Others	2	0.07

HYPERTENSION IN PREGNANCY*

Total number of cases 143
Incidence (%) 5.27

Primiparous 93
Multiparous 50

Type	Cases	Induced labour	Caesarean# section	SB#	NND#	PND#
Gestational HT	27	17	12	0	0	0
G. Proteinuria	24	8	14	0	0	0
G. P. HT	62	29	43	0	1	1
Chronic HT	8	3	5	0	0	0
C. HT with PET	3	2	1	0	0	0
Unclassifid HT/P	30	9	22	0	0	0
Eclampsia	3	1	3	0	0	0

Perinatal Mortality = 6.3/1000 total births

*according to Davey & MacGillivray(1988)

#No. of babies

ANTEPARTUM HAEMORRHAGE

Total number of cases	87
Incidence (%)	3.20

Mode of delivery of fetus versus types of antepartum haemorrhage*

Mode of Delivery	Placenta Praevia	Accidental haemorrhage	APH of ? origin	Extra Placental
Spontaneous	1	0	26	2
Vac. extract.	0	2	3	0
Low forceps	0	1	2	0
Vag. Breech	0	0	1	0
Elective CS	7	0	5	2
Emergency CS & oth	21	1	21	0
Total	29	4	58	4

* There may be more than one cause for antepartum haemorrhage in a patient

Outcome of fetus versus causes of antepartum haemorrhage*

Outcome	Placenta Praevia	Accidental haemorrhage	APH of ? origin	Extra placental
Stillbirth	0	0	0	0
NN death	0	1	0	0
PN death	0	1	0	0

*No of babies

PRETERM DELIVERIES

Total number of cases			159
Incidence (%)			5.70
Parity	Total	Cases	%
Primiparous	1525	94	6.16
Multiparous	1265	65	5.14
Outcome		Cases	Rate (per 1000)
Stillbirth-ante partum		5	31.45
Stillbirth-intrapartum		0	0.00
Stillbirth-undetermined		0	0.00
Neonatal death		4	25.16
Perinatal death		9	56.60
Mode of delivery		Cases	%
Spontaneous vaginal delivery		67	42.14
Vacuum extraction		0	0.00
Low forceps		4	2.52
Vaginal breech delivery		11	6.92
Elective caesarean section		4	2.52
Emergency CS & others		73	45.91
Birth weight		Cases	%
<2500 g		96	60.38
<1500 g		29	18.24
<1000 g		20	12.58
Number of pregnancies	Total	Cases	%
Singleton	2641	102	3.86
Multiple pregnancies	149	57	38.26

MULTIPLE GESTATION

Total cases	74
Incidence (%)	2.73
Primiparous	51
Multiparous	23
Twins	73
Triplets	1
Quadruplets & higher order	0
Total number of babies	149
Preterm < 37 weeks	57
> = 37 weeks	92
Induced labour	4
Incidence of induced labour (%)	5.41

Mode of delivery versus number of babies

	1st baby	2nd baby	3rd baby
Spontaneous vaginal	7	6	0
Vacuum extraction	0	0	0
Low forceps	2	0	0
Vaginal breech delivery	1	4	0
Other vaginal delivery	0	0	0
Caesarean section & others	64	64	1

Outcome of fetus versus number of babies

	1st baby	2nd baby	3rd baby
Livebirths	74	72	1
Stillbirth - antepartum	0	2	0
Stillbirth – intrapartum	0	0	0
Stillbirth – undetermined	0	0	0
Neonatal death	0	0	0
Perinatal death	0	2	0

POSTPARTUM HAEMORRHAGE

Total number of cases	105
Incidence (%)	3.87
Primiparous	65
Multiparous	40

Types	Cases	%
Primary PPH	104	3.83
Secondary PPH	1	0.04

Causes of Primary PPH

Causes	Cases
Uterine atony	65
Retained gestational product	15
Ruptured uterus	0
Cervical tear	3
Vaginal tear	8
Perineal wound	18
Genital haematoma	6
Uterine inversion	0
Consumptive coagulopathy	0
Others	7

Causes of Secondary PPH

Causes	Cases
Retained gestational product	1
Genital tract infection	0
Others	0

MANUAL REMOVAL OF PLACENTA

Total number of cases	19
Incidence (%)	0.70

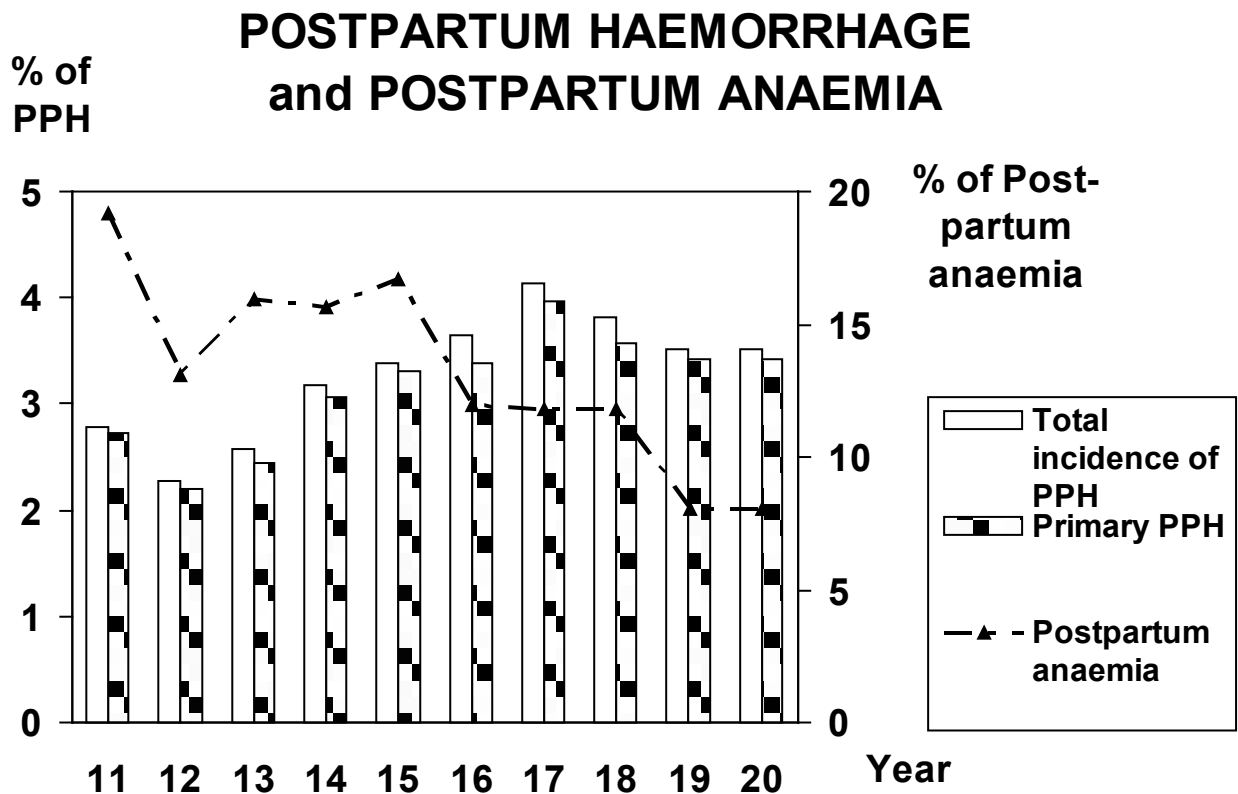
POSTPARTUM ANAEMIA*

	Total	Cases	Incidence(%)
Primiparous	1473	67	4.55
Multiparous	1242	52	4.19
Total	2715	119	4.38

Mode of delivery#	Total	Cases	Incidence(%)
Spontaneous vaginal	1650	66	4.00
Vacuum extraction	188	7	3.72
Low forceps	67	3	4.48
Vaginal breech	14	1	7.14
Elective CS	352	15	4.26
Emergency CS & others	519	33	6.36

*Patients with normal haemoglobin level (>10g%) before delivery but found to be anaemic (<10g%) after delivery.

#No of babies



PUERPERAL PYREXIA

Total number of cases	19
Incidence (%)	0.70
Primiparous	13
Multiparous	6

Causes	Cases
Reactionary	5
Breast problem	1
Urinary tract infection	1
Genital tract infection	0
Wound infection	0
Other causes	2
Unknown	10

Mode of delivery	Total*	Cases*	Incidence(%)
Spontaneous vaginal	1650	4	0.24
Vacuum extraction	188	2	1.06
Low forceps	67	0	0.00
Vaginal breech	14	1	7.14
Elective caesarean section	352	4	1.14
Emergency CS and others	519	8	1.54

*No of babies

OTHER COMPLICATIONS

	Cases	%
Third degree tear	11	0.41
Other genital tract trauma	124	4.57
Ruptured uterus without PPH	0	0.00
Hysterectomy	1	0.04

INDUCTION OF LABOUR

Total number of cases 1104
 Incidence (%) 40.66

Parity	Total	Cases	Incidence(%)
Primiparous	1473	766	52.00
Multiparous	1242	338	27.21

Outcome of babies	Cases
Stillbirth - antepartum	7
Stillbirth - intrapartum	0
Stillbirth - undetermined	0
Neonatal deaths	1
Perinatal deaths	7

Mode of delivery	Cases	%
Spontaneous vaginal	640	57.76
Vacuum extraction	109	9.84
Low forceps	41	3.70
Vaginal breech	6	0.54
Caesarean section	312	28.16
Total*	1108	

Outcome of Induction#	Cases	%
Successful	826	74.82
Failure	278	25.18

*No of babies

#Failure of induction is defined as absence of progressive cervical dilatation resulting from uterine contractions.

Indications for induction*

Indications	Primiparae	Multiparae
Diabetes/impaired glucose tolerance	19	9
Maternal disease	2	1
Bad obstetric history	0	1
Past term	80	42
Hypertension ass. with pregnancy	22	14
Prelabour rupture of membranes	361	115
Antepartum haemorrhage	13	8
Multiple pregnancy	0	3
Suspected IUGR	39	21
Intrauterine death	4	3
Fetal anomaly	3	3
Suboptimal Cardiotocogram	70	22
Social reason	0	1
Others	120	92

*There may be more than 1 indication for the induction of labour in a patient

Induction delivery interval (mean) 8.59 hours

Induction delivery interval in whole group	Number	%
1-10 hours	717	64.71
11-20 hours	377	34.03
>20 hours	14	1.26

TYPES OF LABOUR

Outcome of fetus versus types of labour

Type	not in labour	spon. onset	augmented labour	induced labour	total
Total births	526	1096	60	1108	2790
Stillbirth rate/1000	1 1.90	2 1.82	0 0.00	7 6.32	10 3.58
NN death rate/1000	2 3.80	3 2.74	0 0.00	1 0.90	6 2.15
PN death rate/1000	3 5.70	5 4.56	0 0.00	7 6.32	15 5.38

Mode of delivery versus types of labour

Mode of delivery	not in labour	spon. onset	augmented labour	induced labour	total
Total births	526	1096	60	1108	2790
Spontaneous vaginal (%)	1 0.19	971 88.59	38 63.33	640 57.76	1650 59.14
Vacuum extract (%)	0 0.00	66 6.02	13 21.67	109 9.84	188 6.74
Low forceps (%)	0 0.00	22 2.01	4 6.67	41 3.70	67 2.40
Vaginal breech (%)	0 0.00	8 0.73	0 0.00	6 0.54	14 0.50
CS & others (%)	525 99.81	29 2.65	5 8.33	312 28.16	871 31.22

OBSTETRIC ANALGESIA DURING LABOUR

Patients with Intrapartum Epidural	372	
Primiparous	301	
Multiparous	71	
Epidural Rate	13.70	
	Number	%
Number with induction of labour	321	86.29
	Number	%
Mode of delivery		
Normal spontaneous	166	44.39
Vacuum extraction	48	12.83
Forceps delivery	26	6.95
Vaginal breech delivery	1	0.27
Caesarean section	133	35.56
	First	Second
Duration of first and second stages (in minutes)		
Without epidural	81	17
With epidural	155	48

PREGNANCY FOLLOWING PREVIOUS CAESAREAN SECTION

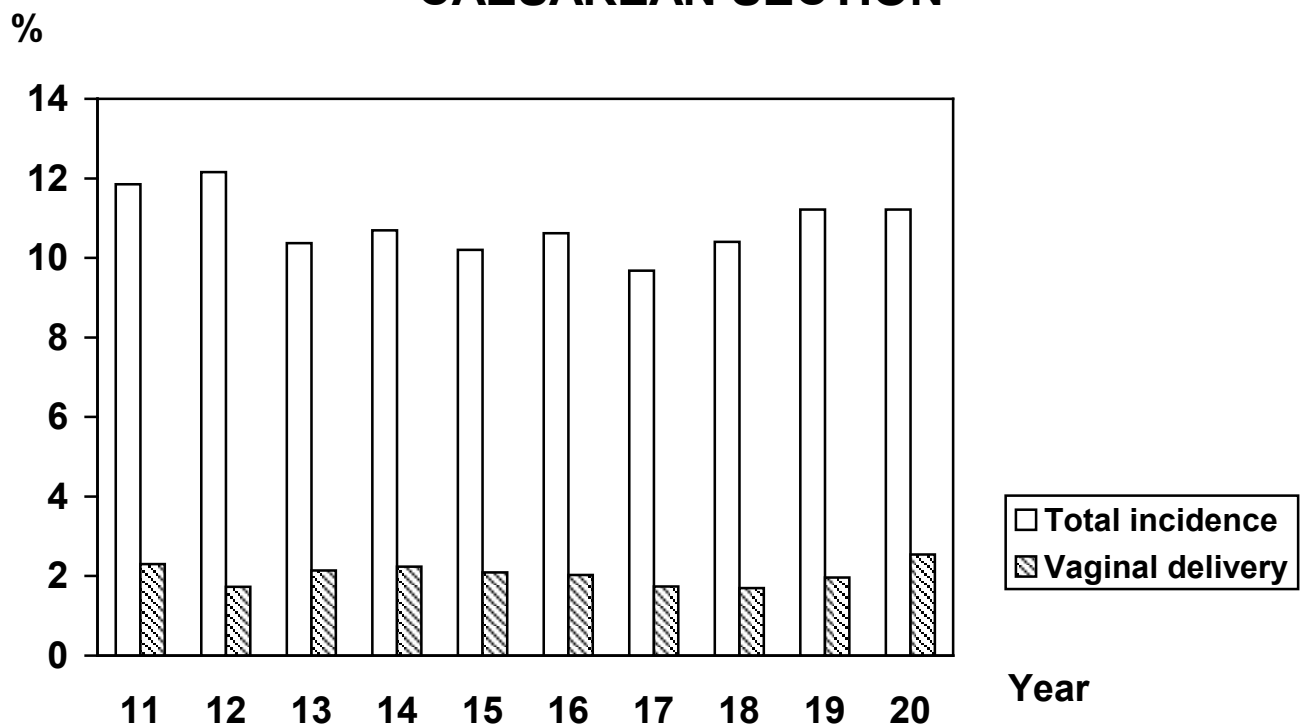
Total number of cases	323
Incidence (%)	11.90

Outcome of fetus	Cases*	Rate
Stillbirth	0	0.00
Neonatal death	0	0.00
Perinatal death	0	0.00

Mode of delivery	Cases*	%
Spontaneous vaginal delivery	47	14.55
Vacuum extraction	5	1.55
Low forceps	2	0.62
Vaginal breech delivery	1	0.31
Elective caesarean section	191	59.13
Emergency CS & others	86	26.63

*No of babies

PREGNANCY FOLLOWING PREVIOUS CAESAREAN SECTION



BREECH PRESENTATION

At delivery

Total number of cases	158
Incidence (%)	5.66

Parity	Total	Cases	%
Primiparous	1525	112	7.34
Multiparous	1265	46	3.64

Outcome	Cases	Rate (per 1000)
Stillbirth-ante partum	3	18.99
Stillbirth-intrapartum	0	0.00
Stillbirth-undetermined	0	0.00
Neonatal death	2	12.66
Perinatal death	5	31.65

Mode of delivery	Cases	%
Assisted breech delivery	12	7.59
Other vaginal breech delivery	2	1.27
Elective caesarean section	81	51.27
Emergency CS & others	63	39.87

Gestational age at delivery	Total	Cases	%
<37 weeks	159	38	23.90
37-40 weeks	2371	119	5.02
>40 weeks	260	1	0.38

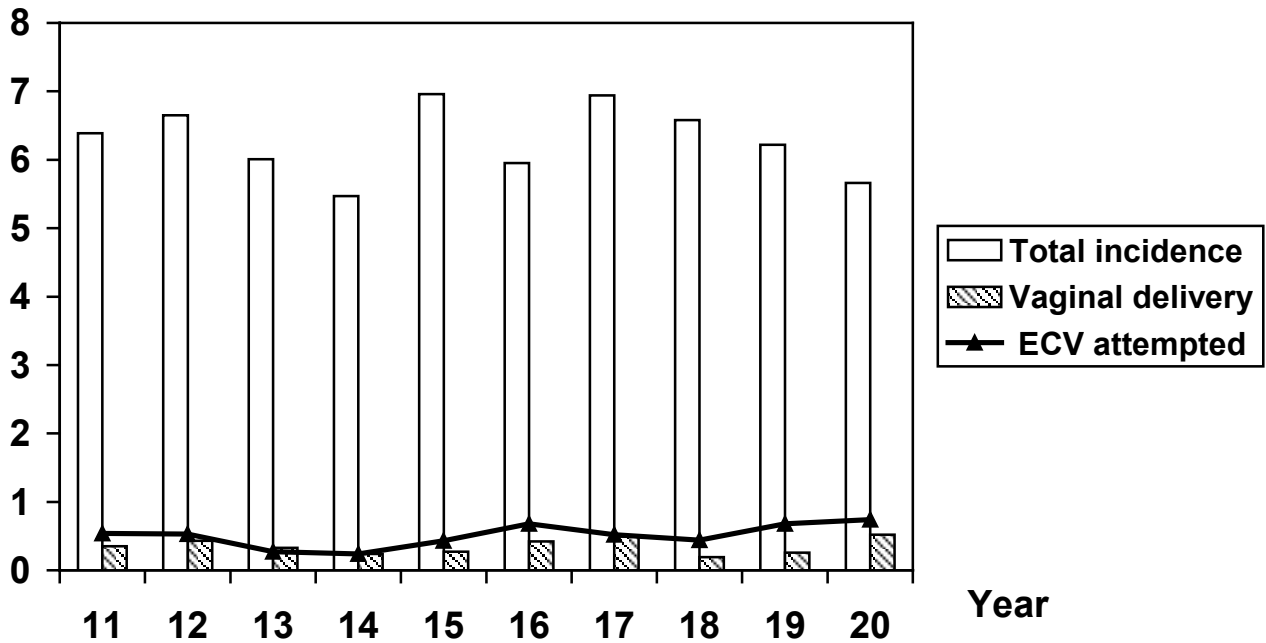
Number of pregnancies	Total	Cases	%
Singleton	2641	108	4.09
Multiple pregnancies	149	50	33.56

External Cephalic Version (ECV)

Parity	Cases	Successful	Successful %
Primiparous	12	3	25.00
Multiparous	8	6	75.00
Total	20	9	45.00

%

BREECH PRESENTATION



MALPRESENTATION OTHER THAN BREECH PRESENTATION*

Total number of cases 9
Incidence (%) 0.32

Mode of delivery	Face/brow	Compound	Transverse
Spontaneous vaginal	1	0	0
Vacuum extraction	0	0	0
Low forceps	0	0	1
Vaginal breech	0	0	0
Elective CS	0	0	2
CS & others	0	2	3
Total	1	2	6

Outcome of fetus	Face/brow	Compound	Transverse
Stillbirth-ante partum	0	0	0
Stillbirth-intrapartum	0	0	0
SB-undetermined	0	0	0
Neonatal death	0	0	0
Perinatal death	0	0	0

*Excluding malposition of occiput.

PROLAPSE & PRESENTATION OF UMBILICAL CORD

Total number of cases	1
Incidence (%)	0.04

Outcome of fetus	Cases	%
Stillbirth - antepartum	0	0.00
Stillbirth - intrapartum	0	0.00
Stillbirth - undetermined	0	0.00
Neonatal death	0	0.00
Perinatal death	0	0.00

Mode of presentation	Total	Cases	%
Vertex	2612	0	0.00
Breech : extended leg(s)	73	0	0.00
flexed legs	79	1	100.00
footling	6	0	0.00
Face/brow	1	0	0.00
Compound	2	0	0.00
Transverse/oblique	6	0	0.00
Others	11	0	0.00

Mode of delivery	Cases	%
Spontaneous vaginal	0	0.00
Vacuum extraction	0	0.00
Low forceps	0	0.00
Assisted breech delivery	1	100.00
Other breech delivery	0	0.00
Caesarean section	0	0.00

MODE OF OPERATIVE DELIVERY

Total number of cases	1126
Incidence (%)	40.36

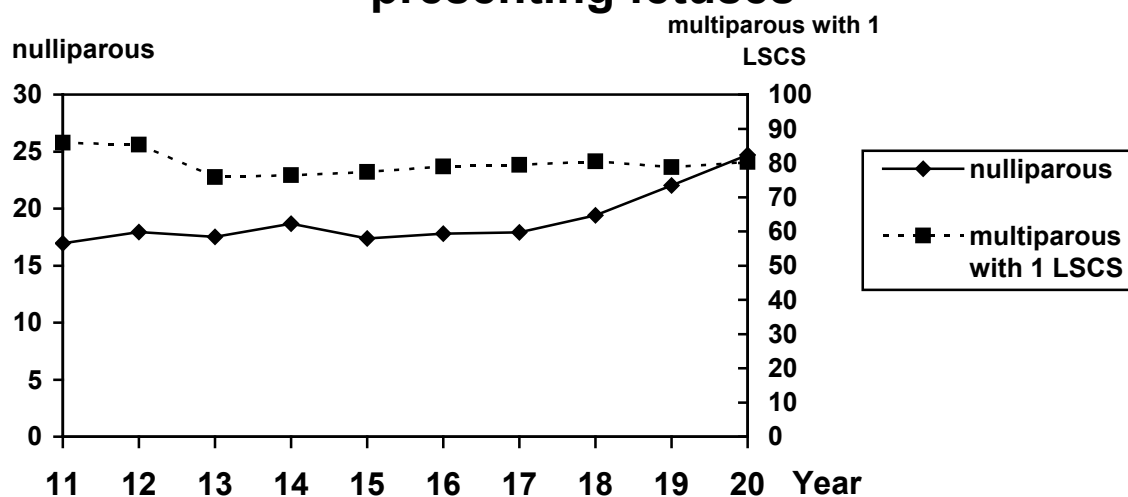
Parity	VE	Forceps	CS
Primiparous	158	52	505
Multiparous	30	15	366
Total	188	67	871
Incidence (%)	6.74	2.40	31.22

Types of abdominal delivery	Number
Elective LSCS	345
Elective classical CS	7
Emergency LSCS	513
Emergency Classical CS	6
Caesarean hysterectomy	0
Others (laparotomy etc.)	0

LSCS in term, singleton, vertex presenting fetuses	Number	CS	%
Nulliparous parturients	1291	319	24.71
Multiparous parturients with 1 previous LSCS	253	203	80.24

Outcome of fetus	VE	LF	Elective CS	Emergency CS & others
Livebirths	188	67	352	518
Stillbirths	0	0	0	1
Neonatal death	0	0	0	3
Perinatal death	0	0	0	3

LSCS rate in term, singleton, vertex presenting fetuses



INDICATIONS FOR ASSISTED DELIVERY*

Indication	VE	LF
Maternal disease	0	0
Maternal distress	3	2
Previous caesarean section	0	0
Obstetric complications	1	0
Fetal distress	59	23
Cord prolapse	0	0
Prolonged second stage	78	25
Others	9	2

INDICATIONS FOR CAESAREAN SECTIONS

Indication	CS
GDM/DM	3
Maternal disease	8
Previous uterine scar	276
Bad obstetric history	0
Antepartum haemorrhage	0
Hypertension	27
Multiple pregnancy	127
Fetal distress	150
Cord prolapse	2
Intrauterine growth retardation	10
Malpresentation/lie	101
No progress	17
Cephalopelvic disproportion	15
Contracted/unfavourable pelvis	0
Failed instrumental delivery	1
Tumour/anomaly	22
Failed induction	179
Elderly/Infertility	0
Suspected macrosomia	1
Social reason	1
Others	26

*There may be more than 1 indication for assisted delivery.

APGAR SCORE AT BIRTH VERSUS MODE OF DELIVERY*

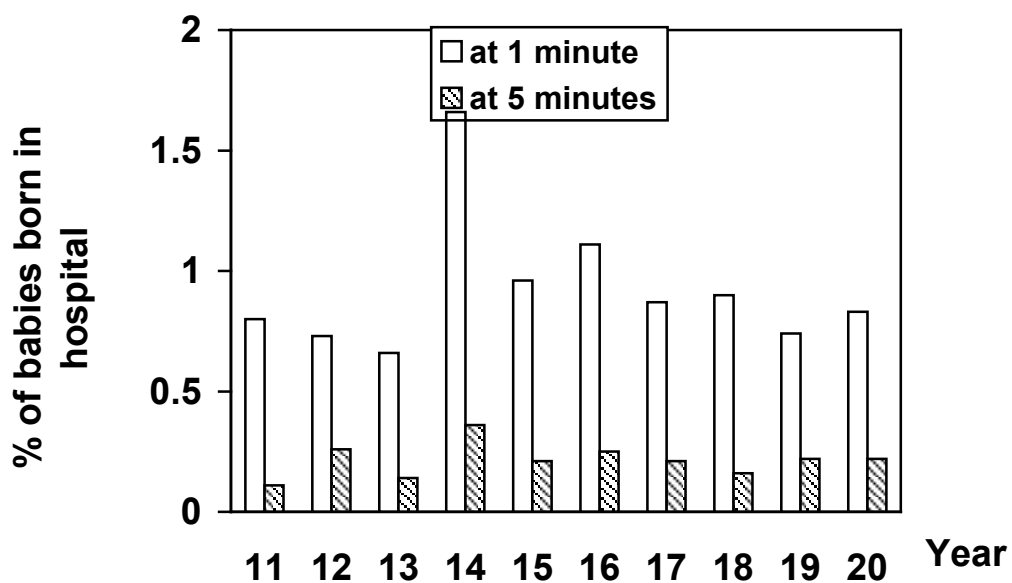
Apgar score at 1 minute

Method of delivery	AS <4	AS 4-6	AS >6	Subtotal
Spontaneous vaginal	2	34	1608	1644
Vacuum extraction	3	18	167	188
Low forceps	0	3	64	67
Vaginal breech	4	3	7	14
Elective CS	5	18	329	352
Emergency CS & others	9	55	455	519
Total	23	131	2630	2784
%	0.83	4.71	94.47	

Apgar score at 5 minute

Method of delivery	AS <4	AS 4-6	AS >6	Subtotal
Spontaneous vaginal	0	4	1640	1644
Vacuum extraction	0	2	186	188
Low forceps	0	0	67	67
Vaginal breech	1	1	12	14
Elective CS	0	3	349	352
Emergency CS & others	5	5	509	519
Total	6	15	2763	2784
%	0.22	0.54	99.25	

NEONATAL ASPHYXIA* (APGAR SCORES LESS THAN 4)



*Excluding babies born before arrival

PERINATAL DATA

Total livebirths & stillbirths	2790
Primiparous	1525
Multiparous	1265
Born before arrival	6
Total livebirths	2780
Primiparous	1519
Multiparous	1261

BASIC INFORMATION

Total birth \geq 500 g	2789
Average birthweight(kg)	3089 (sd=546)
Stillbirth \geq 500 g	9
Early (1st week) neonatal deaths	5
Late (2nd-4th wk) neonatal deaths	1
Total birth \geq 1 kg	2770
Stillbirth \geq 1 kg	7
Early (1st week) neonatal deaths	2
Late (2nd-4th wk) neonatal deaths	1
Stillbirths with lethal malformations	0
Neonatal deaths with lethal malformations	0
Perinatal deaths with lethal malformations	0
Lethal malformation rate per 1000 births	0.00

EXCLUDING LETHAL MALFORMATION (including $<$ 1 kg)

Stillbirth rate per 1000 total births(n=10)	3.58
Neonatal mortality rate /1000 livebirths(n=6)	2.16
Perinatal mortality rate /1000 total births(n=15)	5.38

EXCLUDING BIRTH $<$ 1 kg (including malformation)

Stillbirth rate per 1000 total births(n=7)	2.51
Neonatal mortality rate /1000 livebirths(n=3)	1.08
Perinatal mortality rate /1000 total births(n=9)	3.23

EXCLUDING BIRTH $<$ 1 kg and babies with lethal malformation

Stillbirth rate per 1000 total births(n=7)	2.51
Neonatal mortality rate /1000 livebirths(n=3)	1.08
Perinatal mortality rate /1000 total births(n=9)	3.23

SUMMARY OF FETAL LOSS

	Total	Stillbirths	
		No of	Rate(per 1000)
Total	2790	10	3.58
Booked	2704	9	3.33
Non-booked	86	1	11.63
Primiparous	1525	6	3.93
Multiparous	1265	4	3.16

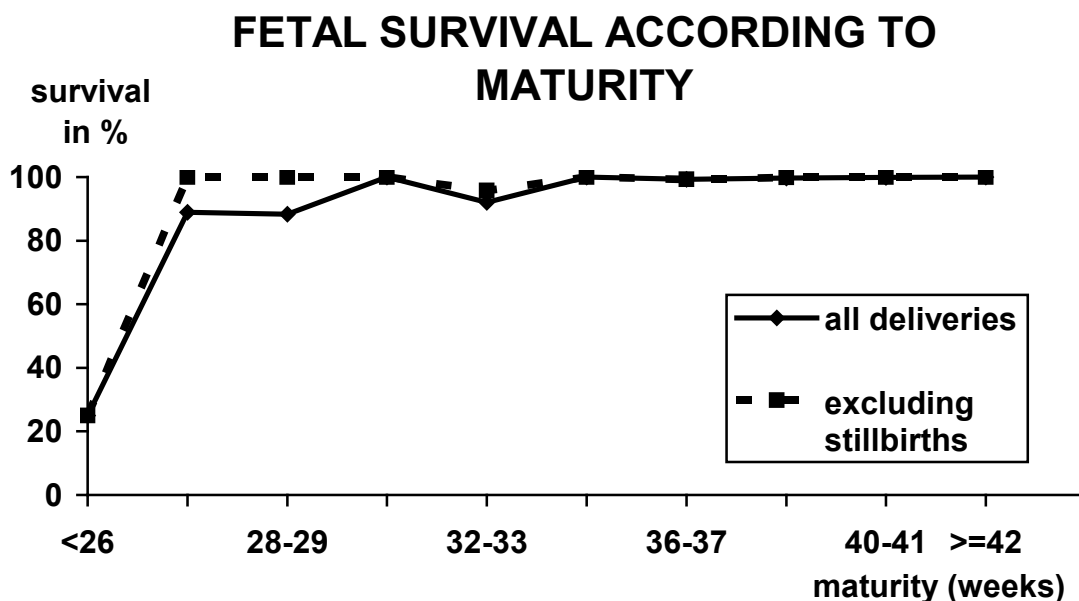
	Livebirths	Neonatal deaths	
		No of	Rate(per 1000)
Total	2780	6	2.16
Booked	2695	3	1.11
Non-booked	85	3	35.29
Primiparous	1519	3	1.97
Multiparous	1261	3	2.38

	Total	Perinatal deaths	
		No of	Rate(per 1000)
Total	2790	15	5.38
Booked	2704	11	4.07
Non-booked	86	4	46.51
Primiparous	1525	9	5.90
Multiparous	1265	6	4.74

FETAL LOSS VERSUS GESTATIONAL AGE*

Gestational age (weeks)	Total births	Live Births	Stillbirth	Neonatal deaths	Perinatal deaths
<26	4	4	0	3	3
rate /1000			0.00	750.00	750.00
26-27	9	8	1	0	1
rate /1000			111.11	0.00	111.11
28-29	18	15	3	0	3
rate /1000			166.67	0.00	166.67
30-31	13	13	0	0	0
rate /1000			0.00	0.00	0.00
32-33	25	24	1	1	2
rate /1000			40.00	41.67	80.00
34-35	48	48	0	0	0
rate /1000			0.00	0.00	0.00
36-37	144	144	0	1	1
rate /1000			0.00	6.94	6.94
38-39	1006	1003	3	1	3
rate /1000			2.98	1.00	2.98
40-41	1522	1520	2	0	2
rate /1000			1.31	0.00	1.31
>=42	1	1	0	0	0
rate /1000			0.00	0.00	0.00
Total	2790	2780	10	6	15

* For this analysis, the gestational age was calculated to the nearest week basing on either a reliable L.M.P. or when this was not available, an early ultrasound dating scan or the postnatal assessment of the newborn with Dubowitz score. Babies with inadequate assessment are excluded.

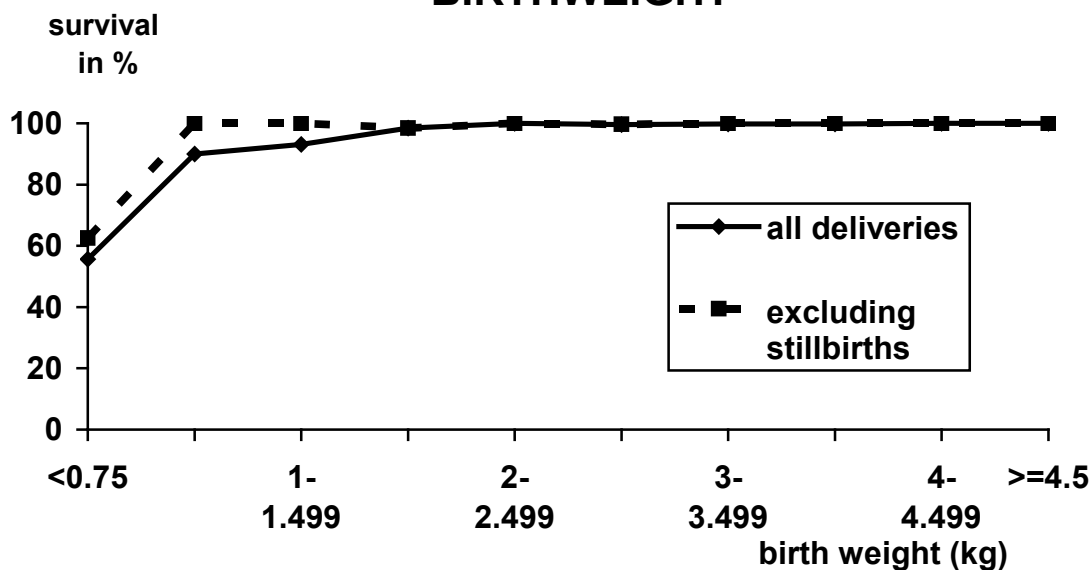


NUMBER OF FETAL LOSS VERSUS BIRTH WEIGHT*

Birth weight in grammes	Total births	Live Births	Still births	Neonatal deaths	Perinatal deaths
500-749	9	8	1	3	4
rate /1000			111.11	375.00	444.44
750-999	10	9	1	0	1
rate /1000			100.00	0.00	100.00
1000-1499	29	27	2	0	2
rate /1000			68.97	0.00	68.97
1500-1999	64	64	0	1	1
rate /1000			0.00	15.63	15.63
2000-2499	187	187	0	0	0
rate /1000			0.00	0.00	0.00
2500-2999	740	738	2	2	3
rate /1000			2.70	2.71	4.05
3000-3499	1184	1182	2	0	2
Rate /1000			1.69	0.00	1.69
3500-3999	497	496	1	0	1
rate /1000			2.01	0.00	2.01
4000-4499	65	65	0	0	0
rate /1000			0.00	0.00	0.00
>=4500	4	4	0	0	0
rate /1000			0.00	0.00	0.00
Total	2789	2780	9	6	14

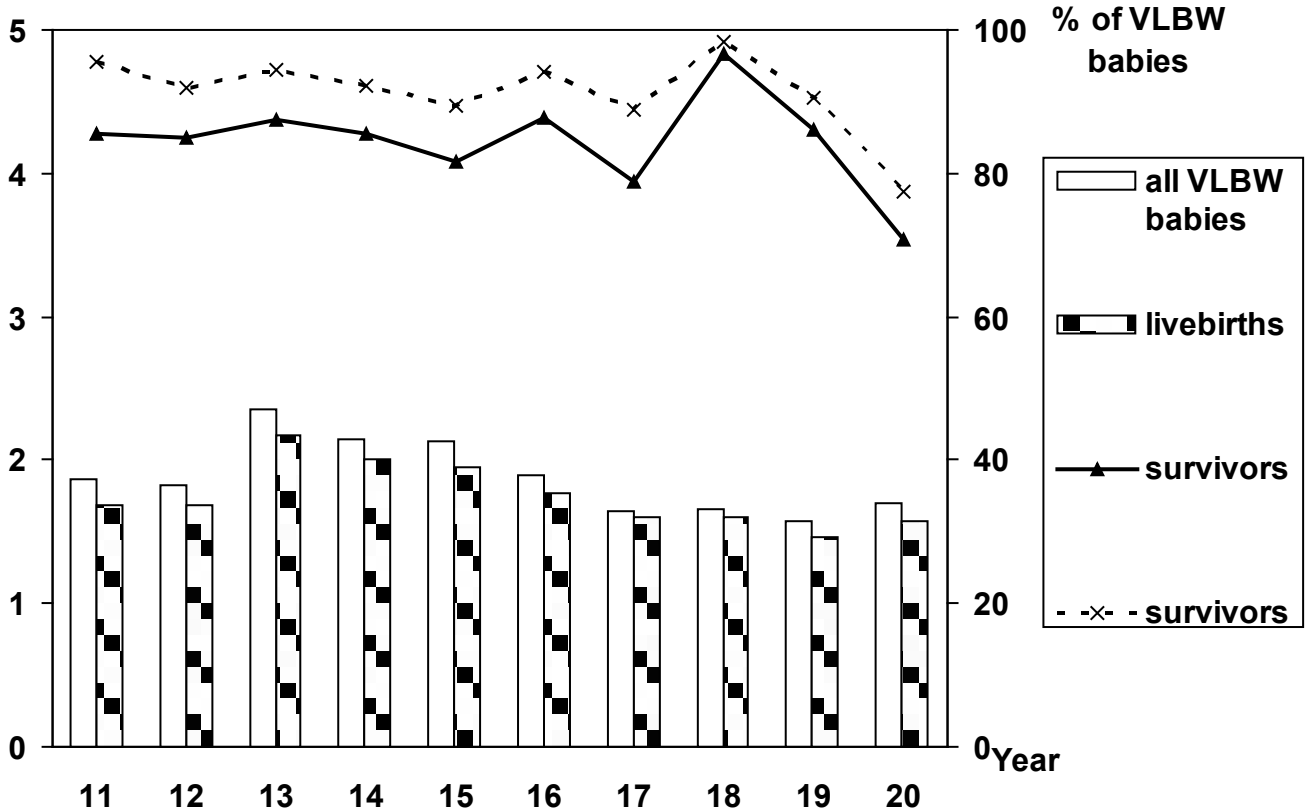
*Babies with unknown birth weight excluded.

FETAL SURVIVAL ACCORDING TO BIRTHWEIGHT



OUTCOME OF VLBW BABY (Birthweight ≤1500g)

% of total deliveries



GESTATIONAL AGE AND FUNCTIONAL MATURITY

	S.G.A.	A.G.A.	L.G.A.	Total
Preterm	38	116	5	159
Term	349	2069	212	2630
Postterm	0	1	0	1
Total	387	2186	217	2790
(%)	13.87	78.35	7.78	

Definition: S.G.A. less than 10th percentile for gestational age
 L.G.A. more than 90th percentile for gestational age
 A.G.A. appropriate for gestational age

CAUSE FOR STILLBIRTHS

1. Congenital anomaly	0
2. Isoimmunization	0
3. Pregnancy induced hypertension	0
4. Antepartum haemorrhage	0
5. Mechanical	0
6. Maternal disorder	0
7. Unclassifiable	0
8. Unexplained	6
9. Miscellaneous	4
Total	0

OBSTETRICAL CAUSES OF NEONATAL DEATHS

1. Congenital anomaly	1
2. Isoimmunization	0
3. Pregnancy induced hypertension	1
4. Antepartum haemorrhage	1
5. Mechanical	0
6. Maternal disorder	0
7. Unclassifiable	3
8. Unexplained	0
9. Miscellaneous	1
Total	7

PAEDIATRIC CLASSIFICATION OF CAUSE OF NEONATAL DEATHS

Cause	Major	Attributory
Congenital anomaly	1	0
Haemolytic disease of newborn	0	0
Hypoxia	1	0
Birth trauma	0	0
Respiratory distress syndrome	0	2
Intracranial haemorrhage	0	2
Infection	0	0
Others	4	0
Miscellaneous	0	0

BIRTH TRAUMA

Total cases	32
Incidence (%)	1.15

TYPES OF BIRTH TRAUMA*

	Number	%
Cephalhaematoma/Scalp injury	20	0.72
Fractures	10	0.36
Intracranial haemorrhage	4	0.14
Nerve injury	2	0.07

*Each baby may have more than 1 type of trauma

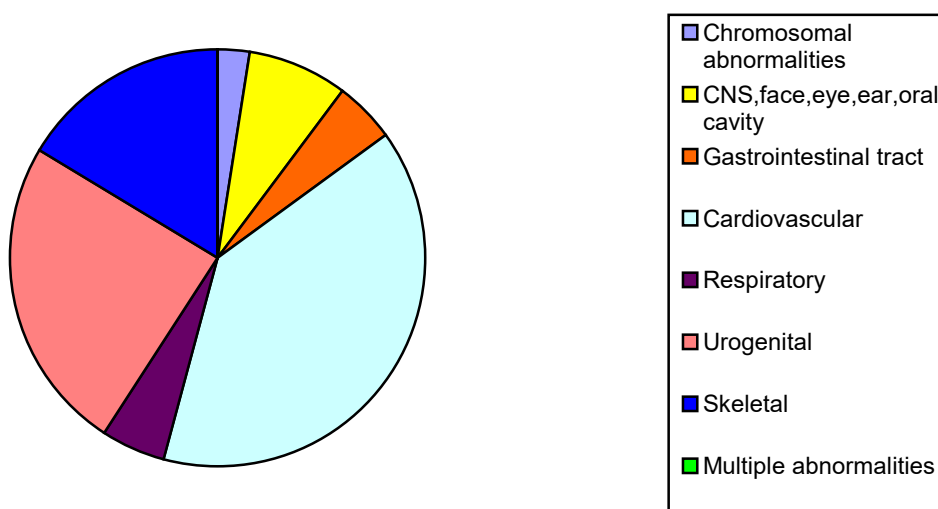
CONGENITAL MALFORMATION

Total number	166
Incidence (%)	5.95

TYPES OF MALFORMATIONS

	Number	%
Chromosomal abnormalities	4	2.41
CNS,face, eye, ear, oral cavity	13	7.83
Gastrointestinal tract	8	4.82
Cardiovascular system	65	39.16
Respiratory system	8	4.82
Urogenital system	41	24.70
Skeletal system	27	16.27
Multiple abnormalities	0	0.00
Others	0	0.00
Fetal mortality		
Stillbirth	0	
Neonatal deaths	0	
Perinatal deaths	0	
Incidence (%)		
among livebirths		5.95
among stillbirths		0.00
among neonatal deaths		0.00

TYPES OF CONGENITAL MALFORMATIONS



OTHER NEONATAL COMPLICATIONS

	Cases	%
Admission To Intensive Care Unit	107	3.84
Respiratory Distress Syndrome	38	1.36
Intraventricular Haemorrhage	8	0.29
Necrotising Enterocolitis	6	0.22
Congenital infection	1	0.04
Pneumonia	33	1.18
Meningitis	0	0.00
Septicaemia	3	0.11

PRENATAL DIAGNOSTIC & COUNSELLING ACTIVITIES

CLINICAL ACTIVITY

The total number of referrals seen at the Prenatal Diagnostic and Counselling Division in 2020 was 1012 (Table 1). During this period, there were 2868 ultrasound attendance and 172 invasive procedures (133 amniocentesis, 28 chorionic villus sampling and 11 special invasive procedures). 67 women (6.6%) were non-TYH booked cases. 945 women were booked at TYH.

Table 1 Number of referrals, invasive procedures and ultrasound attendance at TYH

Year	Non TYH	Booked at TYH	Total referrals	Invasive procedure	Total ultrasound attendance
2020	67 (6.6%)	945	1012	172	2868

AMNIOCENTESIS

A total of 133 women underwent amniocentesis in 2020.

Table 2 Indications for and number of amniocentesis in 2020

Year	Fetal abnormality	Chromosome study	Genetic disease	Total
2020	59	60	14	133

Table 3 Outcome of pregnancies following amniocentesis (amnio)

Outcome	Amnio for fetal abnormality	Amnio for chromosome study	Amnio for genetic disease	Number (%)
Livebirth	49	49	12	110 (83%)
TOP	7	10	1	18 (14%)
Fetal loss (after procedure)	0	*1	0	1(1%)
Miscarriage/IUD/NND	3	0	1	4(3%)
Unknown	0	0	0	0
Total	59	60	14	133

- PPRM on the day after amniocentesis – inevitable abortion

CHORIONIC VILLUS SAMPLING

A total of 28 women underwent chorionic villus sampling (CVS) in 2020.

Table 4 Indications for and number of chorionic villus sampling in 2020.

Year	Fetal abnormality	Chromosome study	Genetic disease	Total
2020	9	14	5	28

Table 5 Outcome of pregnancies following chorionic villus sampling (CVS)

Outcome	CVS for fetal abnormality	CVS for chromosome study	CVS for genetic disease	Number (%)
Livebirth	2	4	2	8 (29%)
TOP	5	10	3	18 (64%)
Fetal loss (after procedure)	0	0	0	0
Miscarriage/IUD/NND	2	0	0	2 (7%)
Unknown	0	0	0	0
Total	9	14	5	28

ULTRASONOGRAPHY

Table 7 Number of ultrasound scan in 2020

Year	Number of women offered ultrasound	Number of women with sonographic abnormalities detected by ultrasound	Number (%)
2020	1004	337	33.5

Table 8 Types of sonographic abnormalities

Sonographic abnormality	Number (%)
CNS	30 (8.9%)
Cardiac	65 (19.2%)
Chest	8 (2.3%)
Renal	65 (19.2%)
Abdominal wall	7 (2%)
Gastrointestinal tract	33 (9.7%)
Genitourinary tract	2 (0.5%)
Skeletal	18 (5.3%)
Limbs	5 (1.4%)
Facial	10 (2.9%)
Neck	11 (3.2%)
Genitalia	2 (0.5%)
Umbilical cord	8 (2.3%)
Multiple congenital abnormalities	8 (2.3%)
Hydrops	2 (0.5%)
Intrauterine growth retardation	78 (23.1%)
Liquor volume	11 (3.2%)
Twin abnormality	3 (0.8%)
Others	4 (1.1%)
Total	370

Table 8 showed the total number of types of sonographic abnormalities are greater than the number of women with sonographic abnormalities detected by ultrasound because some women could have more than one sonographic abnormalities.

FETAL DOWN SYNDROME SCREENING

There were total 2069 cases screened for Down syndrome screening and 146 cases screened positive. Estimated false positive rate was 6.7 %.

Table 9 Results of Nuchal & Biochemical screening in 2020

DS result	No.	Private NIPT	HA NIPT	CVS	Amnio	Scan only	Abnormal karyotype/ CMA	Outcome
Positive nuchal screening	1	0	1	0	0	0	0	Livebirth 1
Positive first trimester combined screening	135	50	60	10	*15	0	Trisomy 21 - 6 Trisomy 18 - 6	Livebirth 124 Silent Miscarriage Trisomy 18 - 1 TOP Trisomy 21 - 5 Trisomy 18 - 5
Positive second trimester serum screening	10	3	3	0	4	0	0	Livebirth 10
Total	146	53	64	10	19	0	12	Livebirth 135 Silent Miscarriage 1 TOP 10

*One case inevitable abortion after invasive procedure

LABORATORY WORKLOAD

Down syndrome screening

Biochemical studies	Total number of tests
2nd trimester quadruple screening test (Serum AFP + fb-hCG + uE3 + Inhibin A)	698
1st trimester combined test (PAPP-A + fb-hCG)	12654
Serum AFP	32
Amniotic AFP	6
Total (1st trimester combined test + 2nd trimester quadruple screening test)	13352
NT only	26

Karyotyping: AF, CV, tissue, blood, others

Chromosome studies	Total number of tests
Amniotic Fluid	171
Chorionic Villi	100
Placental tissue	121
Blood	717
Total	1109

Chromosomal microarray

	Total number of tests
Prenatal samples	961
Inheritance study for prenatal samples	143
Postnatal samples	219
Inheritance study for postnatal samples	2
Total	1325

Whole exome sequencing (HKU Research)

	Total number of trio tests
Prenatal whole exome sequencing	19

Thalassaemia and other molecular tests

Thalassaemia	Total number of tests
Alpha thalassaemia	215
Beta thalassaemia	215
Other molecular tests	
Uniparental disomy	22
Sanger sequencing	40
Methylation specific PCR (MS-PCR)	8
Multiplex Ligation-dependent Probe Amplification (MLPA)	11
Fluorescence in situ hybridization (FISH)	42
Fragile X	64
Y microdeletion	96
22q11.2 microdeletion	47

GYNAECOLOGY

OUTPATIENTS STATISTICS

	New	Follow-up
<u>GENERAL GYNAECOLOGY CLINICS</u>		
General Gynaecology Specialist Clinic	2541	7784
Endometriosis Clinic		231
Early Pregnancy Assessment Clinic	599	753
Paediatric and Adolescent Gynaecology Clinic	35	90
Preadmission Clinic	749	
Termination of Pregnancy Clinic	206	4
Vulval Clinic	36	141
<u>SUBSPECIALTY CLINICS</u>		
Colposcopy		
Colposcopy Clinic	495	1207
Large loop excision of transformation zone	96	
Cryotherapy	2	
Urogynaecology		
Urogynaecology Clinic	201	1373
Pessary Replacement Clinic		182
Pelvic Floor Exercise Clinic		8
Urodynamic study	9	

For fertility, reproductive endocrine subspecialty clinics and oncology clinics, please refer to respective annual reports.

TOTAL ADMISSIONS AND DISCHARGES STATISTICS

Total number of admissions	8184	
Total number of admitted patients	3580	
	<i>(7045 valid forms)</i>	
Status at admission	Number	%
Emergency	1000	14.2
Scheduled	1220	17.3
Transfer in	7	0.1
Day case*	4545	64.5
Unplanned readmission	273	3.9
Status at discharge	Number	%
Discharge home	6999	99.4
Death	14	0.2
Transfer	17	0.2
DAMA	7	0.1
Transfer to convalescence	8	0.1
Walked away	0	0

*Among all admissions

OVERALL STATISTICAL SUMMARY

Diagnosis

	admissions		patients	
	number	%	number	%
Disease of vulva, perineum and urethra	102	1.3	76	2.1
Disease of vagina	172	2.1	79	2.2
Disease of uterine cervix	601	7.3	194	5.4
Disease of uterine body	1778	21.7	865	24.2
Disease of fallopian tube	219	2.7	123	3.4
Disease of ovary	1763	21.5	505	14.1
Disease of broad ligament and pelvic peritoneum	246	3.0	73	2.0
Disease of genital displacement/ urinary incontinence	40	0.5	36	1.1
Disease of menstruation	521	6.4	459	12.8
Disease of pregnancy and reproduction	2568	31.4	1681	47.0
Complications in pregnancy	50	0.6	48	1.3
Miscellaneous gynaecological condition	163	2.0	148	4.1
Miscellaneous non-gynaecological condition	4602	56.2	1408	39.3

*per total number of admissions

Treatment	Number	% (per total number of admissions)
Major abdominal surgery*#	543	6.6
Major vaginal operation*	86	1.1
Major vulval operation	10	0.1
Endoscopic procedures	584	7.1
Colposcopic related procedures	31	0.4
Assisted reproduction procedures	1631	19.9
Minor abdominal operations	21	0.3
Other minor operations	506	6.2
Radiotherapy	15	0.2
Other forms of treatment	4275	52.2

#Statistics for major abdominal surgery for benign and malignant conditions were combined

* excluding laparoscopic surgery

Complications	Number	% (per total number of admissions)
Bowel injury	2	0.03
Urinary tract injury	3	0.04
Perforation of uterus	2	0.03
Major vascular complication	0	0.00
Deep vein thrombosis	0	0.00
Other intraoperative complications	2	0.00
Cardiopulmonary arrest (peri-operative)	1	0.01
Fever	4	0.06
Chest Infection	1	0.01
Urinary tract infection	5	0.07
Excessive operative blood loss	13	0.19
Wound complication	2	0.01
Post-operative haemorrhage	7	0.10
Unplanned operation before discharge	2	0.03
Other postoperative complications	8	0.11

DIAGNOSIS

Diseases of Vulva, Perineum and Urethra

	Admissions	Patients
Total	65	62
Congenital anomaly	0	0
Trauma	1	1
Infection (including Bartholin's abscess)	43	42
Benign neoplasm	1	1
Malignant neoplasm	<i>(refer to oncology statistics)</i>	
Retention cyst	2	2
Vulval dystrophy	3	3
Urethral lesions	3	2
Miscellaneous	12	11

Diseases of Vagina

	Admissions	Patients
Total	73	66
Congenital anomaly	3	3
Trauma	2	2
Infection	5	5
Benign neoplasm	3	2
Malignant neoplasm	<i>(refer to oncology statistics)</i>	
Retention cyst	0	0
Fistula	5	5
Vaginal intraepithelial neoplasia	4	4
Atrophic vaginitis	14	14
Miscellaneous	37	31

Diseases of Uterine Cervix

	Admissions	Patients
Total	100	92
Congenital anomaly	0	0
Trauma	0	0
Infection	0	0
Benign neoplasm (including polyp)	56	54
Carcinoma of cervix	<i>(refer to oncology statistics)</i>	
Other malignancy	0	0
Cervical intraepithelial neoplasia	21	17
Miscellaneous	23	21

Diseases of Uterine Body

	Admissions	Patients
Total	776	629
Congenital anomaly	15	11
Trauma	2	2
Infection	27	27
Fibromyoma	218	176
Carcinoma of corpus	<i>(refer to oncology statistics)</i>	
Other malignancy	57	13
Myohyperplasia	0	0
Endometrial polyp	301	263
Adenomyosis	52	41
Endometrial hyperplasia	29	24
Atrophic endometritis	3	3
Miscellaneous	72	69

Diseases of Fallopian Tubes

	Admissions	Patients
Total	127	113
Acute pelvic inflammatory disease	87	77
Chronic pelvic inflammatory disease	29	26
Tuberculous salpingitis	0	0
Benign neoplasm	1	1
Malignant neoplasm	<i>(refer to oncology statistics)</i>	
Miscellaneous	10	9

Diseases of Ovary

	Admissions	Patients
Total	403	315
Retention/functional cyst	11	11
Endometriotic cyst	68	64
Benign tumour/cyst	159	147
Primary malignant epithelial tumour	<i>(refer to oncology statistics)</i>	
Primary malignant non-epithelial tumour	<i>(refer to oncology statistics)</i>	
Secondary malignant tumour	<i>(refer to oncology statistics)</i>	
Borderline malignant tumour	<i>(refer to oncology statistics)</i>	
Miscellaneous	165	96

Diseases of Broad Ligaments and Pelvic Peritoneum

	Admissions	Patients
Total	38	38
Pelvic endometriosis	15	15
Parovarian cyst	0	0
Peritoneal carcinoma	<i>(refer to oncology statistics)</i>	
Miscellaneous	23	23

Genital Displacements / Urinary Problems

	Admissions	Patients
Total	40	36
Uterine prolapse	9	8
Anterior vaginal wall prolapse (cystocele/urethrocele/paravaginal defect)	5	4
Posterior vaginal wall prolapse (enterocele/rectocele/perineal deficiency)	4	3
Stress incontinence	0	0
Detrusor instability	0	0
Vault prolapse	4	4
Sensory urgency	0	0
Voiding difficulty	0	0
Other urinary disorders	18	17
Miscellaneous	0	0

Disorders of Menstruation

	Admissions	Patients
Total	521	459
Primary amenorrhoea	0	0
Secondary amenorrhoea	0	0
Dysfunctional uterine bleeding	99	94
Postmenopausal bleeding	77	70
Dysmenorrhoea	35	33
Menorrhagia	305	257
Miscellaneous	5	5

Disorders of Pregnancy and Reproduction

	Admissions	Patients
Total	939	799
Infertility	<i>(refer to reproduction statistics)</i>	
Hyperemesis gravidarum	38	30
Threatened miscarriage	168	160
Spontaneous/silent miscarriage	323	288
Complete mole	29	18
Partial mole	0	0
Gestational trophoblastic neoplasia	<i>(refer to oncology statistics)</i>	
Secondary postpartum haemorrhage	10	9
Other puerperal problems	6	6
Ectopic pregnancy	62	54
First trimester termination of pregnancy	23	23
Second trimester termination of pregnancy	146	144
Tubal occlusion	0	0
Pregnancy after Sterilization/tubal occlusion	0	0
Ovarian hyperstimulation syndrome	6	6
Miscellaneous	128	61

Complications in Pregnancy

	Admissions	Patients
Total	50	48
Benign tumour of genital tract	5	5
Malignant tumour of genital tract	0	0
Medical diseases	22	20
Surgical diseases	0	0
Non-specific abdominal pain	23	23

Miscellaneous Gynaecological Conditions

	Admissions	Patients
Total	163	148
Retained IUCD	19	18
Abdominal pain of unknown cause	111	97
Complication of treatment in the same unit	4	4
Complication of treatment in other unit	3	3
Translocated IUCD	2	2
Miscellaneous	24	24

Miscellaneous Non-gynaecological Conditions

	Admissions	Patients
Total	4602	1408
Breast disease	14	12
Urinary tract disease	121	93
Gastrointestinal tract disease	650	161
Cardiovascular disease	107	92
Respiratory tract disease	208	48
Central nervous system disease	23	18
Endocrine disease	42	36
Blood disease	380	304
Dermatological/musculoskeletal disease	129	71
No disease identified	17	17
Miscellaneous	2911	556

TREATMENT FOR GENERAL GYNAECOLOGICAL CONDITIONS

Major Abdominal Surgery* for benign conditions

Total	193
Total hysterectomy	49
Subtotal hysterectomy	0
Extended hysterectomy	0
Myomectomy	17
Adenomyomectomy	0
Ovarian cystectomy / excision of ovarian lesions	20
Oophorectomy	0
Salpingo-oophorectomy	35
Salpingectomy	61
Salpingotomy / Salpingostomy	0
Excision of para-ovarian / paratubal / fimbrial cysts	0
Adhesiolysis	5
Drainage of pelvic abscess	1
Ablation of endometriosis	0
Resection of pelvic endometriosis	0
Resection of bowel endometriosis	0
Surgery for genital prolapse	0
Surgery for stress incontinence	0
Repair of urinary fistulae	0
Laparotomy alone +/- biopsy	5
Miscellaneous	0

*excluding laparoscopic surgery

* Please refer to the Gynaecological Oncology Annual Report for details on surgical procedures performed for malignant conditions

** Also refer the Reproductive Medicine Annual Report for details on fertility procedures performed

Major Vaginal Operations

Total	109
Surgery for urinary incontinence (including TVT)	0
Vaginal hysterectomy for non-prolapsed uterus	23
Vaginal hysterectomy for genital prolapse	13
Pelvic floor repair (Repair of prolapse + vault-prolapse)	16
Repair of urinary fistula	0
Vaginal myomectomy	8
Vaginal stripping/vaginectomy	0
Miscellaneous (including adnexal procedures)	36

Major Vulval Operations

Total	11
Simple vulvectomy	3
Wide local excision	7
Miscellaneous	1

Laparoscopic Operations for benign conditions (including robotic assisted surgery)

Total	365
Robotic surgery (the exact procedures are coded as well)	0
Total hysterectomy	0
a. Total laparoscopic hysterectomy	0
b. Laparoscopic-assisted vaginal hysterectomy	2
Subtotal hysterectomy	1
Myomectomy	6
Adenomyomectomy	0
Ovarian cystectomy / excision of ovarian lesions	112
Oophorectomy	0
Salpingo-oophorectomy	86
Salpingectomy	40
Salpingotomy / Salpingostomy	17
Neo-salpingostomy	0
Tubal re-anastomosis	0
Excision of para-ovarian / paratubal / fimbrial cysts	4
Adhesiolysis	50
Drainage of pelvic abscess	1
Ablation of endometriosis	2
Resection of pelvic endometriosis	0
Resection of bowel endometriosis	0
Surgery for genital prolapse	0
Surgery for stress incontinence	0
Repair of urinary fistulae	0
Ureteric repair / reimplantation	0
Bowel resection /anastomosis / stoma	0
Diagnostic laparoscopy +/- biopsy	38
Laparoscopic ovarian drilling	0
Laparoscopic tubal occlusion/sterilization	1
Retrieval of IUCD	0
Miscellaneous	5

Hysteroscopic procedures

Total	658
Diagnostic hysteroscopy	425
Endometrial resection / ablation	9
Hysteroscopic polypectomy	203
Hysteroscopic myomectomy	16
Hysteroscopic division of uterine septum	1
Hysteroscopic division of adhesion	2
Miscellaneous	2

Colposcopy Related Procedures*

Total	6
Loop Excision (% of total number)	6 (5.9%)
Cone Biopsy	0
Miscellaneous	0

* most of the colposcopic procedures were performed as out-patient

Minor Abdominal Operations

Total	0
Tubal ligation / occlusion	0
Resuture of abdominal wound	0
Removal of abdominal / pelvic translocated IUCD	0
Miscellaneous	0

Other Minor Operations

Total	427
Examination under anaesthesia	0
Endometrial sampling (biopsy / curettage) / polypectomy	261
Suction termination of pregnancy	23
Evacuation of retained products of conception	50
Cystoscopy	27
Marsupialization	9
Other minor vulval surgery	13
Insertion/Removal of IUCD	38
Miscellaneous	6

Other Forms of Treatment

Total	1832
Observation and investigations	1753
Medical treatment for ectopic pregnancy	10
a. Systemic	8
b. Intralesional	2
Uterine artery embolisation	9
High intensity / focused ultrasound therapy	11
Miscellaneous	49

GYNAECOLOGICAL ONCOLOGY

**ONCOLOGY CLINICS
ATTENDANCES**

	2016	2017	2018	2019	2020
Cancer Follow-up Clinic	4010	4183	4322	4207	3918
Trophoblastic Clinic	907	856	726	667	531
Chemotherapy Clinic	1894	1758	2044	2219	2633
Preadmission Clinic	-	-	95	174	162
Research Clinic				15	0

PATIENT GROUP MEETING

We have Oncology patients support group and Stoma patients support group which are led by our nursing staff for our gynae-oncology patients.

Oncology patient support group: withheld due to COVID

Total no. of sessions: 0

Total no. of attendance: 0

Stoma patient support group: withheld due to COVID

Total no. of sessions: 0

Total no. of attendance: 0

Annual patient group party: withheld due to COVID

STATISTICS FOR GYNAECOLOGICAL MALIGNANCIES

Patients with gynaecological malignancy (Total: 382)	
Cancer of ovary	51
Borderline ovarian tumour	22
Cancer of peritoneum	10
Cancer of fallopian tube	7
Germ cell tumour	3
Sex cord stromal tumour	2
Other ovarian malignancies	3
Cancer of cervix	63
Cancer of corpus	149
Leiomyosarcoma/Endometrial stroma sarcoma	9
Malignant mixed mullerian tumor	8
Other uterine malignancies	5
Cancer of vulva	13
Cancer of vagina	6
Gestational trophoblastic neoplasm	10
Paget's disease	1
Mutliple primary malignancies	20

OPERATION FOR MALIGNANT/PRE-MALIGNANT DISEASE

Laparotomy (all cases with open abdominal surgery)	109
Radical hysterectomy +/- unilateral / bilateral salpingo-ophorectomy (U/BSO)	5
Laparoscopic radical hysterectomy +/- U/BSO	4
Laparoscopic radical hysterectomy +/- U/BSO (Da Vinci)	4
Modified radical hysterectomy +/- U/BSO	5
Laparoscopic modified radical hysterectomy +/- U/BSO (Da Vinci)	5
Total abdominal hysterectomy +/- U/BSO	75
Total laparoscopic hysterectomy +/- U/BSO	53
Total laparoscopic hysterectomy +/- U/BSO (Da Vinci)	26
Laparoscopic Radical trachelectomy	2
Laparoscopic radical trachelectomy (Da Vinci)	2
Pelvic lymphadenectomy (one side)	39
Laparoscopic pelvic lymphadenectomy (one side)	30
Laparoscopic pelvic lymphadenectomy (one side) (Da Vinci)	47
Paraaortic lymphadenectomy	32
Laparoscopic paraaortic lymphadenectomy	11
Laparoscopic paraaortic lymphadenectomy (Da Vinci)	28
Laparoscopic sentinel lymph node (Da Vinci)	7
Omentectomy	49
Laparoscopic omentectomy	9
Laparoscopic omentectomy (Da Vinci)	9
Adhesiolysis	12
Laparoscopic adhesiolysis	9
Laparoscopic adhesiolysis (Da Vinci)	5
BSO / USO / ovarian cystectomy	5
Laparoscopic BSO / USO / ovarian cystectomy	6
Laparoscopic BSO / USO / ovarian cystectomy (Da Vinci)	2
Appendicectomy	12
Laparoscopic appendicectomy	3
Laparoscopic appendicectomy (Da Vinci)	0
Debulking surgery	28
HIPEC	2
Bowel resection and re-anastomosis	6

Colostomy / ileostomy	5
Closure of stoma	0
Repair of bowel	2
Repair of bladder	0
Repair of vessels	0
Repair of vagina / perineum	2
Vault stripping / vaginectomy	5
Wide local excision of vulva	5
Radical vulvectomy	2
Groin node dissection (one side)	4
Cone biopsy	2
Large loop excision of transformation zone	2
Brachytherapy	24
Removal or insertion of central line insertion	4
Diagnostic hysteroscopy	3
Hysteroscopic polypectomy	0
Suction evacuation	0
Laparoscopic biopsy	7
Diagnostic laparoscopy	13
Examination under anaesthesia	6
Cystoscopy	1

CHEMOTHERAPY

Total number of patients receiving in-patient chemotherapy: 242

Total number of patients receiving out-patient chemotherapy: 277

Total number of patients receiving oral chemotherapy: 47

Total number of patients receiving PARP inhibitors: 43

Total 688 and 1163 courses of inpatient and outpatient chemotherapy were given respectively.

COLPOSCOPY SERVICES

Statistics

New Cases	495
Follow-up	1207

Diagnosis (based on worst histology)	Cervix	Vagina	Vulva
Normal	67	9	
Inflammation	31		
Warts/HPV	42	2	
Low grade squamous intraepithelial lesion	188	14	
High grade squamous intraepithelial lesion	61	8	
Microinvasive carcinoma			
Squamous cell carcinoma	2		
Adenocarcinoma	1		
Adenocarcinoma in-situ			
No histology	55	5	0
Unsatisfactory for assessment	7	2	
Others			
	1	1	
Atypical cells	2		
Endocervical polyp	2		
Metastatic adenocarcinoma			
Paget's disease			
Recurrence of cervical cancer		1	
Recurrence of cancer of uterine corpus		1	

Procedures

Cone biopsy	0
Cryotherapy	2
Large loop excision of transformation zone	102
Under local anaesthesia	96
Under general / spinal anaesthesia	6

REPRODUCTIVE MEDICINE

OUTPATIENT STATISTICS

	New	Follow-up
Infertility Clinics	531	520
Nurse Triage Clinic	291	0
Male infertility Clinics*	7	10
Reproductive Genetic Clinic	44	34
Recurrent Miscarriage Clinic	58	55
Sexual Counselling	28	7
Private Clinic – Reproductive Medicine	232	109

*Only those cases seen under Department of Obstetrics and Gynaecology were counted here (mainly cases requiring counselling or treatment on male endocrine problems). Those requiring assessment and management by urologists were seen in the Department of Surgery and were not counted here.

ASSISTED REPRODUCTION PROCEDURES

Intrauterine insemination

Natural Cycle Intrauterine Insemination

Fourteen patients underwent 32 cycles of intrauterine insemination during natural cycles because of coital problems (n=30) or other reasons (n=2).

The mean age of patients was 35.6 years. Six pregnancies were achieved and the **pregnancy rate** was 18.8% per cycle initiated. There were five ongoing singleton pregnancies.

Ovarian Stimulation & Intrauterine Insemination

Seventy-nine women underwent 179 cycles of ovarian stimulation by letrozole or clomiphene citrate in conjunction with intrauterine insemination. Thirteen cycles were cancelled: 7 cycles for excessive response, 2 cycles for premature luteinization and 4 for other reasons.

The mean age of patients was 33.8 years. The indications and cycle characteristics are shown in Tables 34 and 35 respectively. Twelve pregnancies were achieved and the **pregnancy rate** was 6.7% per cycle initiated. There were 8 ongoing singleton pregnancies.

IVF and Frozen embryo transfer

Oocyte retrieval (ultrasound guided)	703
Embryo transfer*	1019

* including fresh and frozen embryo transfer cycles

	No. of cycles
Started ovarian stimulation	714
Oocyte retrieval	703
Fresh embryo transfer	287
Single embryo transfer	284
Freezing of all embryos	322

Ongoing pregnancy rate per transfer in stimulated cycle: 77 (26.8%)

Multiple pregnancy: 0 (0%)

Ectopic pregnancy: 2 (0.7%)

No. of moderate/severe OHSS: 3 (0.4%)

No. of frozen embryo transfer cycles: 732

No. of single embryo transfer: 725 (99.0%)

Ongoing pregnancy rate per transfer: 33.2%

Multiple pregnancy: 2 (0.6%)

Ectopic pregnancy: 3 (0.9%)

OPERATIVE PROCEDURES

	Number
Diagnostic laparoscopy +/- chromotubation	7
Laparoscopic ovarian cystectomy	7
Laparoscopic salpingostomy	1
Laparoscopic adhesiolysis	11
Laparoscopic salpingectomy	9
Laparoscopic segmental resection	2
Laparoscopic ovarian drilling	1
Laparoscopic ablation of endometriosis	3
Laparoscopic salpingo-oophorectomy	0
Myomectomy	0
Diagnostic hysteroscopy	34
Hysteroscopic polypectomy	30
Hysteroscopic adhesiolysis	7
Hysteroscopic lysis of uterine septum	2
Hysteroscopic myomectomy	0
Hysteroscopic proximal tubal cannulation	0
Uterine curettage and insertion of Mirena	7
Others	6

LIST OF ABBREVIATIONS

AFP	Alpha-fetoprotein
AGA	Appropriate for gestational age
APH	Antepartum haemorrhage
BSO	Bilateral salpingo-oophorectomy
Chronic HT	Chronic hypertension
C. HT with PET	Chronic hypertension with superimposed preeclampsia
CS	Caesarean section
GDM	Gestational diabetes mellitus
Gestational HT	Gestational hypertension
G. Proteinuria	Gestational proteinuria
G. P. HT	Gestational proteinuric hypertension
IGT	Impaired glucose tolerance
IUD	Intrauterine death
IUGR	Intrauterine growth retardation
LF	Low forceps
LGA	Large for gestational age
LSCS	Lower Segment Caesarean
NND	Neonatal death
PND	Perinatal death
PNM	Perinatal mortality
PPH	Postpartum haemorrhage
RFA	Radiofrequency ablation
SB	Stillbirth
SGA	Small for gestational age
TOP	Termination of pregnancy
TVT	Tension free vaginal tape

USO	Unilateral salpingo-oophorectomy
Unclassified HT/P	Unclassified hypertension/proteinuria
VE	Vacuum extraction
VLBW	Very low birthweight

