



# Western Regional Hospital, Pokhara



# Annual Report

## F/Y 2077/078



Pokhara Academy of Health  
Sciences  
Western Regional Hospital  
Pokhara, Kaski

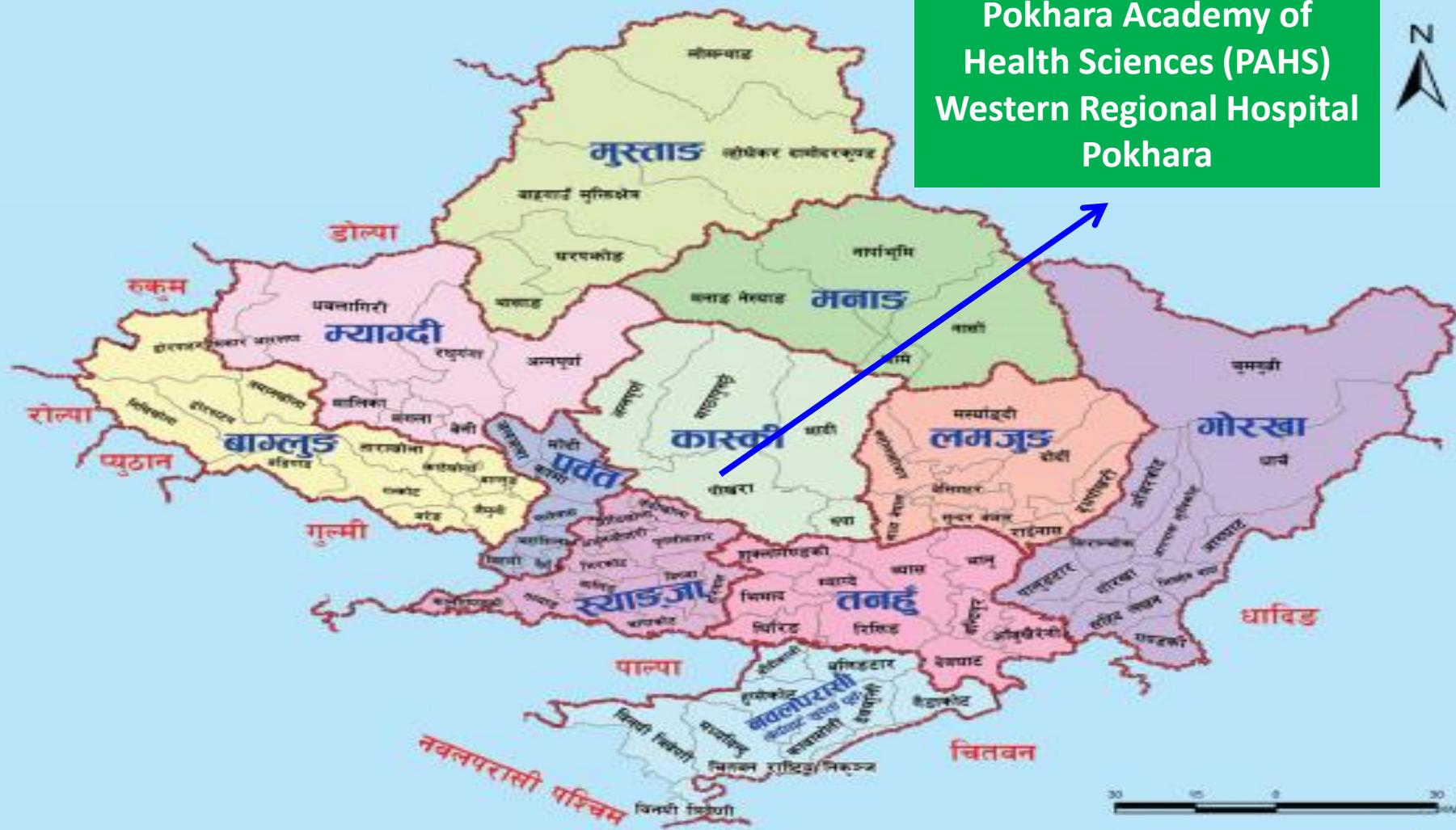
# Outline of Presentation

- Catchment Area Map Statistics
- Historical Development
- Bed Distribution
- Infrastructure
- General Features of Hospital
- Service Catchment area
- Hospital Services
- Human resource
- Financial Situation
- Hospital Services
- Hospital Statistics
- Mortality, Morbidity
- MPDR Indicators
- Health Insurance Statistics
- Target group Free health service
- Immunization Statistics
- OCMC Statistics
- COVID-19 Statistics
- Major Innovations
- Hospital Strengths
- Major Challenges
- Recommendations

# General Catchment Area

## गण्डकी प्रदेश

# Pokhara Academy of Health Sciences (PAHS) Western Regional Hospital Pokhara



# Historical Development of Western Regional Hospital

- Hospital was established in 2012 BS named as a "Soldiers Board Hospital" with strongly initiated by Major Bir Singh Gurung and his friends.
- In 2019 BS, this Hospital was handed over to the Government of Nepal developed as a 15 beded Hospital. It became the District Hospital of Kaski.
- In 2032 BS, this Hospital and INF shining Hospital merged with the name of Gandaki Zonal Hospital with capacity of 50 beds.
- In 2043 BS, Gandaki Zonal Hospital upgraded to 150 beded as Regional Hospital .

- In 2046 BS, 50 more beds were added to make it a 200 beded Hospital.
- IN 2061 BS, 150 more beds were added to separate expansion of post operative and orthopedic ward. Maternity/Gynae and NCU wards also separately conducted at this period.
- Government of Nepal decided to upgrade WRH to 500 beded in 2069 chaitra .
- Government of Nepal declared to make WRH as Pokhara Academy of Health Sciences in 2072 Paush.
- Academy has conducted MD/MS entrance exam in Falgun 25,2076 and admission process started
- Regular Class of MD/MS has started from 1st Shrawan 2077
- No.of MD/MS students enrolled in first year is 17 and in second year is 26.
- The running beds distribution of WRH are as follows.

# Beds Distribution

Department	Deluxe cabin	Cabin Beds	Semi Cabin Beds	General Beds	Total beds
Medical ward	1	2	2	35	40
Pediatric			2	35	37
Orthopedic				50	50
Post operation				8	8
Gynecology		4	2	35	41
Surgical				50	50
ICU				9	9
NICU				30	20
PICU				6	6
Maternity		3		69	72
Dialysis				15	15
Emergency				25	25
NRH				10	10
COVID				90	90
<b>Total</b>	<b>1</b>	<b>9</b>	<b>6</b>	<b>467</b>	<b>483</b>

# Infrastructure

- ❖ Hospital ownership land: (207+62) Ropani
- ❖ Own Building:
  - ❖ Hospital area: (Adequate)
  - ❖ Doctor quarter: (Inadequate)
  - ❖ Staff quarter: (Inadequate)
  - ❖ Other:
- ❖ Ambulance : No
- ❖ Major Medical Equipment:

❖ MRI Machine	1 Functioning
❖ CT Scan	1 nonfunctioning (New on process)
❖ Echo Machine	1 Functioning
❖ X-ray Machine	2+5 Functioning
❖ USG Machine	12 Functioning
❖ Ventilator	38 Functioning
❖ Oxygen Concentrators	79
❖ ABG Machine	4
❖ BIPAP/CPAP	38

# **GENERAL FEATURES OF WESTERN REGIONAL HOSPITAL**

## **LOCATION AND AREA:**

Western Regional Hospital is located at Ramghat, ward No.11 of Pokhara Metropolitan city of Kaski district. It covers 269 ropanies of land with boundary wall. Roads in north, south and west sides surround it. It is located at the distance of about 1 Km from the center of the city, 2 km from the inter-city bus park and 3 Kms from the domestic airport.

Altitude: 856 m

GPS Co-ordinates : N 28 12'46"

E 83 59'54"

## **CATCHMENT AREA:**

Though this is a regional hospital and whole western region is the catchment's area, patients mainly from the surrounding districts use to visit this hospital. The people from other districts of Terai area usually prefer to go to Kathmandu instead of going to Pokhara.

# Main Catchment Areas (2077/078)

## Inpatients Visit (Visited by the People of 68 Districts)

S.N	Districts	Patients	Percent
1	Kaski	6821	48.0
2	Tanahun	2316	16.3
3	Syangja	1560	11.0
4	Parbat	830	5.8
5	Baglung	516	3.6
6	Myagdi	452	3.2
7	Lamjung	439	3.1
8	Gorkha	248	1.7
9	Dhading	140	1.0
10	Nawalparasi	75	0.5

## OPD/ER Visit (Visited by the People of 77 districts)

S.N	Districts	Patients	Percent
1	Kaski	121305	77.5
2	Syangja	7888	5.0
3	Tanahun	10146	6.5
4	Parbat	4159	2.7
5	Baglung	2414	1.5
6	Myagdi	2274	1.5
7	Lamjung	2128	1.4
8	Gorkha	1212	0.8
9	Dhading	741	0.5
10	Palpa	316	0.2

# Main Catchment Areas (2077/078)

## Inpatients Visit

(Visited by the People of all Provinces)

Province	No.of Patients	Percent
1	141	1.0
2	97	0.7
Bagmati	335	2.4
Gandaki	13311	93.8
5	213	1.5
6	70	0.5
Sudur Paschim	27	0.2
<b>Grand Total</b>	<b>14194</b>	<b>100.0</b>

## OPD /ER Visit

(Visited by the People of all Provinces)

Province/Other	No.of Patients	Percent
1	613	0.4
2	425	0.3
Bagmati	1647	1.1
Gandaki	152076	97.2
5	1035	0.7
6	407	0.3
Sudur paschim	140	0.1
Foreign	144	0.1
<b>Grand Total</b>	<b>156487</b>	<b>100.0</b>

# Hospital Services

- Emergency Services
- Indoor Services
- OPD Services
- Health Insurance Services
- COVID-19 Treatment Service

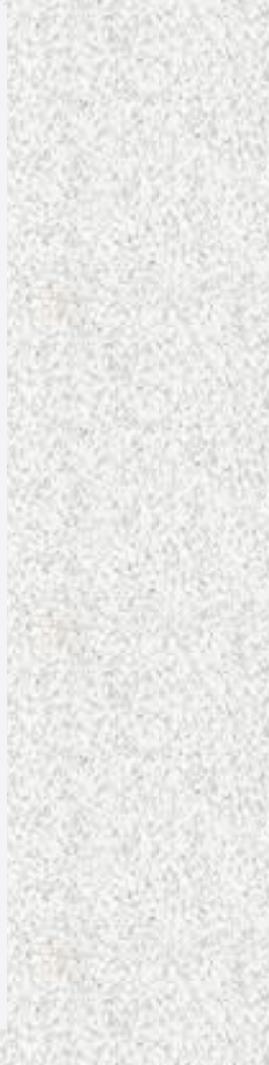
# OPD Services

- Medical
- Surgical
- Orthopedic
- Maternity/Antenatal
- Gynecology
- ENT
- Dental
- Psychiatric
- COVID OPD
- Ophthalmology

- Pediatric
- Dermatology & STD
- Physiotherapy
- Cardiology
- Urology
- Nephrology
- Gastrology
- Hepatology
- Neuro-Surgery

# Indoor Services

- Medical
- Surgical
- Gynecology
- Maternity
- Paediatric
- Orthopedic
- COVID Isolation



- NICU
- PICU
- ENT
- Operation
- ICU
- Post operative
- Hemo-dialysis

# Major Hospital Services

## Preventive Services

- MCH Clinic
- Immunization
- Family Planning
- Nutrition Rehabilitation home
- PMTCT (Prevention of mother to child transmission of HIV)

# Curative Services

OPD	Indoor services
<ul style="list-style-type: none"><li>❖ Dental</li><li>❖ Psychiatric</li><li>❖ Medical</li><li>❖ Surgical</li><li>❖ Orthopedic</li><li>❖ ENT</li><li>❖ Maternity/ Antenatal</li><li>❖ Gynecology</li><li>❖ Pediatric</li><li>❖ Dermatology/ STD</li><li>❖ Physiotherapy</li></ul>	<ul style="list-style-type: none"><li>❖ Cardiology</li><li>❖ Gastrology</li><li>❖ Nephrology</li><li>❖ Hepatology</li><li>❖ Neuro-Surgery</li><li>❖ Urology</li><li>❖ Ophthalmology</li><li>❖ COVID OPD</li></ul>

# Diagnostic Services

## ❖ Laboratory Services

- Hematology
- Para-cytology
- Bacteriology
- Virology
- Biochemistry
- Immunology
- Serology
- Cytology
- Histo-pathology
- Hormonology

- ❖ MRI
- ❖ ERCP
- ❖ Cath-lab
- ❖ X-Ray
- ❖ Ultrasound
- ❖ ECG, EEG, PFT, ECT
- ❖ Echocardiography
- ❖ Endoscopy
- ❖ Colonoscopy
- ❖ Speech therapy
- ❖ Halter monitor
- ❖ Tread Mill Test

# Special Programme

- ART
- CAC, PAC
- MCH Clinics
- SBA Program
- Safe Motherhood
- Methadone Maintenance Programmee
- Nutrition Rehabilitation Home
- OCMC
- Social Service Unit
- Geriatric Service
- Dialysis
- Free Primary Emergency Treatment

# Human Resource

S.N	Posts	Government		Internal		Currently Available	
		Sanctioned Post	Fulfilled	Sanctioned Post	Fulfilled	Government	Internal
1	Specialized Doctor	54	38	5	1	66	1
2	Medical officer	45	21	40	26	93	26
3	Nursing officer and above	4	3	0	0	6	0
4	Staff Nurse	100	71	70	70	93	97
5	ANM	4	4	12	12	4	18
6	HA/AHW	13	9	10	10	9	11
7	Radiographer/Dark room Assistant	12	10	2	2	10	2
8	Lab technician/Assistant	10	8	7	7	9	16
9	Medical Record Officer/Assistant	4	3	0	0	4	0
10	Administrative Staffs	9	8	18	18	10	19
11	Other Technical Staffs	21	8	20	15	12	48
12	Helper/Driver	25	9	116	114	9	114
	Total	301	192	300	275	325	352

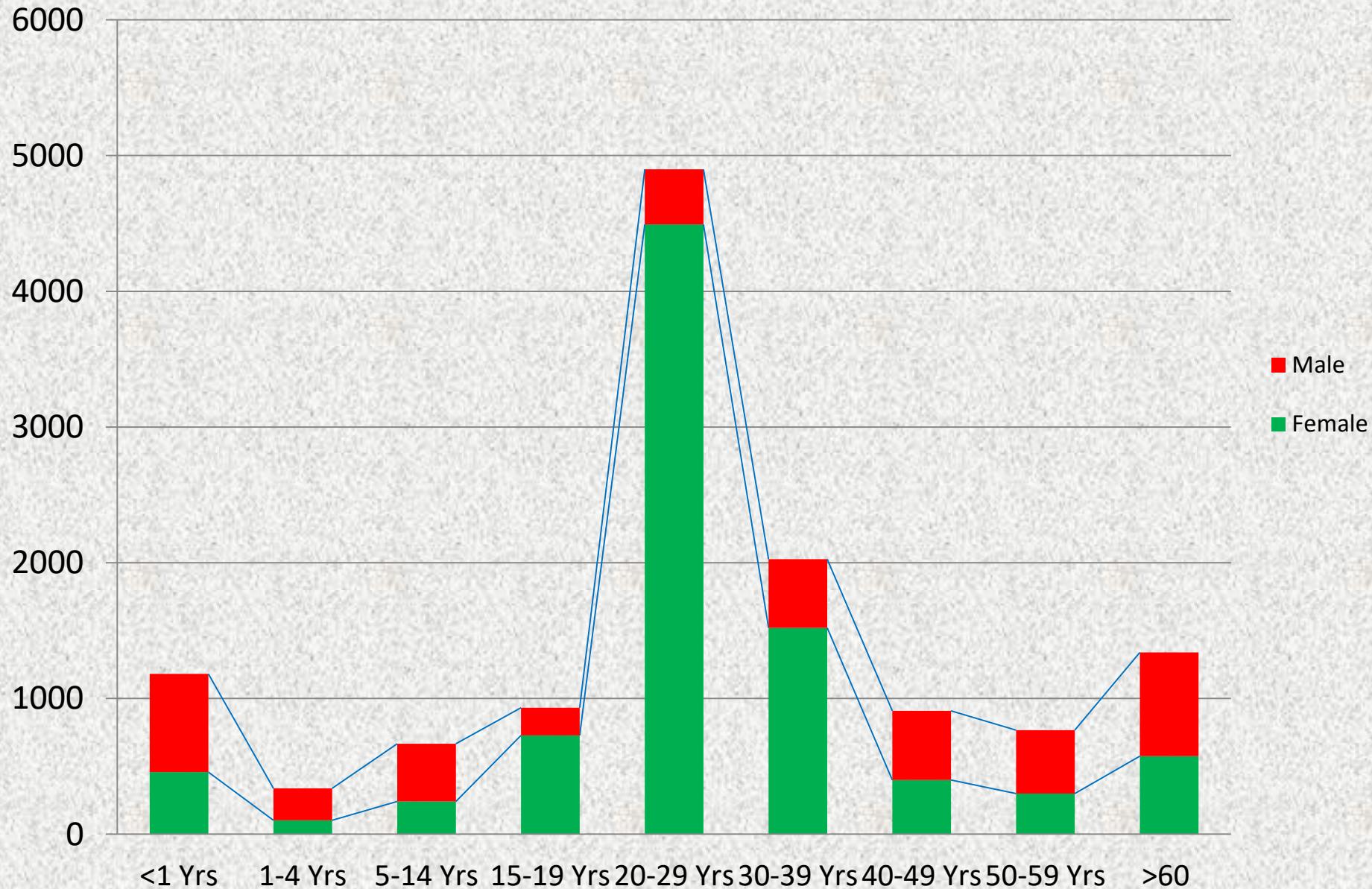
# Hospital Statistics

S. N	Indicators	F/Y 2075/076	F/Y 2076/077	F/Y 2077/078
1	Total Number of OPD Cases	269979	213773	130454
2	Total Number of Emergency Cases	39728	39251	26033
3	Total Number of Inpatients Discharged	20669	17321	14228
4	Total Number of Lab Services Provided	2025254	1220320	943553
5	Total Number of Hospital Services Provided	309707	253024	156487
6	Total Number of Delivery Conducted	8399	7374	5346
7	Referral Cases (Out) Total	112	26	21
8	Total Maternal Deaths	1	3	5
9	Total Late Neo-natal Deaths	6	3	2
10	Total Hospital Deaths	256	193	484

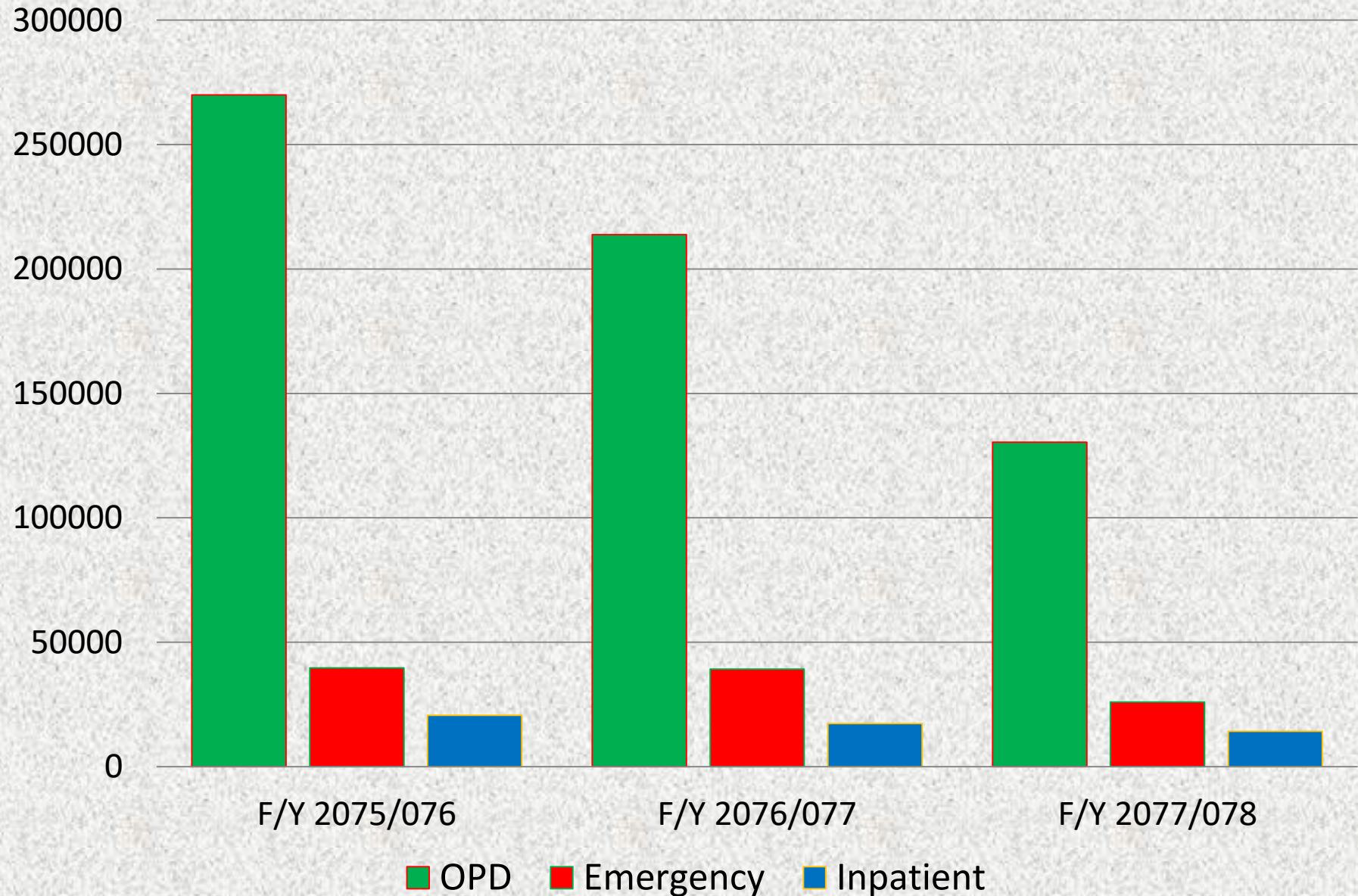
# Inpatients Admitted in F/Y 2077/078

Age Group	Number			% of Subtotal		% of Total
	Female	Male	Sub-Total	Female	Male	
<b>&lt;1 year</b>	458	723	1181	38.78	61.22	9.04
<b>1 to 4 Yrs</b>	103	235	338	30.47	69.53	2.59
<b>5 to 14 Yrs</b>	241	425	666	36.19	63.81	5.10
<b>15 to 19 Yrs</b>	738	204	932	79.18	21.89	7.14
<b>20 to 29 Yrs</b>	4493	406	4899	91.71	8.29	37.52
<b>30 to 39 Yrs</b>	1520	506	2026	75.02	24.98	15.52
<b>40 to 49 Yrs</b>	400	509	909	44.00	56.00	6.96
<b>50-59 Yrs</b>	299	467	766	39.03	60.97	5.87
<b>60+Yrs</b>	576	764	1340	42.99	57.01	10.26
<b>Total</b>	8818	4239	13057	67.53	32.47	100.00

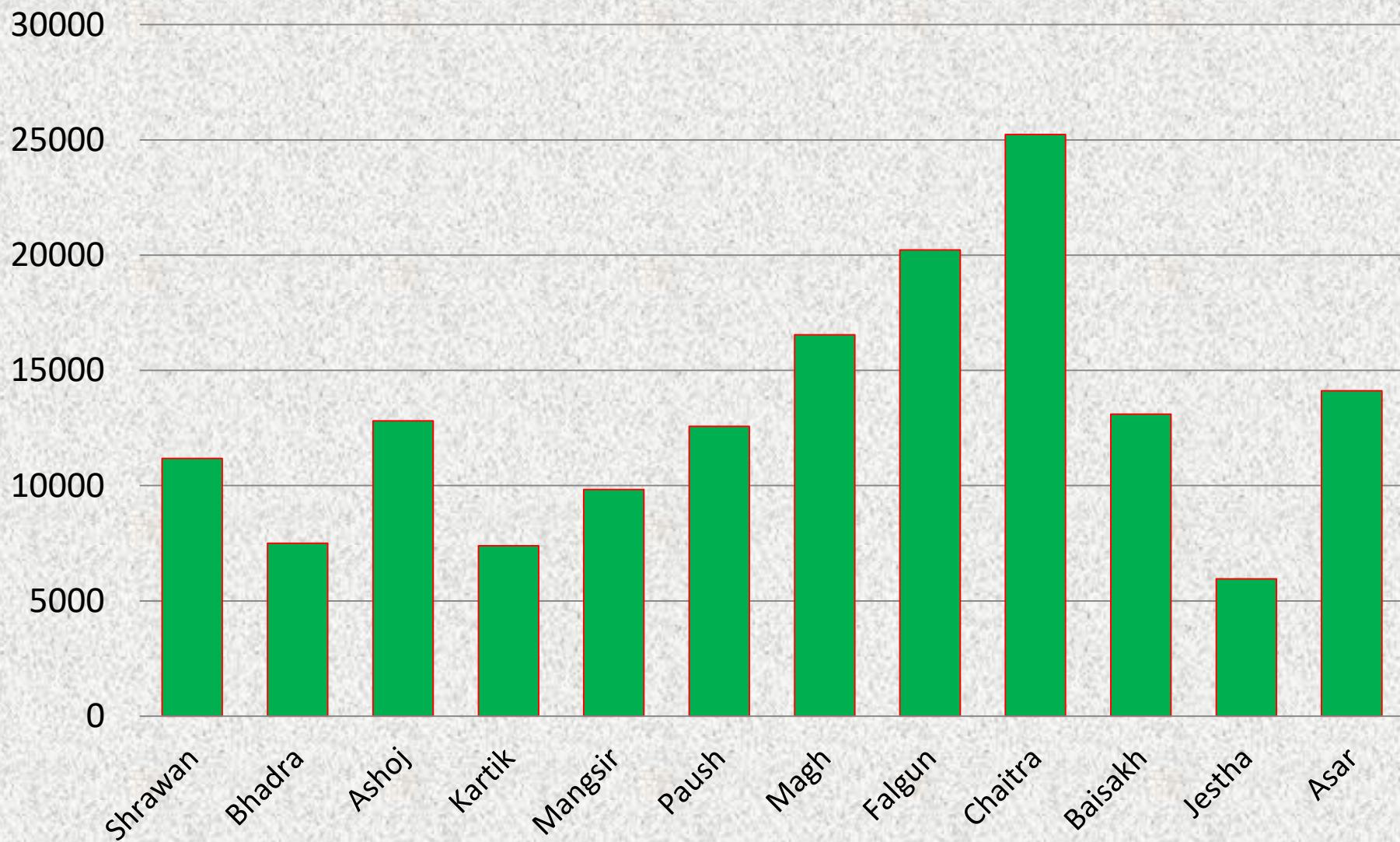
# Age wise Inpatients in F/Y 2077/078



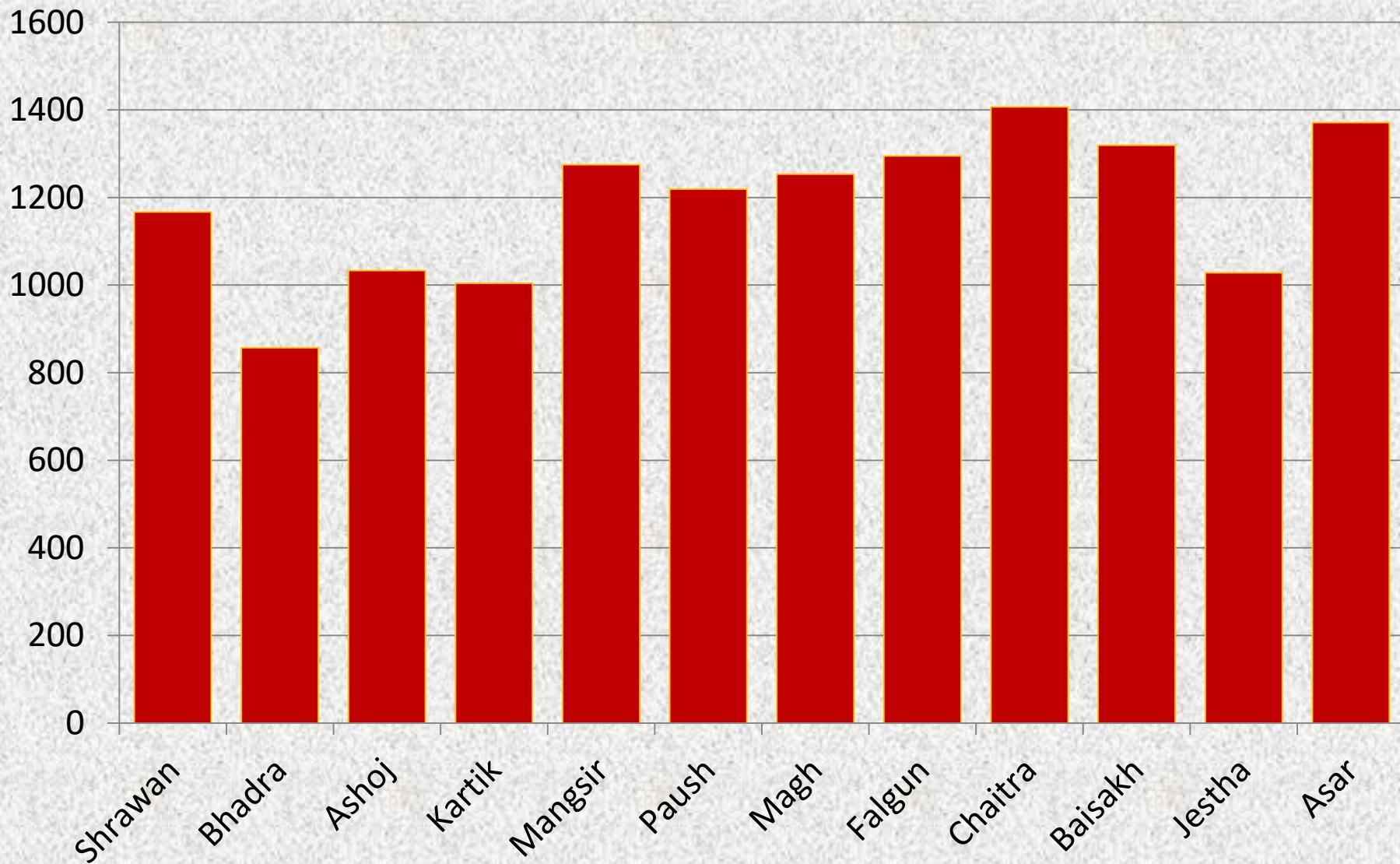
# Flow of Patients in WRH



# Month-wise OPD Patients in F/Y 2077/078



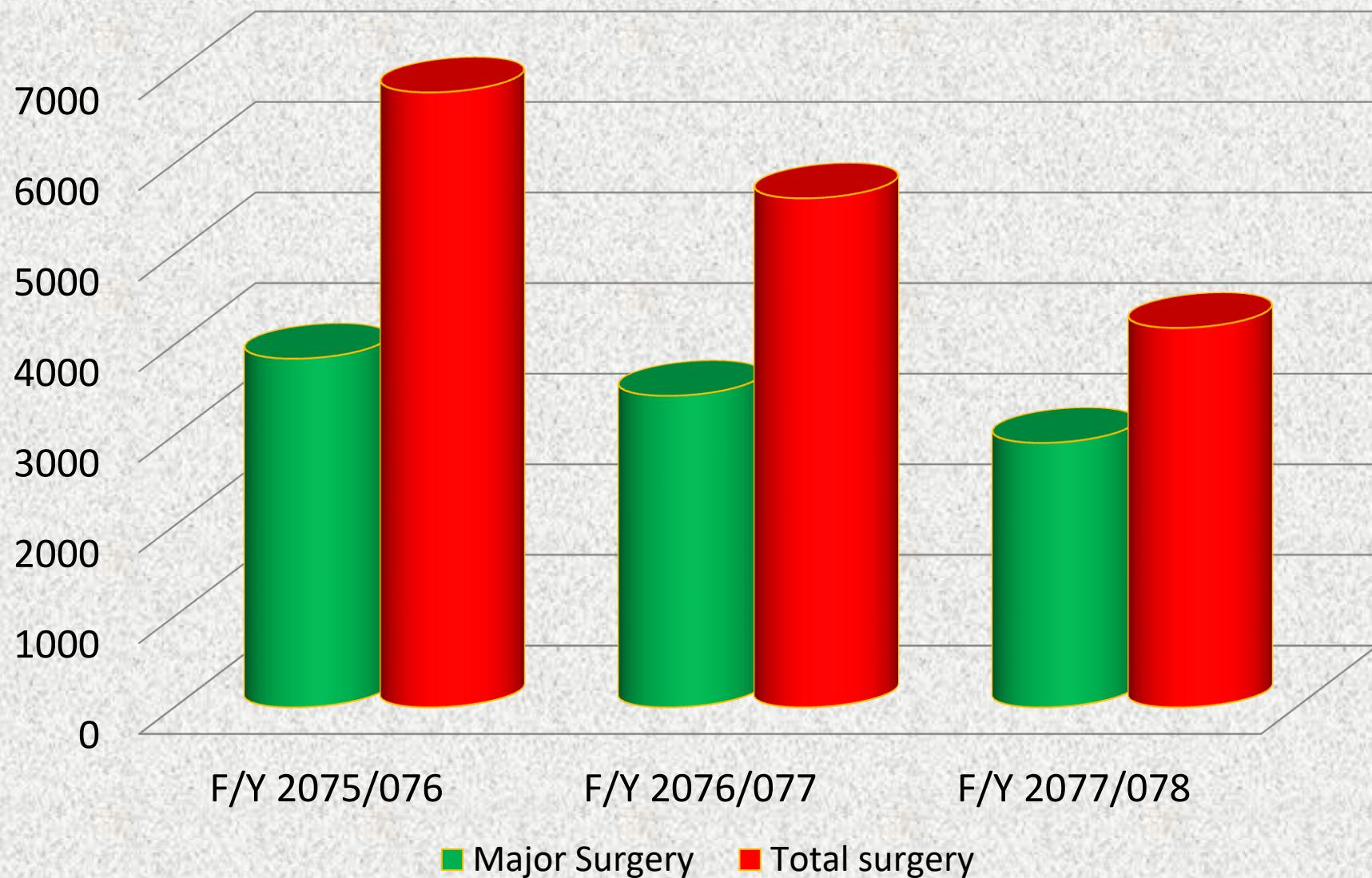
# Month-wise Inpatients in F/Y 2077/078



# Hospital Indicators

S. N	Indicators	F/Y 2075/076	F/Y 2076/077	F/Y 2077/078
1	Outpatient Sex Ratio	60	63	69
2	Inpatient Sex Ratio	42	39	48
3	Deaths within 48 hours of admission	107	62	13
4	Deaths after 48 hours of admission	144	131	79
5	Average number of Radiographic Image	315	249	177
6	Average Number of Laboratory Tests	5548	3343	2585
7	Bed occupancy Rate	73.32	55.68	46.86
8	Average Length of Stay	4.1	3.9	4.1
9	Bed Turnover Rate	65	52	42
10	Bed Turnover Interval	1.4	2.9	4.6
11	% of Surgeries among inpatients	33	32	29

# Total Surgery Vs. Major Surgery



# Lab Services

F/Y	Health Laboratory Services (In Number)								Total
	Paracitology/ Bacteriology	Virology	Hematology	Hormones/ Endocrinology	Biochemistry	Immunology/ Serology	Other Tests		
2075/076	65681	93304	1080199	40650	718672	20777	5971	2025254	
2076/077	44060	63142	635263	36515	420751	17794	2795	1220320	
2077/078	41022	82914	349685	29098	409463	29550	1821	943553	

# Top 10 Morbidity Among Inpatients

S. N	Morbidity in F/Y 2075/076		Morbidity in F/Y 2076/077		Morbidity in F/Y 2077/078	
	Disease	No. of Patients	Disease	No. of Patients	Disease	No. of Patients
1	ARI	603	FEVER	519	COVID-19	1336
2	COPD	599	APPENDICITIS	507	Bac.Sepsis	532
3	APPENDICITIS	562	COPD	443	Pneumonia	352
4	FEVER	552	BAC.SEPESIS	394	Appendicitis	346
5	BAC.SEPESIS	521	ARI	362	Kidney Disease	225
6	AGE	380	PNEUMONIA	308	COPD	190
7	NNJ	377	KIDNEY DISEASE	284	Cholelithiasis	178
8	PNEUMONIA	298	NEONATAL JAUNDICE	222	Inguinal Hernia	154
9	CHOLELITHIASIS	280	CHOLELITHIASIS	214	AGE	145
10	THALASSAEMIA	280	AGE	213	NNJ	139

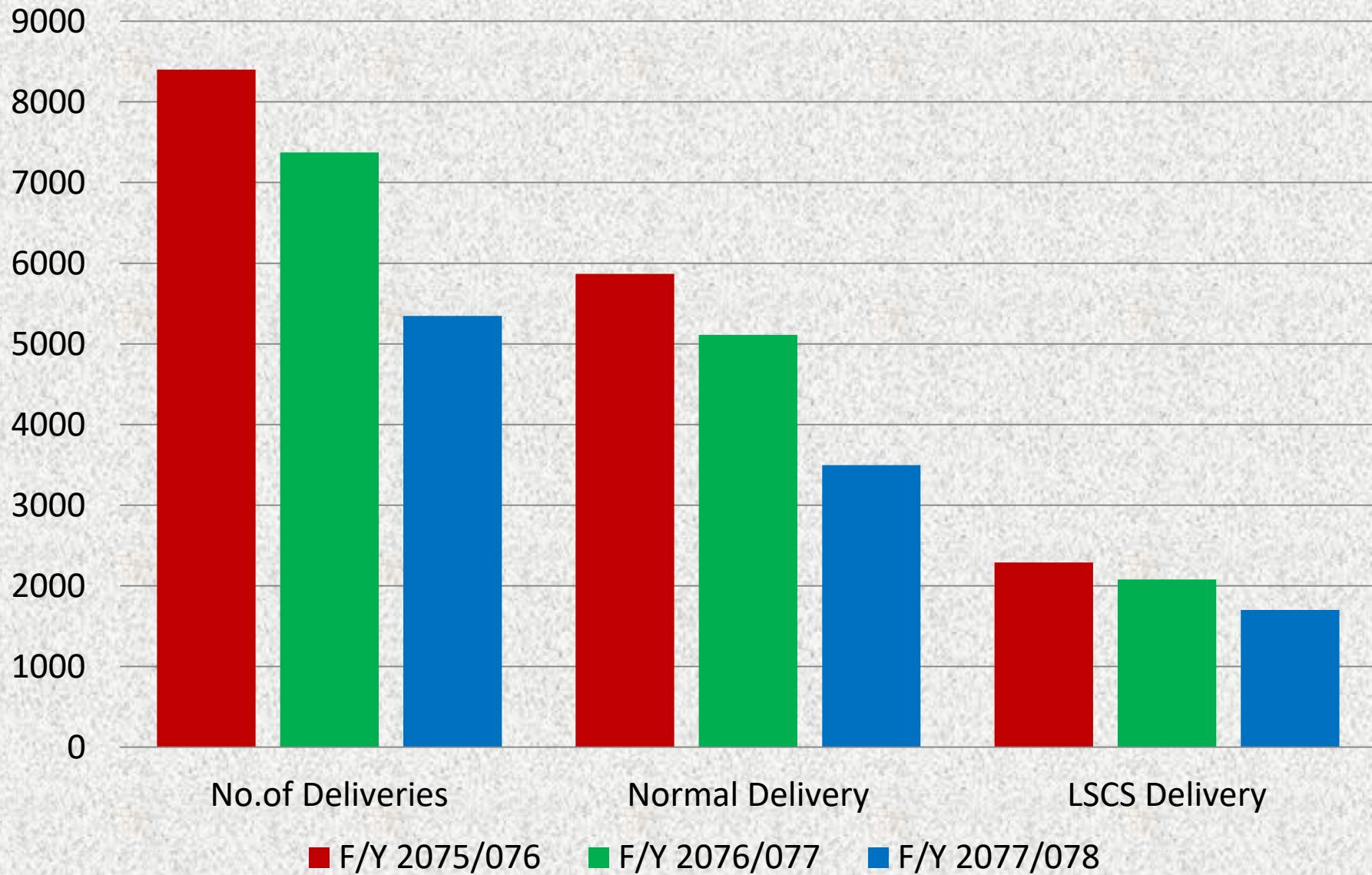
# Top Ten Mortality Among Inpatients

S. N	Mortality in F/Y 075/076		Mortality in F/Y 076/077		Mortality in F/Y 077/078	
	Disease	No. of Patients	Disease	No. of Patients	Disease	No. of Patients
1	COPD	39	COPD	28	COVID-19	228
2	LIVER DISEASE	16	KIDNEY DISEASE	23	PNEUMONIA	36
3	PNEUMONIA	13	LBW	17	BAC.SEPISIS	34
4	BIRTH ASPHYXIA	12	LIVER DISEASE	15	LBW	24
5	PRETERM INFANTS	11	SEPTICAEMIA	13	KIDNEY DISEASE	18
6	SEPTICAEMIA	9	PNEUMONIA	10	LIVER DISEASE	17
7	KIDNEY DISEASE	7	BIRTH ASPHYXIA	7	BIRTH ASPHYXIA	16
8	LBW	6	DIABETES MELITUS	6	COPD	15
9	GASTRO- INTESTINAL HAEMORRHAGE	6	HIV	6	STROKE	7
10	NEONATAL ASPIRATION OF MECONIUM	6	NEONATAL ASPIRATION	5	SEPTICAEMIA	5

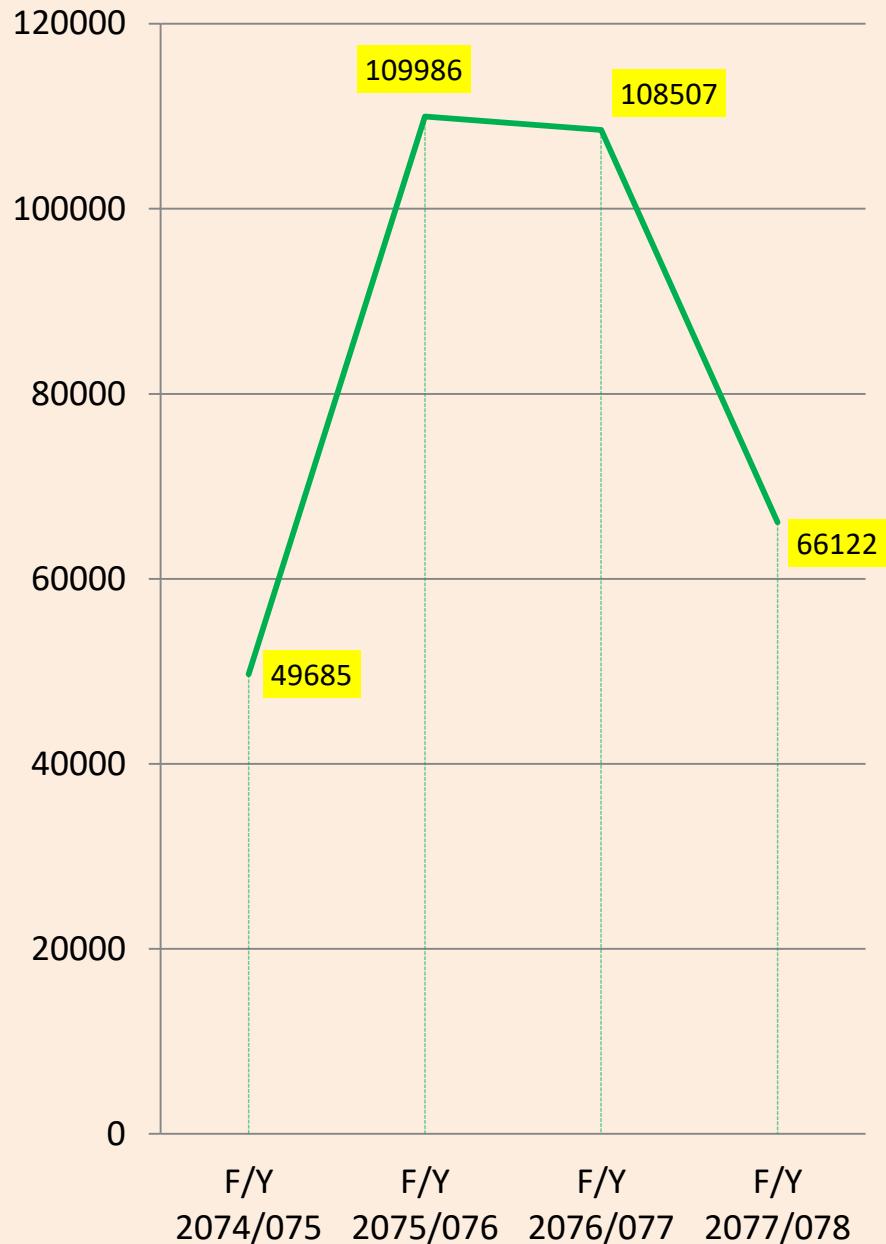
# Hospital Delivery Statistics

Description	F/Y 2075/076	F/Y 2076/077	F/Y 2077/078
No. of Deliveries	8399	7374	5346
No. of Normal Deliveries	5867	5113	3496
No. of Assisted Deliveries (Complicated)	189	149	129
No. of LSCS	2084	2078	1700
LSCS %	24.81	28.18	31.79
Breech	259	33	21
No. of Maternal Deaths	1	1	5
No. of Perinatal Deaths	192	141	180
No. of Early Neonatal Deaths	49	30	67
No. of Late Neonatal Deaths	6	3	2
No. of Still Birth	143	111	113

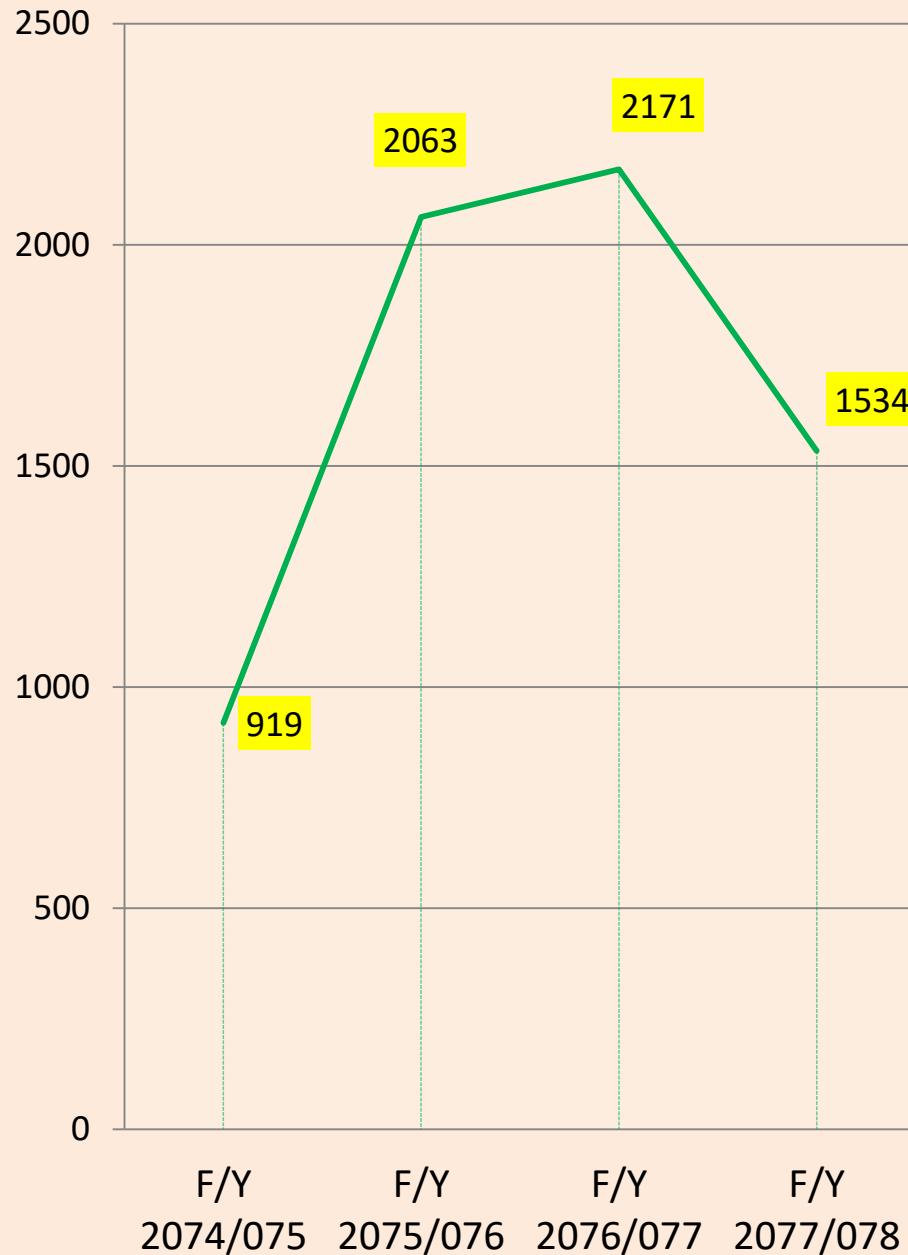
# Hospital Delivery Statistics



## Trend of HI OPD Cases



## Trend of HI Inpatients Cases



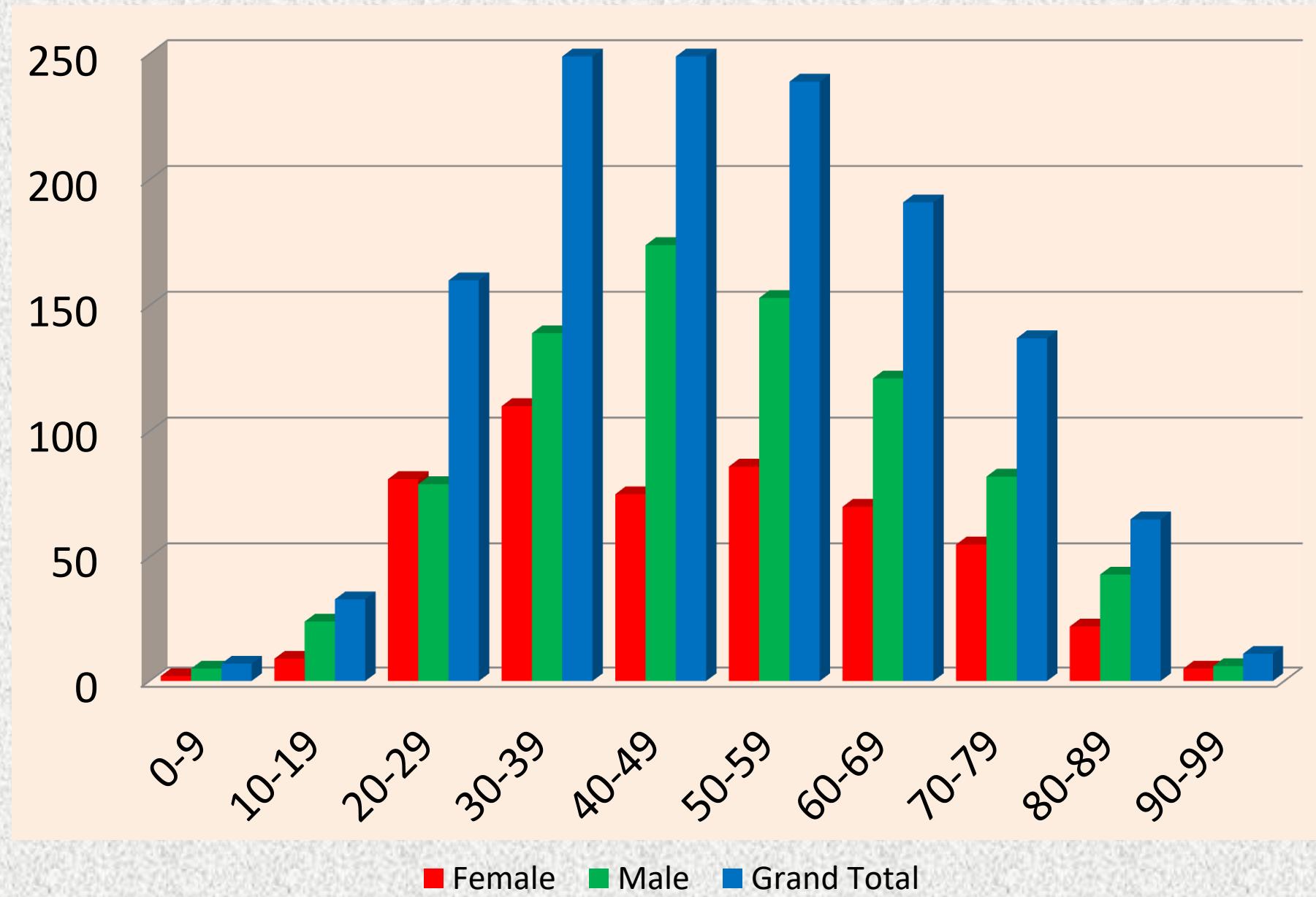
# Target Group Free Health Service

F/Y	Poor	Helpless	Disabled	Sr. Citizens >60	FCHV	Gender Based violence	Others	Total
2075/076	2239	43	202	1677	15	14	94	4284
2076/077	2242	65	256	1622	22	35	65	4306
2077/078	1957	56	195	1545	5	16	57	3831

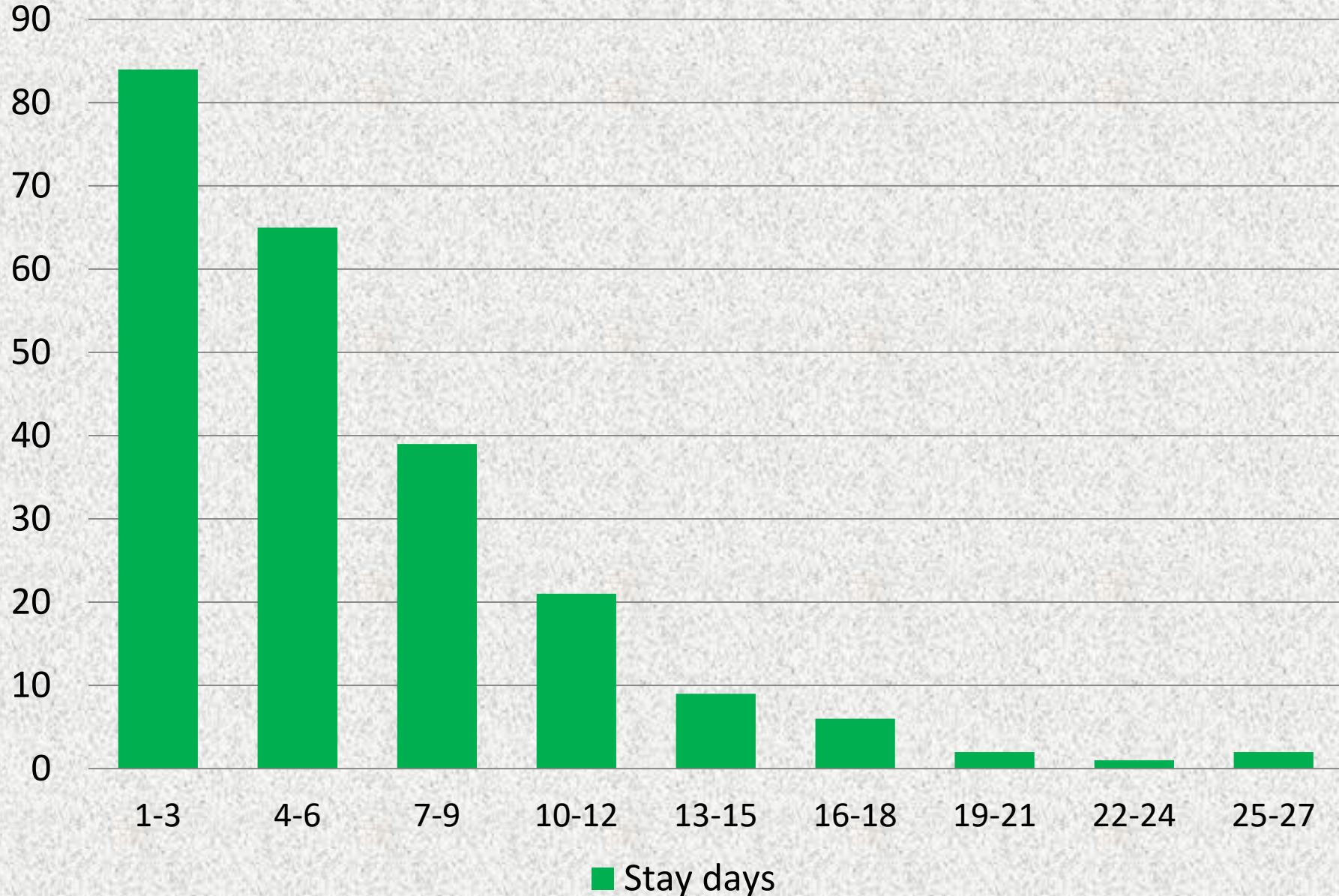
# Free Health Service

F/Y	EMERGENCY	OPD	INDOOR
2075/076	1259	1406	1619
2076/077	1430	1318	1558
2077/078	1356	1321	1154

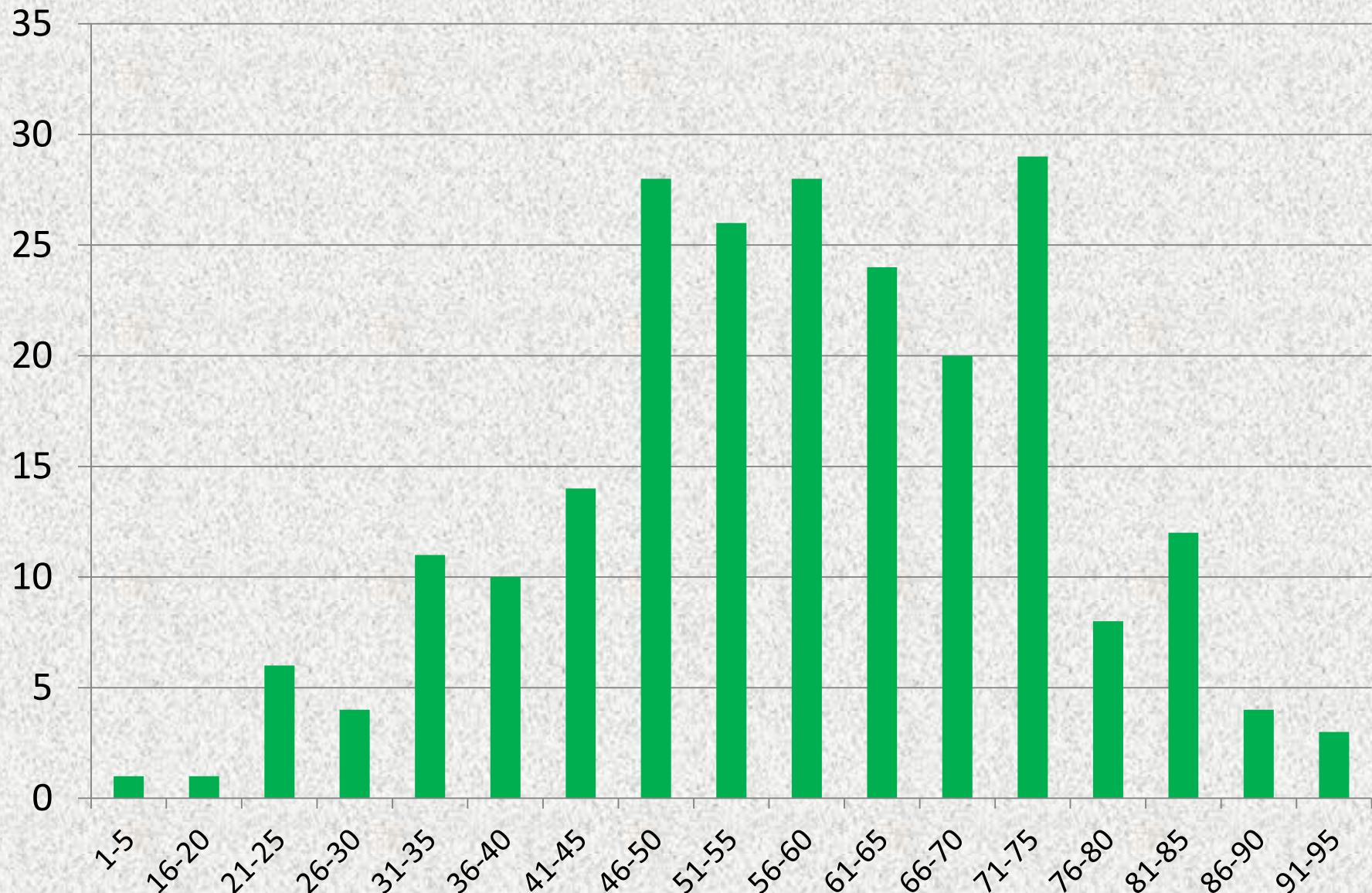
# COVID Admission(F/Y 2077/078)



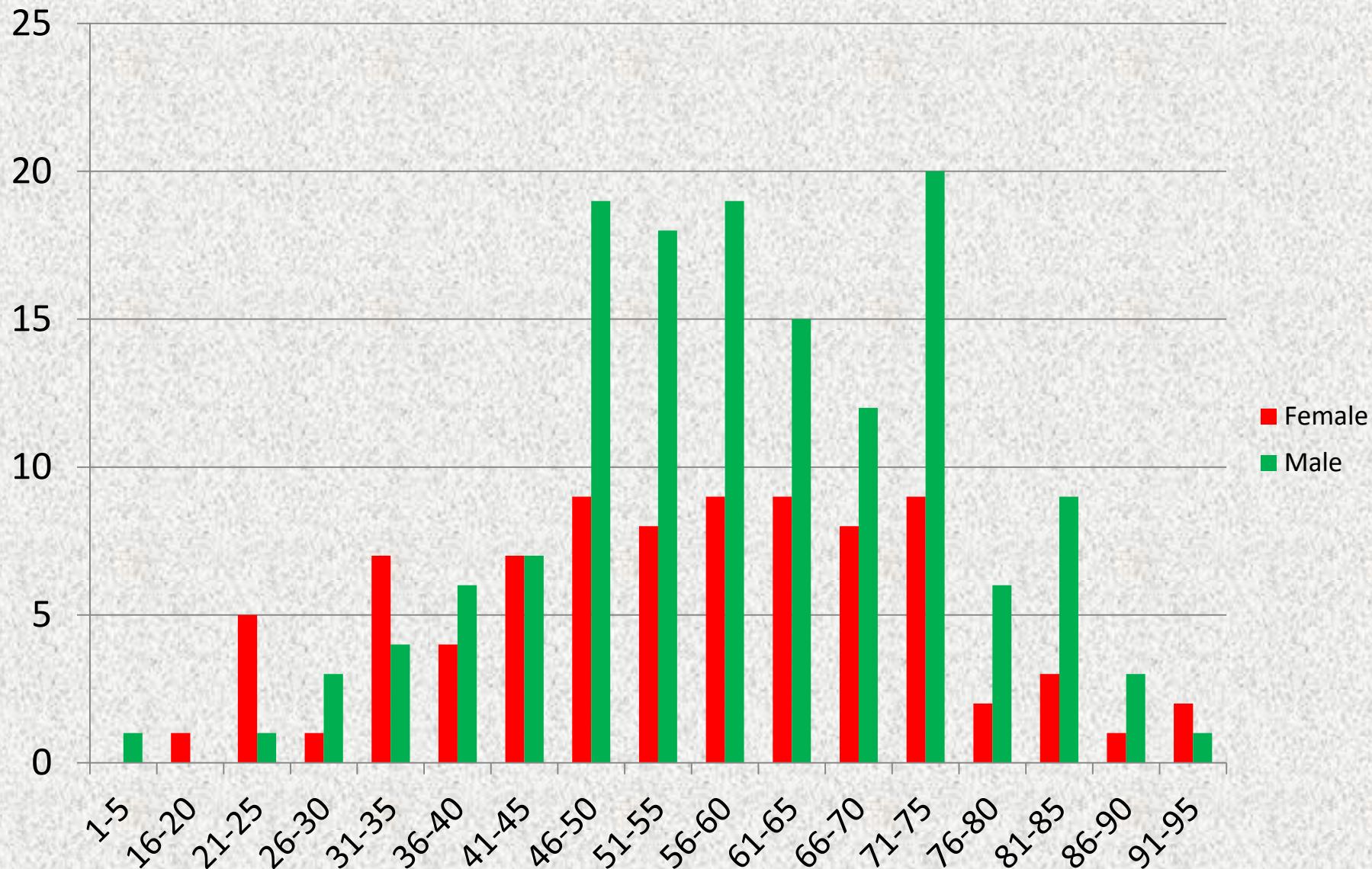
# COVID Death and Hospital Stay days in F/Y 2077/078



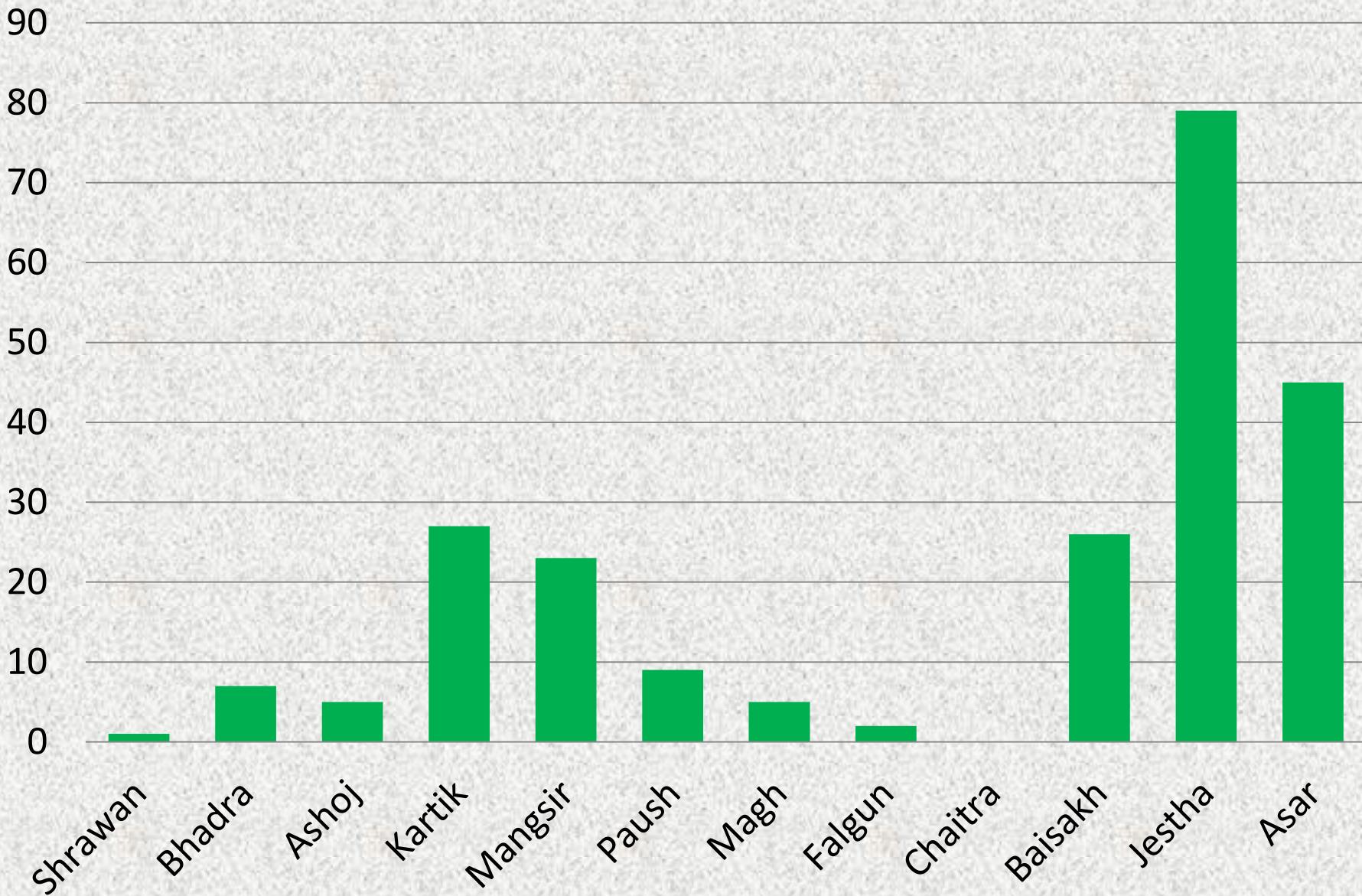
# Age wise COVID death (F/Y 2077/078)



# Age wise COVID Death in F/Y 2077/078



# Month wise COVID death in F/Y 2077/078



# Major Innovations

- Development of PAHS
- Installation of Oxygen Plant
- Starting Super- Speciality Services like cardiology, Gastrology, Nephrology, hepatology, Neurosurgery etc
- MD seat allocation (17+26 seats)
- Admission of MD Residents
- COVID-19 treatment center
- Starting of COVID OPD
- Hospital waste management
- Expansion of dialysis Service
- Established NICU Service from NCU Service

# Continued.....

- Computerized Lab (Interfacing Lab data)
- Hospital beds Increased
- Shifted Maternity and Neonatal service from the new maternity building.
- Token system for OPD and Insurance counter
- Health Insurance Program
- Separate Health Insurance Counter
- New services; RIRS, PCNL, MRI, ESWL, Fibro-Scan, Biopsy, Vit.D, B12 etc

# Hospital Strength

- Adequate Hospital ownership land
- Adequate Water Supply
- ICU, NCU Department
- Advanced Medical Equipments
- Own hospital Pharmacy
- Attachment with PAHS
- Health Insurance Program

# Major Challenges

- Patient's crowd management
- Management of Health Insurance Program
- To run Academic activities MBBS/Nursing in PAHS
- To manage quarter for staffs
- Dead body management
- Insufficient financial subsidy
- Accessibility of beds in maternity /Orthopaedic /Surgical Wards
- To develop as a central and competitive hospital of Gandaki province

# Recommendations

- Need to expand Maternity ,Medical and other over crowded wards.
- Need to expand Hospital Pharmacy and counter in Non-Overlapping Mode.
- Need to establish another OT room.
- Need to establish MICU as soon as possible
- Need to install necessary medical equipments like CT-Scan as soon as possible
- To initiate for the installing of EMR

# Continue..

- Need to establish the Critical Care Management of heart, kidney etc
- Construction of library building.
- To improve overall sanitation system with liquid waste management.
- To increase financial subsidy
- Construction of adequate staff quarter as soon as possible
- Scientific Management of Health Insurance Program
- Development of EMR system
- To Add other Academic activities in PAHS



Administrative Building of Western Regional Hospital, Pokhara



पोखरा स्वास्थ्य विज्ञान प्रतिष्ठान



कोविड-१९ उपचार केन्द्र, पोखरा

COVID-19 Treatment Center, Pokhara



New Maternity Building  
Western Regional Hospital, Pokhara



Thank  
You