CK BIRLA HOSPITALS | RBH
Rukmani Birla Hospital JAIPUR

SUMMER INTERNSHIP (1st May 2023 to 30th June 2023)

Rukmani Birla Hospital (RBH), Jaipur

IIHMR UNIVERSITY

INTERNATIONAL STATISTICAL CLASSIFICATION OF DISEASES & RELATED HEALTH PROBLEMS (ICD) & MORTALITY DATA – A STUDY

Hospital Profile

A unit of Calcutta Medical Research Institute (CMRI) & CK Birla Group -RBH is a Multispecialty Tertiary care 230 bedded NABH accredited Hospital. The foundation of RBH has been laid on 3 key principles- Clinical Excellence, Ethics & Patient centricity

Vision

Aspire to transform the future of healthcare through outstanding clinical outcomes, research, education & compassionate care.

Mission

Committed to bringing global standards of clinical expertise & care to patients & their families.

Organization structure

COO

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Unit Head

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→ Medical Superintendent
- Head Quality
- Head Operations (Clinical)-Med Admin
- Head Operations (Non-clinical)- F&B, Security, Engineering, Housekeeping,PCS
- Head Nursing

→ Head HR
→ Head Marketing
→ Head Supply Chain
→ Head IT
→ Head Finance

ICD (Theoretical learnings)

Dual axis, alphanumeric, diagnostic classification system developed by WHO to generate uniform real time morbidity & mortality data

Methodology (Practical learnings)

Orientation & Hands on training on basis of ICD coding methodology & mortality coding (at MRD,SDMH)

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Audit of cause of death certificates & death summaries for ICD Code

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Classify cause of death as immediate, antecedent & underlying

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Convert disease diagnosis into an alphanumeric ICD Code (up to 4 codes)

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Master sheet generation

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Generation of index -
1. Disease wise Index
2. Department wise Index
3. Doctor wise Index
4. IPD wise Index/Patient wise index
5. Morbidity cum Mortality Report

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Analysis & Recommendation

SWOT

Established Brand, Highly experienced & competent Staff, Space for expansion, Patient satisfaction , Quality patient centric care delivered

Human Resource shortage, High nursing turnover rate

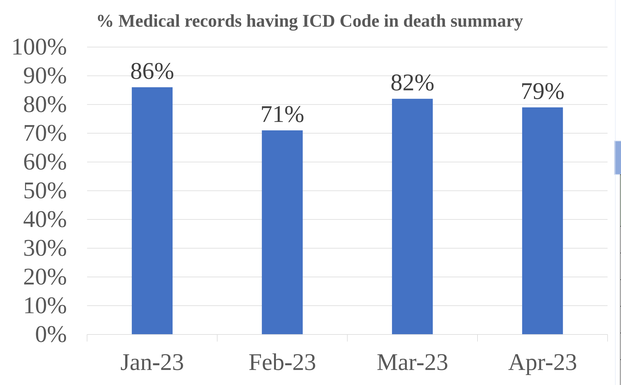
Continuous Medical Education programs, Increasing IPD conversion rates, Technology upgradation, New Quality Improvement Projects such as Code FAST for Stroke, Code Rapid Response Team , Code STEMI

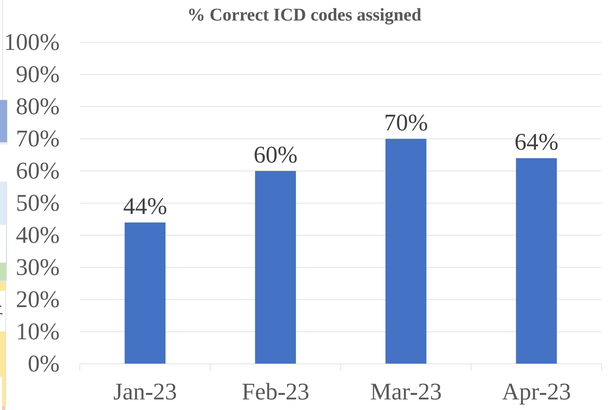
Competing private Hospitals, Employee Retention

Distribution of mortality data

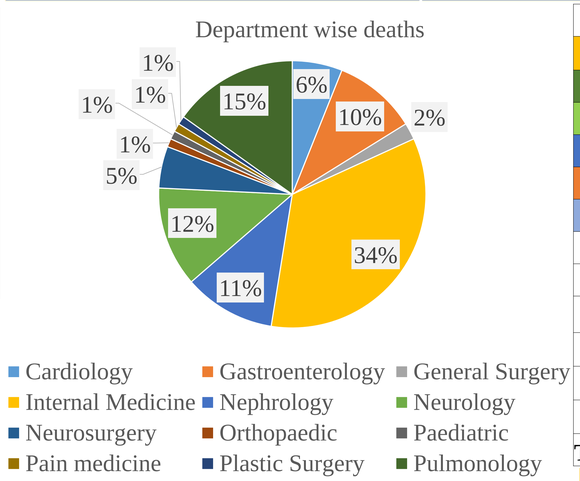
Place of death	Jan-23	Feb-23	Mar-23	Apr-23	Total
MICU	9	17	14	11	**51**
ICCU	3	3	2	2	**10**
Neuro ICU	4	3	6	1	**14**
SICU	7	2	1	0	**10**
HDU	3	3	1	1	**8**
KTU	2	0	3	0	**5**
Others	2	2	1	0	**5**
Total	**30**	**30**	**28**	**15**	**103**

Audit Findings





Department wise index



Department	No of deaths	Mortality %
Internal Medicine	34	34%
Pulmonology	15	15%
Neurology	12	12%
Nephrology	11	11%
Gastroenterology	10	10%
Cardiology	6	6%
Neurosurgery	5	5%
General Surgery	2	2%
Orthopaedic	1	1%
Paediatric	1	1%
Pain medicine	1	1%
Plastic Surgery	1	1%
TOTAL	**99**	

Disease wise index

ICD Code	Diagnosis	No of deaths
N17	Acute Kidney Injury	9
N18	Chronic Kidney Disease	9
I63	Cerebellar infarcts	6
J18	Pneumonia	6
J44	COPD	6
J84	Interstitial Lung Disease	6
K76	Chronic Liver Disease	6

ICD Chapter No	ICD codes	Disease Related Group (DRG)	No of deaths
9	I00-I99	Diseases of the circulatory system	20
10	J00-J99	Diseases of respiratory system	19
14	N00-N99	Diseases of genitourinary system	18
2	C00-D48	Neoplasms	12
11	K00-K93	Diseases of digestive system	10

Other Learnings & Value additions

- Key Performance Indicators (KPIs) & PSQ indicators
- Quality Council & Committees
- Internal Departmental Audits- Pharmacy, BMW etc.
- NABH Self Assessment
- Code FAST Audit for Stroke Excellence –RES-Q
- Incident Reporting –RCA, CAPA
- Hazard identification & Risk Assessment (HIRA)
- Medical Law & Ethics

Challenges

- No centralized pool of all death summaries. Some death summaries were missing on the system
- ICD coding software not available.
- Without ICD coded morbidity & mortality data, finding the exact disease pattern/case mix, deaths to cases, case fatality rates & creating a morbidity cum mortality report is not possible at the moment.
- Cause of death reporting not as per the WHO International form of medical certificate of cause of death.

Suggestions

- Discharge/death summaries can be prepared through HIS so that there is a centralized system with the provision of ICD code as a mandatory field.
- Strengthening of MRD & respective typing pools with ICD coding software application.
- Orientation & training of duty doctors & MRD staff on ICD coding methodology, its relevance & correct way of reporting the cause of death
- Booklet of cause of death certificates to be retained

Usefulness of the Internship (Journey at a Glance as a Quality Intern)

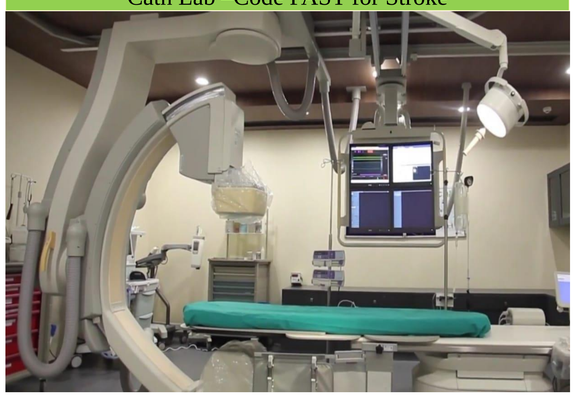
CME Session on MLC

World Blood Donor Day –Poster & Slogan competition (1st prize)

Team Quality

NABH-Nursing Excellence

Cath Lab –Code FAST for Stroke



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