

PSRH 12th
Biennial
scientific
conference-20
17.

BBA Study

Midwife Aliote Galuvakadua

Research Title

- A Retrospective Study on Women Who Birthed their Babies Before Arrival (BBA) to CWMH maternity unit from Jan to Dec 2013.

Introduction/Background

- Definition BBA- woman who birthed their baby before arrival to hospital.
- BBA's contributes to a special group that is at risk to high morbidity and mortality.
- These women can stay longer in the hospital.
- No study done in Fiji.

Study Setting

- CWMH maternity unit-Anderson maternity.
- Largest maternity unit in Fiji.
- Bed state of 169.
- Annual birth average 8000 (CWMH).
- Approximately 40% of Fiji annual births.



Research Team

- Primary Investigator

Aliote Galuvakadua- Midwife: Maternity Unit, Colonial War Memorial Hospital

- Mentor

Sharon Biribo- Acting Director Research College of Medicine Nursing & Health Sciences: Fiji National University

- Advisor

James Fong- HOD O&G CWMH.

Literature Review

- Improving the health of women and children during child birth is an international priority.
- WHO estimated -1,500 women dies per day resulted from complication of child birth and 536,000 maternal deaths yearly.
- BBA's incidence varies 0.1 – 0.3% in developed countries and rises to > 50% in lesser developed countries.

7 Literature Review

- Kumbani, Byani, Chirwa and Odland-qualitative study in rural Southern Malawi ,2013.
- Women’s perspective on perinatal care-titled why women fail to give birth in health facilities.?
- Result- onset of labour at night, rainy season, rapid labour, socio cultural factors and health worker’s attitude.

8 Literature Review

- Eakabua, Odusolo, Agan, Ikalaki, Etokidan –study in South Eastern ,Nigeria,2011.
- Focus- awareness of BPP/CRP and assess the use of maternity services, a multi centric study looking at 800 women.
- Result- prevailing illiteracy, insufficient infrastructure, poor transport system and unpredicted assess to health care providers.
- BPP/CRP-promotes skilled care for all births and encourages decision making before the onset of labour.

Research Question

What are the factors influencing women to birth their babies before arriving to CWMH?

Aim

Investigate factors influencing women to birth their babies before arriving to CWMH.

Objectives

- Describe the socio demographic characteristics of women who birth their babies before arrival
- Describe maternal and foetal outcomes
- Audit documented interview conducted post BBA for reasons for BBA

BBA Annual Report Summary

A retrospective record review BBA's CWMH 2013. 12 months period Jan- Dec.

Year	Total Birth	BBA
2011	7920	63
2012	8207	68
2013	8717	62
Total	24844	193

11 Methodology: Process for data collection

Research Approvals

- Facility approval (HOD, MNS, MS of CWM Hospital)
- National Health Research Committee (NHRC)
- Fiji National Health Research Ethics Review Committee (FNRERC)

Securing Funds

- Request sent to NHRC (through MOH Research Secretariat)
- Request sent to PSRH

Case Identification

- Identification of BBA cases from Maternity Unit Register
- Note National Health Number (NHN) to identify folders

Data Collection

- Registry Staff assisted with folder retrieval
- PI: Commenced data collection of BBA study variables according to Standard Data Collection Sheet
- Patient Confidentiality maintained using a Data De-identification/ Coding form

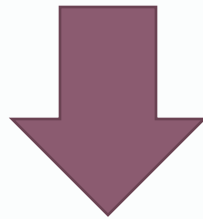
Data de-identification Form

Study number	NHN	Participant name	participants fathers name
BBA 1			
BBA 2			
BBA 3			



Data-2013

I-taukei	Fijians of Indian descent	Fijian of Other Origin
57	4	1
Total = 62		



- 49 Folders retrieved
- Folder retrieval rate = 79%

Analyses

- Descriptive study
- Results represented as Counts, Frequencies and Percentages
- Folder retrieval rate < 80%, therefore unable to make generalizable conclusions

15 Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. Ethnicity of mothers who BBA

		Ethnicity of Mothers		
		I-Taukei N (%)	Fijian of Indian Descent N (%)	Row Total N (%)
Age Groups	15-19 Yrs	4 (8.5)	2 (4.3)	6 (12.8)
	20-24 Yrs	14 (29.8)	0	14 (29.8)
	25-29 Yrs	12 (25.5)	1 (2.1)	13 (27.7)
	30-34 Yrs	9 (19.1)	0	9 (19.1)
	35-40 Yrs	4 (8.51)	1 (2.1)	5 (10.6)
Column Totals		43 (91.5)	4 (8.5)	47 (100)

16 Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. Marital Status of mothers who BBA

		Marital Status of Mothers				Row Totals N (%)
		Not Indicated N (%)	Married N (%)	Single N (%)	Divorced N (%)	
Age Groups	15-19 Yrs	0	2 (4.3)	2 (4.3)	2 (4.3)	6 (12.8)
	20-24 Yrs	0	6 (12.8)	5 (10.6)	3 (6.4)	14 (29.8)
	25-29 Yrs	1 (2.1)	8 (17)	2 (4.3)	2 (4.3)	13 (27.7)
	30-34 Yrs	0	8 (17)	1 (2.1)	0	9 (19.1)
	35-40 Yrs	0	3 (6.4)	2 (4.3)	0	5 (10.6)
Column Totals		1 (2.1)	27 (57.4)	12 (25.5)	7 (14.9)	47 (100)

17 Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. Level of education of mothers who BBA

		Level of Education				Row Totals N (%)
		Not Indicated N (%)	Primary N (%)	Secondary N (%)	Tertiary N (%)	
Age Groups	15-19 Yrs	0	0	6 (12.8)	0	6 (12.8)
	20-24 Yrs	1 (2.1)	1 (2.1)	8 (17)	4 (8.5)	14 (29.8)
	25-29 Yrs	0	2 (4.3)	6 (12.8)	5 (10.6)	13 (27.7)
	30-34 Yrs	1 (2.1)	1 (2.1)	3 (6.4)	4 (8.5)	9 (19.1)
	35-40 Yrs	0	1 (2.1)	4 (8.5)	0	5 (10.6)
Column Totals		2 (4.3)	5 (10.6)	27 (57.4)	13 (27.7)	47 (100)

Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. Employment Status of mothers who BBA

		Employment Status			Row Totals N (%)
		Not Stated N (%)	Employed N (%)	Not Employed N (%)	
AgeGroups	15-19 Yrs	1(2.1)	1(2.1)	4 (8.5)	6 (12.8)
	20-24 Yrs	1 (2.1)	2 (4.3)	11 (23.4)	14 (29.8)
	25-29 Yrs	1 (2.1)	2 (4.3)	10 (21.3)	13 (27.7)
	30-34 Yrs	0	4 (8.5)	5 (10.6)	9 (19.1)
	35-40 Yrs	0	1 (2.1)	4 (8.5)	5(10.6)
Column Totals		3 (6.4)	10 (21.3)	34 (72.3)	47 (100)

19 Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. ANC Booking Status of mothers who BBA

		ANC Booking Status		Total N (%)
		Booked N (%)	Unbooked N (%)	
AgeGroups	15-19 Yrs	4 (8.5)	2 (4.3)	6 (12.8)
	20-24 Yrs	12 (25.5)	2 (4.3)	14 (29.8)
	25-29 Yrs	10 (21.3)	3 (6.4)	13 (27.7)
	30-34 Yrs	8 (17)	1 (2.1)	9 (19.1)
	35-40 Yrs	3 (6.4)	2 (4.3)	5 (10.6)
Column Totals N (%)		37 (78.8)	10 (21.3)	47 (100)

20 Results

Socio-demographic characteristics of women who Birthed Before Arrival

Table of Age Groups vs. Parity of mothers who BBA

		Mother's Parity			Row Total N (%)
		1-3 N (%)	4-6 N (%)	7-9 N (%)	
Age Groups	15-19 Yrs	5 (11.1)	0	0	5 (11.1)
	20-24 Yrs	13 (28.9)	0	0	13 (28.9)
	25-29 Yrs	11 (24.4)	2 (4.4)	0	13 (28.9)
	30-34 Yrs	5 (11.1)	4 (8.9)	0	9 (20)
	35-40 Yrs	2 (4.4)	2 (4.4)	1 (2.2)	5 (11.1)
Column Totals		36 (80)	8 (17.8)	1 (2.2)	45 (100)



Results

Maternal & foetal outcomes of women who Birthed Before Arrival in 2013

Table of ANC Booking Status vs. VDRL Status of mothers who BBA

		ANC Booking Status		Row Total N (%)
		Booked N (%)	Unbooked N (%)	
VDRL Status	Non-Reactive	34 (69.4)	3 (6.1)	37 (75.5)
	No Tests Done	0	8 (16.3)	8 (16.3)
	Positive (All Dilutions)	4 (8.2)	0	4 (8.2)
Column Totals N (%)		38 (77.6)	11 (22.4)	49(100)

Results

Maternal & foetal outcomes of women who Birthed Before Arrival in 2013

Table of Age Groups vs. Status at discharge of babies who were BBA

		Status at Discharge		Row Totals N (%)
		Alive at Discharge N (%)	Stillbirth N (%)	
AgeGroups	15-19 Yrs	5 (10.6)	1(2.1)	6 (12.8)
	20-24 Yrs	14 (29.8)	0	14 (29.8)
	25-29 Yrs	12 (25.5)	1(2.1)	13 (27.7)
	30-34 Yrs	9 (19.1)	0	9 (19.1)
	35-40 Yrs	4 (8.5)	1(2.1)	5 (10.6)
Column Totals N (%)		44 (93.6)	3 (6.7)	47 (100)

Results

Maternal & foetal outcomes of women who Birthed Before Arrival in 2013

Table of Age Groups vs. Status at discharge of babies who were BBA

		Baby's Gender		Row Total N (%)
		Male N (%)	Female N (%)	
Gestational Age	Unknown	1 (2.0)	0	1 (2.0)
	Term	18 (36.7)	24 (49)	42 (85.7)
	Preterm	2 (4.4)	4 (8.2)	6 (12.2)
Column Total N (%)		21 (42.9)	28 (57.1)	49 (100)

24 Results

Maternal & foetal outcomes of women who Birthed Before Arrival in 2013

Table of Age Groups vs. Outcome of babies who were BBA

		Outcomes				Row Total N (%)
		Not Recorded N (%)	Discharge to Mother N (%)	Admitted to Nursery N (%)	Complications N (%)	
Age Groups (Years)	15-19	1 (2.1)	5 (10.6)	0	0	6 (12.8)
	20-24	0	13 (27.7)	1 (2.1)	0	14 (29.8)
	25-29	1 (2.1)	12 (25.5)	0	0	13 (27.7)
	30-34	0	8 (17)	1 (2.1)	0	9 (19.1)
	35-40	0	4 (8.5)	0	1 (2.1)	5 (10.6)
Column Total N (%)		2 (4.3)	42 (89.4)	2 (4.3)	1 (2.1)	47 (100)

Results

Reasons why women Birthed Before Arrival in 2013

Table of Ethnicity vs. whether Birth Preparedness Plan & Complication Readiness Plan had been done

		BPP CRP Done			Total N (%)
		Not recorded N (%)	Yes N (%)	No N (%)	
Ethnicity of mothers	I-Taukei	10 (20.4)	8 (16.3)	25 (51)	43 (87.8)
	Fijian of Indian Descent	0	1 (2)	5 (10.2)	6 (12.2)
Column Total N(%)		10 (20.4)	9 (18.4)	30 (61.2)	49 (100)

Results

Reasons why women Birthed Before Arrival in 2013

Reasons for Birthing Before Arrival	Frequency	%
None Documented,	41	84.0
Health Centre Referral	2	4.0
Counseled by Empower Pacific	1	2.0
Did not think she was pregnant.	1	2.0
Mentally Challenged	1	2.0
Intended to go for booking	1	2.0
Referred to social welfare	1	2.0
Unemployed, single, 2 eldest children given up for adoption	1	2.0
Total	49	100.0

27 Conclusion: Socio-demographic characteristics of women who birthed before arrival in 2013

- Almost **70%** of women belonged to the age range of 20-29 years
- 91.5% of women were I-Taukei
- Almost **60%** of women were married
- **57.4%** of women received primary level of education and a further **27.7%** had tertiary level education
- 72.3% of women were not employed
- **80%** of women who birthed before arrival had parity of 1-3. Of these, **19.1%** had parity of 1. **17.8%** had parity between 4-6
- **78.8%** of mothers were booked

Conclusion: Maternal & Foetal outcomes of women who birthed before arrival in 2013

- 8.2% of women who tested VDRL Positive were booked mothers
- 93.6 % of babies were alive at discharge
- 89.4% of babies were discharged to their mothers with only 5.4% needing admission to the nursery or having a complication (pre-term)
- Slightly more females were born than males, but the majority, 85.7% were born at term

Conclusion: Reasons Why women birthed before arrival in 2013

- For the 87.8 % of I-Taukei women who BBA, 51% did not have a BPP CRP done
- For the 12.2% Fijians of Indian descent, 10.2% did not have a BPP CRP done
- Overall, documentation for reasons why women birthed before arrival was not recorded: 84%

Recommendations:

- Amend the interview section of the BPP to include specific questions for doctors, nurses and midwives to document specific reasons why the mother birthed before arrival
- Conduct a study interviewing mothers who have Birthed before arrival to understand reasons (some women were multiparous, had tertiary level education, were married and were employed)
- Availability of funds from MOHMS for staff to conduct research: Need to reinstate \$5,000.00 research grants to facilitate research

31 Utilization of results

- This study is the first in Fiji to document outcomes of mother and babies of BBA's.
- Study will assist healthcare professionals to target awareness among mothers and plan intervention strategies toward preventing BBAs
- Improve the quality of documentation in the interview section
- Develop SOP for BBA's especially documentation: Reasons for BBA, including personal, social, cultural or economic reasons.
- Presentations and publications regarding BBA in the PSRH Journal

Strengths of the Study:

Study was conducted using Observational Routinely-collected health

Data and attempted to adhere to the RECORD guidelines.

Limitations:

- Lack of funding support from MOHMS research secretariat (delay in implementation)
- Lack of technical support (limited access to workplace computers for data entry etc.)
- Retrieval of patient's record: Missing folders
- BBA interview: Not focused, no structured questions.

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Vinaka...!

