CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
SJIF Impact Factor: 7.187
http://doi.org/10.5281/zenodo.4369402

Avalable online at: http://www.iajps.com *Research Article*

THE INVOLVEMENT OF HOSPITALISTS AND MATERNAL FETAL MEDICINE (MFM): SUBSPECIALISTS IN HOSPITAL OBSTETRICAL CARE

[1]Dr Benazeer, [2]Dr. Aamir Shahzad, [3]Dr. Mahreen Zia
[1]Medical officer in Rahnuma Family Planning Association of Pakistan
[2]BHU Aurangabad, Jand, Attock
[3]BHU Khunda, Jand, Attock

Article Received: October 2020 **Accepted:** November 2020 **Published:** December 2020

Abstract:
Objective: *The target of this investigation was to assess the part of hospitalists and Maternal Fetal Medicine (MFM) subspecialists in obstetrical inpatient care.*
Methods: *This electronic study was offered to individuals from the American College of Obstetrics and Gynecology (ACOG; n ¼ 1,039) and the Society for Maternal-Fetal Medicine (SMFM; n ¼ 1,813). Our current research conducted at Sir Ganga Ram Hospital, Lahore from March 2019 to February 2020.*
Results: *Overall, 607 (21%) respondents finished the overview. Largely, 35% revealed that hospitalists gave care in at any rate one of their emergency clinics. Contrasted and ACOG respondents, a higher recurrence of SMFM respondents detailed solace with emergency clinic is giving consideration to all ladies on work and conveyance (74.4 versus 43.5%, p ¼ 0.005) and ladies with complex issues (56.4 versus 43.5%, p ¼ 0.004). Most of ACOG respondents to some degree/totally concurred that hospitalists related with diminished unfavorable occasions (69%) and improved security/wellbeing society (70%). Generally, 35% of ACOG respondents have MFM meeting accessible with 53% having inpatient inclusion. Of these, 85% were satisfied with MFM accessibility.*
Conclusion: *Over 33% of respondents work in units set up with hospitalists and the greater part have inpatient MFM inclusion. It is essential to assess if and how hospitalists can improve maternal and perinatal results, and the sorts of emergency clinics that best served by them.*
Keywords: *Hospitalists and Maternal Fetal Medicine (MFM): Subspecialists Hospital Obstetrical Care.*

Corresponding author:
Dr. Benazeer,
Medical officer in Rahnuma Family Planning Association of Pakistan

QR code

Please cite this article in press Benazeer et al., ***The Involvement Of Hospitalists And Maternal Fetal Medicine (MFM): Subspecialists In Hospital Obstetrical Care.,*** *Indo Am. J. P. Sci, 2020; 07(12).*

INTRODUCTION:

Within the past decade, the obstetrical (Ob) "hospitalists," also referred to as "laborists," have increasingly been utilized to provide care in labor and delivery (L&D) units [1]. First described in 2003, the obstetric hospitalist model was introduced with the hope of decreasing physician workload and improving patient care and satisfaction [2]. This model was initially conceptualized to include physicians who provided continuous monitoring of patients on the L&D unit. Concurrent with the rise in hospitalist care, there has been increased focus on treatment of complex maternal conditions by Maternal Fetal Medicine (MFM) subspecialists.4,5 In a 2013 call to action, Dalton emphasized the vital role that MFM physicians have in the care of complex women, and indicated that MFM physicians should be readily available to provide care to the medically complicated obstetrical inpatient [3]. With the increasing prevalence of Ob hospitalists and the recent focus on inpatient care of the complex obstetrical patient to reduce maternal morbidities and mortality, we sought to explore the current practices regarding care of the obstetrical inpatient [4]. This survey study was intended to evaluate the role of Ob hospitalists and MFM subspecialists in obstetrical inpatient care, to evaluate the comfort level of general Obstetrician Gynecologist specialists and MFM subspecialists regarding Ob hospitalist care for specific groups of inpatients, and to establish the level of satisfaction of Ob/Gyn specialists regarding MFM services available to their patients [5].

METHODOLOGY:

Separate surveys were offered to members of the American College of Obstetricians and Gynecologists (ACOG) and members of the Society for Maternal Fetal Medicine (SMFM) during the time periods noted later. Our current research was conducted at Sir Ganga Ram Hospital, Lahore from March 2019 to February 2020. The study was reviewed by the Institutional Review Board at the University of Pennsylvania and found to meet the criteria for exemption.

Study Population and Survey Administration

The surveys were tailored to each organization: the ACOG survey focused on the perspective of the general Ob/Gyn specialist, and the SMFM survey focused on the perspective of the MFM subspecialist. A computer-generated random sample of ACOG fellows and junior fellows currently in practice received the e-mail (*n* ¼ 611) as well as all members (*n* ¼ 552) of ACOG's Collaborative Ambulatory Research Network (CARN). CARN consists of ACOG fellows and junior fellows in practice who have volunteered to participate in survey studies without compensation. Members of ACOG were instructed to only complete the survey if they provided inpatient obstetrical care and were not an MFM physician. If respondents indicated that they did not provide inpatient obstetrical care or were an MFM physician, they were excluded from the analysis. ACOG members received an e-mail with a link to complete the survey via Real Magnet.[6] They were given 10 weeks to complete the survey and received five e-mail reminders.

Data Analysis:

Data were imported into Stata version 12.0 (Stata Corpora- tion, College Station, TX) for analysis. Chi-square tests were used to compare categorical variables, *t*-tests were used to compare parametric data, and tests of proportions were used to compare percentages and proportions. A *p*-value < 0.05 was considered statistically significant.

RESULTS:

A total of 2,976 physicians were contacted (►Fig. 1). Overall, 114 responding ACOG members were ineligible as they were either MFM physicians or do not provide inpatient obstetrical care. Of the remainder (1,813 SMFM and 1,039 ACOG), 213 ACOG and 394 SMFM members completed the survey. The overall response rate was 21.3% (*n* ¼ 607). The SMFM non-responders included both MFM physicians who chose not to respond as well as those who were ineligible because they did not provide inpatient care. Therefore, the specific number of SMFM members who were ineligible is unknown.

Table 2 presents information on the role of the obstetrical hospitalist. Respondents reported similar frequencies regarding the types of patients the hospitalists care for at their institution. Less than 10% of respondents reported that hospitalists care for patients with complex or high risk issues. Regarding their comfort with the types of patients that the hospitalists care for, SMFM respondents were more likely to be somewhat or very comfortable with Ob hospitalists pro- viding care for all women on L&D, and specifically with Ob hospitalists caring for women with complex obstetrical is- sues. A minority of ACOG members (range, 33–44%) were comfortable with Ob hospitalists providing care to any type of obstetric patients. Regarding the impact on L&D outcomes, the majority of ACOG respondents somewhat or

completely agreed that the presence of Ob hospitalists was associated with decreased adverse events (69%), improved safety and safety culture (70%), improved house staff training (60%), and improved provider satisfaction (73%).

Approximately 85% of respondents were satisfied with the availability of MFM subspecialists for in-person questions/consultations for women with complex conditions and for the delivery of these women. About 80% of respondents were satisfied with the MFM service provided for critically ill obstetrical patients. Of those who were not satisfied with the MFM services, the majority (67%) indicated a preference for MFM availability 24 hours daily.

DISCUSSION:

We surveyed general Ob/Gyn specialists and MFM subspecialists to evaluate the roles of hospitalists and MFM subspecialists in the care of the obstetrical inpatient. Consistent with published data,8 approximately 35% of respondents had Ob hospitalists working at their hospital.

Table 1: Demographic and practice characteristics of respondents:

Demographic characteristic	ACOG (*n* ¼ 213)	SMFM (*n* ¼ 394)	*p*-Value
Female gender	126 (59)	117 (45)	< 0.001
Age[a]	50.4 (9.9)	52.6 (9.5)	0.006
Years in practice[a]	17.8 (9.9)	17.6 (9.6)	0.8
Level of hospital/NICU			
Level I	49 (23)	23 (6)	< 0.001
Level II	70 (33)	42 (11)	
Level III	94 (44)	329 (83)	
Type of hospital			
Urban university or university affiliate	61 (29)	237 (60)	< 0.001
Urban community	92 (43)	127 (32)	
Rural community	43 (20)	12 (3)	
Other	17 (8)	18 (5)	
Type of ObGyn			
MFM	0	394 (100)	—
Generalist	184 (87)	0	
Hospitalist	9 (4)	0	
Combination of generalist/hospitalist	20 (9)	0	
Hospitalists are present in at least one of the hospitals	84 (39)	130 (33)	0.1
Number of years hospitalists have been employed			
0–5	148 (69)	249 (63)	< 0.001
6–10	40 (19)	91 (23)	
> 10	25 (12)	54 (14)	
Who employs the hospitalists			
The hospital/university	88 (41)	192 (49)	0.09
Independent group	37 (17)	48 (12)	
A hospitalist company	21 (10)	19 (5)	
The MFM division	5 (3)	39 (10)	
Part of a private practice or multispecialty group	27 (13)	70 (18)	
Other	21 (10)	26 (6)	
Unknown	14 (6)	0	

In terms of the MFM subspecialty, 84% of MFM subspecialists practiced in a hospital with a level III NICU with the majority (60%) at university centers. More than three-quarters of Ob/Gyn specialists practice in hospitals with a level II or level III NICU and 72% have MFM availability for patient care, with 53% having inpatient MFM availability [5]. It is not surprising that 28% of ACOG respondents did not have MFM subspecialists available for patient care as 23% of respondents practice in a hospital with a level I NICU [6].

Interestingly, in our survey, MFM subspecialists were more comfortable with hospitalists providing care to all patients on L&D units, while the majority of MFM and Ob/Gyn physicians were not comfort- able with Ob hospitalists providing care to women with complex medical and complex fetal conditions [7]. The reasons why Ob/Gyn specialists appear to be less comfortable with Ob hospitalists providing inpatient obstetric care remain to be elucidated. These differences in comfort level may be a Table 2 Role of the obstetrical hospitalists barrier to acceptance of the role of hospitalists in inpatient obstetrical care [8].

Table 2:

Percentage of respondents who report that hospitalists care for the following types of patients[a]			
	ACOG (*n* ¼ 213)	SMFM (*n* ¼ 394)	*p*-Value
Women with complex medical conditions	17 (8)	30 (8)	1.0
Women with complex obstetrical conditions	20 (10)	38 (10)	1.0
Women with complex fetal conditions	15 (7)	22 (6)	0.6
All women on L&D	36 (17)	53 (13)	0.2
All women on L&D except private patients	41 (19)	40 (10)	0.002
Patients of the MFM practice	18 (8)	29 (7)	0.6
Women in the intensive care unit	16 (8)	6 (2)	0.001
Percentage of respondents who were somewhat or very comfortable with hospitalists providing care to the following groups of patients:[a]			
	ACOG (*n* ¼ 213)	SMFM (*n* ¼ 394)	*p*-Value
All women on L&D	93 (44)	293 (74)	0.005
Women with complex medical conditions	80 (38)	174 (44)	0.1
Women with complex obstetrical conditions	93 (44)	222 (56)	0.004
Women with complex fetal conditions	72 (34)	115 (29)	0.3
What is the impact of the hospitalist on various outcomes ?[b]			
	ACOG (*n* ¼ 213)		
	Somewhat/completely agree		
Decreased adverse events	147 (69)		
Decreased malpractice claims	78 (37)		
Decreased cesarean deliveries	62 (29)		
Improved neonatal outcomes	97 (46)		
Improved patient satisfaction	94 (44)		
Improved provider satisfaction	155 (73)		
Improved safety and safety culture	149 (70)		
Improved house staff training	127 (60)		

Importantly, ACOG respondents indicated a perception of improved safety environment, decreased adverse events, and improved house staff training with hospitalist care [9]. In addition, with the continued presence of Ob hospitalists on obstetrical inpatient units and the continued push for this expanding specialty, it is important to evaluate the types and location of hospitals that would best be served by the Ob hospitalist [10].

Table 3: What is the definition of an obstetrical hospitalist

Definition	*n* (%) *n* ¼ 394
Part of a group providing 24/7 coverage on L&D	126 (32)
Maintains a full office practice but is assigned to cover unassigned patients on L&D and/or in the emergency room. Assists other providers for a particular shift (Doc of the day).	41 (10)
Covers unassigned patients on L&D and/or in the emergency room. Assists other providers for all of their shifts, having no office practice.	69 (18)
Maintains a full office practice and takes call covering their group's patients as well as unassigned patients and assists other providers for a particular shift.	41 (10)
No office practice but covers their group's patients as well as unassigned patients and assists other providers for all of their shifts.	56 (14)
Other	61 (15)

CONCLUSION:

While only a minority of ACOG respondents expressed comfort with Ob hospitalists providing care for women on L&D, the majority indicated a perception that Ob hospitalists improve safety and safety culture, decrease adverse events, and improve house staff training. It is important to evaluate if and how hospitalists can improve maternal and perinatal outcomes, and the types of hospitals that are best served by them.

REFERENCES:

1. Weinstein L. The laborist: a new focus of practice for the obstetrician. Am J Obstet Gynecol 2003;188(2): 310–312
2. Funk C, Anderson BL, Schulkin J, Weinstein L. Survey of obstetric and gynecologic hospitalists and laborists. Am J Obstet Gynecol 2010;203(2):177.e1–177.e4
3. Olson R, Garite TJ, Fishman A, Andress IF. Obstetrician/gynecologist hospitalists: canwe improve safety and outcomes for patients and hospitals and improve lifestyle for physicians? Am J Obstet Gynecol 2012;207(2):81–86
4. D'Alton ME, Bonanno CA, Berkowitz RL, et al. Putting the "M" back in maternal-fetal medicine. Am J Obstet Gynecol 2013;208(6):442–448
5. D'Alton ME. Where is the "M" in maternal-fetal medicine? Obstet Gynecol 2010;116(6):1401–1404
6. Real Magnet. Available at: https://www.realmagnet.com/solutions/ survey-management/. Accessed April 20, 2014
7. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform 2009;42(2): 377–381
8. Srinivas SK, Lorch SA. The laborist model of obstetric care: we need more evidence. Am J Obstet Gynecol 2012;207(1): 30–35
9. Wenstrom K, Erickson K, Schulkin J. Are obstetrician-gynecologists satisfied with their maternal-fetal medicine consultants? A survey. Am J Perinatol 2012;29(8):599–608
10. Funk C, Anderson BL, Schulkin J, Weinstein L. Survey of obstetric and gynecologic hospitalists and laborists. Am J Obstet Gynecol 2010;203(2):177.e1–177.e4.