

Assessment of the Quality of Care Provided for Normal Delivery in three Hospitals in Baghdad

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Abstract:

Objective: The aim of the current study is to assess the quality of care provided for normal deliveries by normal delivery records review.

Design: During the period from the first of April to the end of May 2002, (180) normal delivery records were reviewed for the year preceding the study (1/1/2001 – 31/12 / 2001) in three hospitals in Baghdad (Al-Yermouk , Al-Ilwiyia and Abu – Graib) .

Results: The study revealed that , standard delivery records (partographs) were available in all three hospitals surveyed , but the Partograph was either not used or used for selected cases .

Analysis of normal delivery record to assess the quality of a normal vaginal delivery practice showed that vaginal examination was done according to the norms in the majority of cases (90.2%) , while fetal heart and blood pressure monitoring was done (according to the norms) in 45% and 32.2% of cases respectively . The birth weight and assessment of the condition of the baby was reported in 67.2% and 17.2% of records respectively.

Conclusion: To improve the current situation, several actions were suggested.

Key words: Normal delivery, quality of care

Introduction:

Evaluation of health care has largely developed over the last 50 years . The limitation in the availability of resources of health services was one of the main factors that stimulating the move towards evaluation ^[1] .Attention to the quality of care has also been growing in the reproductive health field and there have been significant efforts to define criteria and develop strategies to assess the quality of maternal health services ^[2].

Useful information can be collected quickly from the examination of a sample of facility (hospital) records and check if the recording tasks have been done correctly, by comparing it to a check list and to evaluate case management of certain conditions ^[3].

The aim of the current study is to assess the quality of care provided for normal deliveries and to identify the gaps in the provision of this care.

Subjects & methods:

Three hospitals (Al- Yermouk, Al- Ilwiyia, and Abu –Graib) in Baghdad were the focal point for this study, they serve a catchments area of (1600000) population, generally represent different ranges of social strata in Baghdad city.

To achieve the aim of this study a cross sectional study design was adopted. Normal delivery record (NDR) review was used to assess the quality of care provided for normal deliveries.

Analysis of normal delivery record review to assess the quality of a normal vaginal practice,

by comparing the treat norm to actual practice, by using five indicators of performance.

The investigators asked the staff (of the hospitals under study) to locate the delivery records (partographs) available for deliveries that have taken place in the year preceding the study (1/1/2001 – 31/12/2001) . A random sample was chosen from these records. Total of (180) records were surveyed (60 records from each hospital).The data collection for the current study was conducted over a period of two months starting from the beginning of April to the end of May 2002.

Results:

The current study shows that a standard delivery record (partograph) was available in all three hospitals surveyed, but the partograph was either not used at all or used only for certain cases and even in those cases, there was a great deficiency in the information written.

(Vaginal examination, fetal heart (FH) monitoring, blood pressure (BP) monitoring, birth weight, and assessment of the condition of the baby (Apgar score) recorded on the card).

The study shows that out of (300) normal vaginal delivery records reviewed (60 x five indicators), in Al-yermouk hospital two hundred thirty records (76.7%) were completed according to norms, for Al-Ilwiyia hospital one hundred seventy seven (59 %) of records were completed according to norms and the lowest was for Abu-Griab hospital where 50

(16.7%) were completed according to norms. For all hospitals the results showed that vaginal examination was done according to the norms in the majority of cases (90.2%), while fetal heart and blood pressure monitoring was done (according to norms) in 45% and 32.2% respectively . The birth weight and assessment of the condition of baby was reported in 67.2% and 17.2% of the records respectively. (Table -1- details these activities) .

The number of hours from admission to delivery versus number of vaginal examination , number of blood pressure measurements and number of fetal heart monitoring is demonstrated in (Tables 2,3,4) respectively . A positive correlation was found between the number of hours from admission and vaginal examination($r+ 0.67$), fetal heart monitoring ($r+0.16$) and blood pressure ($r+0.38$) monitoring (Figures 1,2,3).

Table 1: The assessment of overall quality of normal delivery practice, using five indicators of performance, by facility type (hospital).

Action	Norm	Al-Yarmouk hospital according to norms (out of 60)	Al-Ilwya hospital according to norms (out of 60)	Abu-Griab hospital according to norms (out of 60)	All according to norms (out of 180)
Vaginal examination	At least 4 hourly	60 (100%)	59 (98.3%)	47 (78.3%)	166 (92.2%)
Fetal heart monitoring	At least hourly	48 (80%)	31 (51.7%)	2 (3.3%)	81 (45%)
Blood pressure monitoring		36 (60%)	22 (36.7%)	0	58 (32.2%)
Birth weight recorded on card	Should always be recorded on card	60 (100%)	60 (100%)	1 (1.7%)	121 (67.2%)
Assessment of the condition of baby recorded on card		26 (43.3%)	5* (8.3%)	0	31 (17.2%)
Total	Out of 300	230 (76.7%)	177 (59%)	50 (16.7%)	

*These cases were recorded because the babies were admitted to the intensive care unit.

Table 2: The number of vaginal examinations versus the number of hours from admission to delivery.

No. of vaginal examinations	Number of hours from admission to delivery as recorded in the record							All
	1	2	3	4	5	6	Not recorded	
1	14	-	-	-	-	-	-	14 (7.8%)
2	19	7	4	-	-	-	-	30 (16.7%)
3	16	9	4	12	1	1	-	43 (23.9%)
4	4	9	8	2	13	-	-	36 (20%)
5	-	4	6	5	2	2	-	19 (10.6%)
6 & more	1	1	2	2	15	3	-	24 (13.3%)
Not recorded	2	-	-	-	-	-	12	14 (7.8%)
Total	56	30	24	21	31	6	12	180

Table 3: The number of blood pressure measurements versus the number of hours from admission to delivery.

No. of blood pressure measured and recorded	Number of hours from admission to delivery as recorded in the record (in the normal delivery records)							All
	1	2	3	4	5	6	Not recorded	
1	40	21	10	10	8	4	-	93 (51.7%)
2	1	3	4	6	4	1	-	19 (10.6%)
3	1	1	6	2	1	1	-	12 (6.7%)
4	-	1	1	-	-	-	-	2 (1.1%)
5	1	1	2	-	-	-	1	5 (2.8%)
Not recorded	13	3	1	3	18	-	11	49 (27.2%)
Total	56	30	24	21	31	6	12	180 (100%)

Table 4: The number of fetal heart monitoring versus the number of hours from admission to delivery.

No. of fetal heart reported	Number of hours from admission to delivery as recorded in the record							All
	1	2	3	4	5	6	Not recorded	
1	4	4	1	-	1	-	2	12 (6.7%)
2	14	9	5	3	-	-	-	31 (17.2%)
3	5	1	7	2	1	-	-	16 (8.9%)
4	7	5	3	2	3	-	-	20 (11.1%)
5	-	5	8	1	2	5	-	21 (11.7%)
6 & more	1	4	-	1	1	1	-	8 (4.4%)
Not recorded	25	2	-	12	23	-	10	72 (40%)
Total	56	30	24	21	31	6	12	180 (100%)

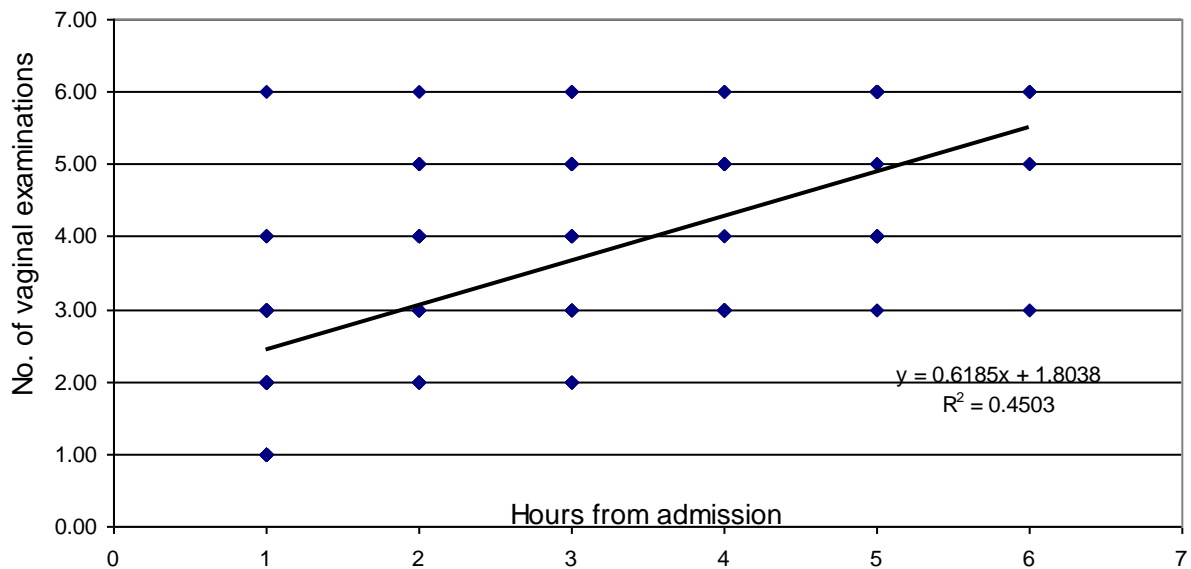


Figure 1: The relationship between vaginal examination and the number of hours from admission

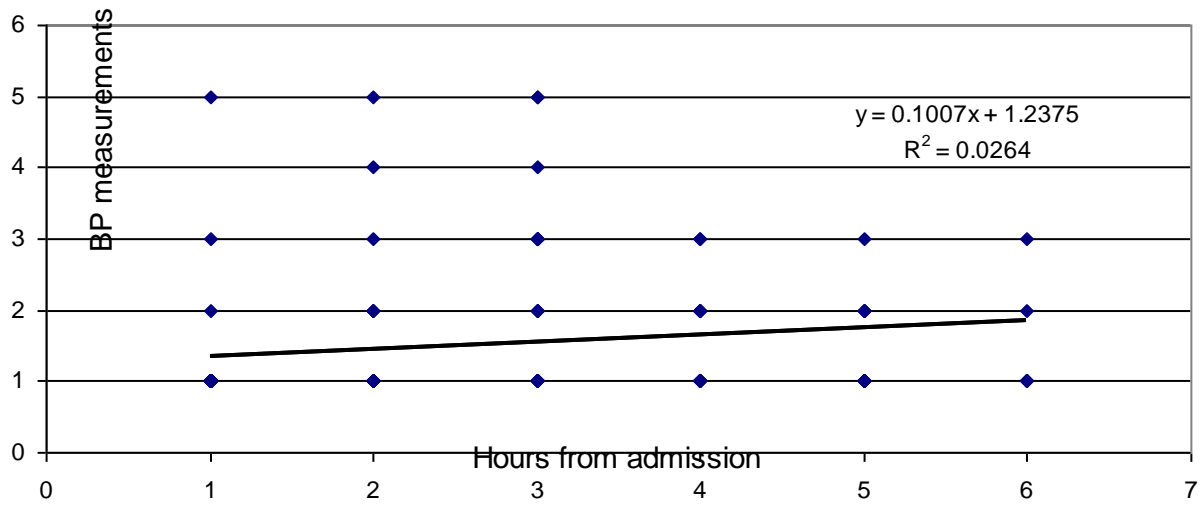


Figure 2: The relationship between the number of BP recording and the number of hours from admission

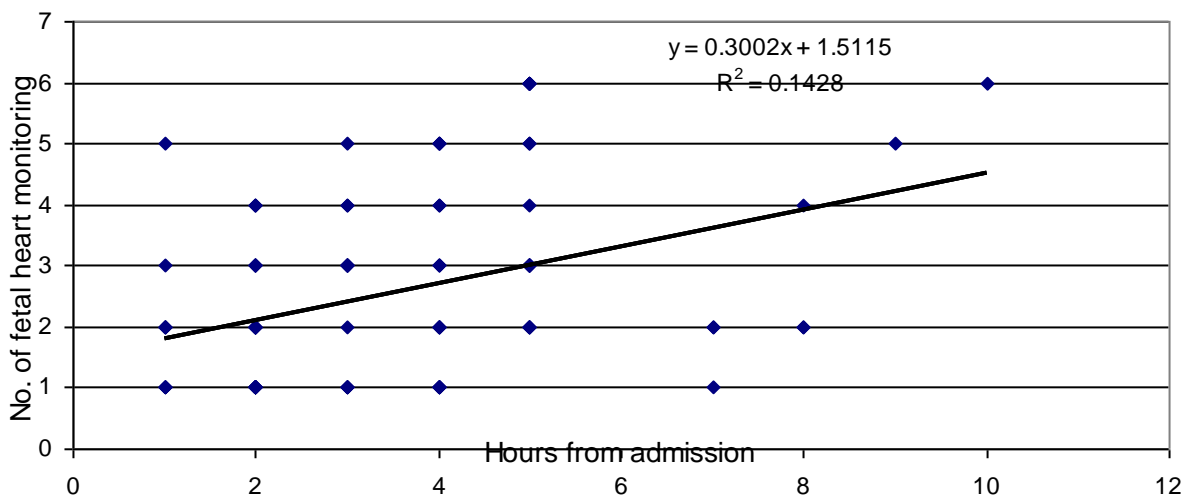


Figure 3: The relationship between the fetal heart monitoring and the number of hours from admission

Discussion:

By comparing the treatment norm or standard to actual practice, a rough assessment of the quality of care can be made^[4].

Clinical notes may not be a good source for evaluating performance in general practice, because of subjective variability in writing and recording^[5].

In many settings, the records are incomplete, inaccurate and difficult to establish whether, the items not written on records are absent or just not established^[6].

The partograph is one of the methods introduced to reduce the high incidence of maternal and neonatal mortality in developing countries, by acting as a visual means to evaluate a normal delivery and as an early warning system for the early detection of abnormal evolution in labour for the mother as well as for the fetus^[7].

The Mother – Baby package recommends that all institutional deliveries should be monitored using an appropriately adapted version of a partograph in order to prevent prolonged labour^[8].

The current study shows that standard delivery records (partographs) were available ,but the partograph is either not used at all or used only for certain cases ,and even in those cases the information is improperly written (incomplete and inaccurate) which makes the interpretation of the data a difficult task. These deficiencies in records must in part reflect a deficient process of care and consequently, the outcome of care is expected to be deficient.

Assessment of the quality of a normal vaginal delivery practice (in the present work) shows that vaginal examination was done four hourly

(According to the norms) in 90.2% of records , fetal heart and blood pressure monitoring was done hourly (according to the norms) in 45% and 32.2% respectively.

The birth weight was written in 67.2% of records and assessment of the condition of the baby (Apgar score) in 17.2% of records (according to the norms should be done for every case) .

To sum up , the results of this study pin point clearly that there was a great deficiency in the

process of care provided to normal delivery cases .To improve the current situation ,it is suggested that a special consideration should be made for filling the delivery records, taking into account the partograph in particular. Health care providers should be trained to use this instrument routinely in all cases admitted to the labour room.

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