

Applying Standards for Nursing Care to Improve the Quality of Nursing Performance at First Stage of Labor

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Abstract: Standards Of Nursing Overall Performance Describe A Competent Stage Of Behavior In The Expert Function, Which Incorporates Activities Related To Ethics, Education, Evidence-Based Practice And Research, Quality Of Practice, Verbal Communication, Management, Collaboration, Expert Practice Assessment, Beneficial Resource Usage, And Environmental Health. The Aim Of This Study Was To Apply Standards For Nursing Care To Improve The Quality Of Nursing Performance At First Stage Of Labor. A Quasi-Experimental Research Design Was Utilized. The Study Was Carried Out At Labor And Delivery Units In Minia Hospitals (Obstetric University Hospital, General Hospital, And Health Insurance At Labor Unit Convenience Sample For All (50 Nurses) Who Were Working In Different Labor And Delivery Units During The Study In The Previous Settings. Tools. An Interviewing Questionnaire For Health Care Providers Turned Into Advanced By The Researcher And The Second Was Overall Performance Standards For Maternal And Neonatal Health, Normal Labor, And Delivery (NLD). Study Results Showed Highest Strong Positive Statistical Significant Correlations Were Found Between Nurses Performance In Relation To Their Age And Years Of Experience (P-Value <0.05). The Significant Difference Was Found Concerning, Immediately And After 3 Months And Total Scores Of Nurses' Performance Were Highly Statistically Significant Difference Was Illustrated (P <0.001), While The Mean Scores Of Nurses' Performance (163.5±8.2) Immediate Post-Test Was The Higher Than 3 Months Later After Application Of Standards (138.9±11.5), And Pretest (107.1±3.1). Conclusion: Showed A Low Percentage Of Achievement Regarding Some Performance Standards For Maternal And Neonatal Health (NLD) Among All Studied Hospitals Before The Intervention. It Was Clear That There Was Improvement In Achievements Of Performance Standards For Maternal And Neonatal Health: Normal Labor And Delivery (NLD) After Application Of This Study Immediately Better Than Three Months Later Follow Up The Study Recommendation: Continuous Quality Control By Nursing Manager To Ensure High Quality Of Care And Positive Attitude Towards Women In Labor, Periodic On Job Training About The Use Of Partograph Which Should Be Provided To All Healthcare Providers.

Keywords: Standards For Nursing Care, Improve The Quality, Performance At Labor Unit, First Stage Of Labor

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I Introduction:

Childbirth Is One Of The Maximum Important Events In The Life Of A Female With Essential Effect On Her Physical, Psychological And Emotional Health [Bertucci, Et Al., 2012] And It Is A Unique Event For Each Woman, It Is A Transformational Process And The Bridge Between Pregnancy And Motherhood [Gibbes And Engebretson, 2013]. It Additionally Represents Collectively A Major Life Event And A Time Of Alternate Both A Finishing And A Beginning For A Woman, A Baby, And Her Family [Tharpe, Et Al, 2013] And [Pillitteri, 2010]. Throughout This Journey, The Care That A Woman Receives Plays A Vital Role In Supporting The Woman And Her Family [Ward And Hisley, 2012].

Improving Maternal Fitness Is One Of The Improvement Goals Of The Millennium [The Millennium Development Goals Report, 2010]. Ensuring Get Admission To A Skilled Attendant At Delivery Is Also Likewise One Of The Priorities For The Safe Motherhood Initiative [Prata Et Al .,2010]. Applying Standardized Maternity Care In Hospitals Reduces Maternal Deaths And Disabilities [WHO, 2015]. The Components Of Powerful Childbirth Care Based Totally On Clinical Evidence And Worldwide Standards Have Been Published And Extensively Disseminated [United States Agency For International Development, 2011]. Despite All Suggestions, The Care Provided And Practices For Childbirth Aren't Standardized [Murray,

2013]. There Are Nonetheless Extensive Gaps Between Real Practices And Scientific Evidence Both In Advanced And Developing Nations [**Simbar Et Al., 2009**].

Globally, Each Day Approximately 1000 Women Die From Preventable Causes Associated Pregnancy And Childbirth, 99% Of All Maternal Deaths Arise In Growing International Locations [**WHO, 2012**]. Despite That, Seventy-Four % Of Women Are Antenatal Care Covered, With 79% Professional Attendant At Birth And 72% Institutional Delivery, In Egypt Maternal Mortality Ratio Was Fifty-Five Per 100,000 Births In 2008 [**Unicef, 2010**]. Every Year Approximately 1400 Egyptian Ladies And 1/2 Of Their Babies Die From Complications Associated With Pregnancy And Childbirth Additionally, Substandard Care Via Obstetrics Is The Primary Contributing Element To Forty-Three % Of The Avoidable Deaths [**Abdel – Hady Et Al., 2012**].

Obstetricians Have Divided Labors Into Four Stages That Delineate Milestones In A Non-Stop Method. **The First Stage Of Labor And Its Phases:** Starts With Regular Uterine Contractions And Ends With Entire Cervical Dilatation At Ten Cm Divided Into A Latent Phase And An Active Phase. The Latent Phase Begins With Mild, Irregular Uterine Contractions That Melt And Shorten The Cervix Contractions Grow To Be Gradually Greater Rhythmic And Stronger The Active Phase Normally Starts At Approximately Three To Four Cm Of Cervical Dilation And Is Characterized By Means Of Speedy Cervical Dilation And Descent Of The Presenting The Supplying Fetal Part [**Satin, 2013**].

2d Stage Of Exertions Begins With Complete Cervical Dilatation And Ends With The Transport Of The Fetus. **The Third Stage Of Labor** Starts With The Transport Of The Fetus And Ends With The Shipping Of The Placenta And Fetal Membranes. Delivery Of The Placenta Regularly Takes Much Less Than Ten Minutes; However, The Third Level May Last As Long As 1/2 An Hour. **Fourth Stage Postnatal** The Hour Or After Delivery When The Tone Of The Uterus Is Re-Established Because Of The Uterus Contracts Again, Expelling Any Ultimate Content. [**Khalil, 2015**].

Standards Of Nursing Overall Performance: Describe A Competent Stage Of Behavior In The Expert Function, Which Incorporates Activities Related To Ethics, Education, Evidence-Based Practice And Research, Quality Of Practice, Verbal Communication, Management, Collaboration, Expert Practice Assessment, Beneficial Resource Usage, And Environmental Health. All Registered Nurses Are Anticipated To Have Interaction In Professional Feature Activities, Along With Leadership, Suitable To Their Education And Characteristic. Registered Nurses Are Accountable For Their Professional Actions To Themselves, Their Healthcare Consumers, Their Friends, And Ultimately To Society [**Pitchforth Et Al., 2010**]. All Requirements Of Practice Offer A Guide To The Knowledge, Abilities, Judgment & Attitudes Which Might Be Needed To Practice Appropriately. They Mirror A Desired And Achievable Level Of Performance Against Which Actual Performance Can Be Compared. Their Important Reason Is To Promote, Guide And Direct Expert Nursing Practice. Standardized Care Is Needed During The First Stage Of Labor, To Address The Problems Of Maternal And Neonatal Health In Growing Countries, To Outline The Level Of Overall Performance, To Improve The Fine Of Services Furnished And In The Long Run To Lessen Maternal And New-Born Deaths [**Mellow, 2014**].

Aim Of The Study

The Current Study Was Carried Out To Apply Standards For Nursing Care To Improve The Quality Of Nursing Performance At First Stage Of Labor.

Research Hypothesis

There Will Be A Positive Effect Of Applying Standards For Nursing Care To Improve The Quality Of Nursing Performance At First Stage Of Labor.

II Subjects And Methods

Research Design:

The Quasi-Experimental Design (Pre And Post-Test) Was Adopted In The Current Study To Reach The Stated Aim.

Study Setting:

The Current Study Was Carried Out In Minia Hospitals (Obstetric University Hospital, General Hospital And Health Insurance At The Labor Unit).

Sample:

A Convenience Sample Of 50 Nurses Who Were Working In Different Labor And Delivery Units During The Study In The Previous Settings

Inclusion Criteria:

Each Nurse Works In Labor And Delivery Unit (Which Includes Settings For Normal Delivery And Provide Care During The First Stage Of Labor).

Exclusion Criteria.

Any Nurse Works In OB-GYN Department At Maternity Unit But Not Participating Neither In Delivery Unit Work Nor Providing Immediate Care Of The Newborn Was Excluded.

Tools Of Data Collection

To Achieve The Purpose Of The Current Study, Data Has Been Collected Through The Following Two Tools:

(Tool One): Interviewing Questionnaire Sheet: This Questionnaire Was Developed, Translated And Utilized By The Researcher To Collect The Necessary Data To Be Filled By Nurses Who Were Involved In The Provision Of Direct Care In Labor Unit, Such As (Age, Level Of Education, Years Of Experience In Labor Unit, And Previously Attended Nursing Training About Care During Labor. Knowledge Related To The First, Second, Third And Fourth Stage Of Labor.

(Tool Two): The Performance Standards For Maternal And Neonatal Health. This Tool Turned Into Prepared With The Aid Of Johns Hopkins Program For Global Training In Gynecology And Obstetrics To Assess The Actual Performance Of Health Care Providers Caring For Women In Labor And Delivery Units It Included Nine Performance Standards Normal Labor And Delivery (NLD).

NLD-01 Standard, Which Is Related To “The Provider Properly In Charge Prepare Equipments , Supplies And The Environment To Conduct Clean And Safe Deliveries This Included 6 Criteria, **NLD-03 Standard**, Which Is Related To “The Provider Treatment Of The Pregnant Woman In Labor In A Cordial Manner” This Contains 9 Criteria, **NLD-06 Standard**, Which Is Related To “The Provider Properly Conducts The Obstetric Examination Between Contractions If Time Allows” It Included 9 Criteria , **NLD-7 Standard** , Which Is Related To “The Provider Properly Conducts A Vaginal Examination” Including 11 Criteria , **NLD-11 Standard**, Which Is Related To “ The Healthcare Provider Informs Or Reinforces Data About Infant Feeding-Emphasizing Breastfeeding” Including 6 Criteria, **NLD-13 Standard**, That's Associated With “The Provider Uses The Partograph To Display Labor And Makes Modifications To Care When Necessary” Including 16 Criteria, **NLD- 14 Standard**, Which Is Related To Provider Prepares To Aid The Delivery/ Birth, Including 9 Criteria.

Procedure:

Fieldwork Description: Data Collection For This Study Carried Out During April 2016 To December 2016, During Morning And Evening Shifts. The Researcher Attended The Labor Unit From 9:00 Am To 2:00 Pm And From 2:00 Pm To 8:00 Pm 3 Days Per Week. Oral Consent For Participation In The Study Was Obtained From Every Woman For Ethical Issues.

Assessment Phase: At The Beginning Of The Interview, The Researcher Introduced Herself To The Nurses In Labor Unit And She Has Explained The Purpose Of The Study. The Oral Consent Of Nurses Was Obtained For Participation. Then The Researcher Starts To Fill The Interview Questionnaire To Assess Nurse's Socio-Demographic Characteristics, And Data Related To Management Of Normal Labor Were Collected Through The Study Tools.

Application Phase (2): Application Of The Standard Has Taken 10 Weeks In Addition To 6 Weeks For Pre-Test And 12 Weeks After The Program For Post-Test And Follow-Up.

Outcome Follow-Up Phase

Impact Of Applying The Standards On Nurses Was Done By Comparing The Change In Their Skills And Knowledge Prior The Study, After Finishing The Study Immediately And Three Months Follow- Up Using The Previous Mentioned Interviewing Questionnaire And Observational Checklist.

Ethical Considerations:

Each Participant Nurse In The Study Was Informed That Her Rights Would Be Secured, Informed About The Nature, Process, And Expected Outcomes Of The Study, Reassured That The Study Procedures Would Not Harm Patients, Reassured That Records Would Be Exclusive And Could Be Used Only For The Research Purposes, And Informed About Her Rights To Withdraw At Any Time Throughout The Study.

Statistical Design:

The Collected Data Were Organized, Tabulated And Analyzed Using A Statistical Package Of Social Science (SPSS) 19.0 Programs

III Results

Table (1) Distribution Of The Study Sample According To Their Age, Marital Status And Level Of Education (N= 50)

Items	No_ 50	%
Age Of Nurses':		
Less Than 20 Years	10	20.0
From 20 To 30 Years	32	64.0
30 Years And More	8	16.0
Mean ± SD		1.96 ± 0.60
Years Of Experience:		
Less Than 5 Years	19	38.0
From 5 To 10 Years	15	30.0
10 Years And More	16	32.0
Birth Training Courses		
Yes	18	36.0
No	32	64.0
Qualification Of Nurses':		
Bachelor Of Sciences In Nursing	8	16.0
Technical Institute Of Nursing	11	22.0
Secondary Nursing Diploma	31	62.0

Table (1) Shows The Distribution Of Nurses According To Their Socio-Demographic Characteristics. It Was Found That The Age Of More Than Half Of The Nurses (64.0%) Ranged From Twenty To Less Than Thirty Years. As Regards Their Qualification More Than Half Of The Nurses Hade Secondary Nursing Diploma Education While Nurses Who Have Bachelor Of Science In Nursing Were (16.0 %) The Majority Of Nurses (38%) Were Relatively New In The Career And Had Work Experience Less Than 5 Years. As Regards To Birth Training Courses, (64.0%) Of Nurses Didn't Attend Birth Training Courses And (36.0%) Of Nurses' Had Attended Birth Training Courses.

Table (2) Distribution Of Nurses' Performance Regarding NLD-01 Standard

The Provider In Charge Prepares Equipment, Supplies And The Environment To Conduct Clean And Safe Deliveries	Pre N=50		Immediate N=50		After 3 Months N=50		χ ²	P-Value
	Freq.	%	Freq	%	Freq	%		
1. Ensures That The Delivery Room Is Clean.	24	48.0	50	100	50	100	62.903	.000*
2. Ensures That The Supplies And Equipment To Perform Normal Deliveries Are Available.	50	100	50	100	50	100	....	....
3. Ensures That The Supplies And Equipment To Manage The Normal Newborn Including Appropriate Room Temperature Are Available.	50	100	50	100	50	100	....	....
4. Ensures That The Supplies And Equipment To Manage Any Maternal Or Newborn Complication Are Available.	50	100	50	100	50	100	....	....
5. Ensures That The Supplies And Materials For Infection Prevention Are Available.	15	30.0	50	100	29	58.0	53.059	.000*
6. Ensures That The Clerking Notes, Partograph, And All Necessary Registers Are Available.	0	.0	50	100	0	.0	150.00	.000*

Statistically Significant Difference

Table (2) Shows That, There Were No Statistically Significant Differences In Nurses Performance Score Regarding **NLD-01 Standard** (The Provider In Charge Prepares Equipment, Elements, And The Surroundings To Conduct Smooth And Safe Deliveries) (Ensures That The Supplies And Equipment To Carry Out Normal Deliveries, Ensures That The Supplies And Equipment To Manage The Normal Newborn And Ensures That The Substances And Device To Manage Any Maternal Or Newborn Complications) ,At Baseline Assessment (P>0.05). While The Difference Observed Was Highly Statistically Significant Improvement In Total Performance Score Of Nurses Regarding (Ensures That The Supplies And Materials For Infection Prevention Are Available. And Ensures That The Clerking Notes, Partograph, And All Necessary Registers Are Available) Immediately Higher Than Three Months Of Intervention Compared With Baseline Total Score (P < 0.001).

Table (3) Distribution Of Nurses' Performance Regarding NLD-03 Standard

The Provider Treats The Pregnant Woman In Labor In A Cordial Manner.	Pre N=50		Immediate N=50		After 3 Months N=50		χ^2	P-Value
	Freq.	%	Freq.	%	Freq.	%		
1. The Provider Ensures That She/He Speaks The Language Spoken By The Woman Or Seeks Someone Who Can Assist In This Regard	50	100	50	100	50	100	.....	.....
2. Greets The Woman And Her Husband Or Companion In A Cordial Manner	50	100	50	100	50	100	.....	.....
3. Introduces Her/Himself	0	.0	50	100	50	100	150.00	.000*
4. Explains Care Before Any Examination Or Procedures	0	.0	50	100	50	100	150.00	.000*
5. Discreetly Asks Woman If She Would Like Someone To Remain With Her During The Examination, Labor And Delivery	0	.0	0	.0	0	.0	.....	.....
6. Facilitates The Presence Of The Support Person Of The Woman's Choice, As Appropriate (If The Setting Allows) / Ensures That ONLY The People The Woman Desires Are Present	50	100	50	100	50	100	.....	.....
7. Responds To Questions Using Easy-To-Understand Language	12	24.0	50	100	50	100	101.786	.000*
8. Responds To Her Immediate Needs (Thirst, Hunger, Cold/Hot, Need To Urinate, Etc.)	50	100	50	100	50	100	.....	.....

* Statistically Significant Difference

Table (3) Explore That, There Were Highly Statistically Significant Improvement In Total Performance Score Of Nurses Regarding **NLD-03 Standard (The Provider Treats The Pregnant Woman In Labor In A Cordial Manner)** In This Criteria (Introduces Her/Himself, Explains Care Earlier Than Any Examination Or Processes And Responds To Questions Using Easy-To-Understand Language) (Pre, Post And 3 Months Later After Application Of Standards) (P <0.001)

Table (4) Distribution Of Nurses' Performance Regarding NLD-06 Standard

The Provider Properly Conducts The Obstetric Examination Between Contractions If Time Allows.	Pre N=50		Immediate N=50		After 3 Months N=50		χ^2	P-Value
	Freq.	%	Freq.	%	Freq.	%		
1. Observes The Shape And Size Of The Abdomen And Checks For The Presence Of Scars And Other Skin Lesions	15	30.0	35	70.0	29	58.0	17.477	.000*
2. Avoids Examining The Woman During A Contraction	0	.0	15	30.0	17	34.0	20.577	.000*
3. Measures Fundal Height	0	.0	15	30.0	17	34.0	20.577	.000*
4. Determines Presentation, Fetal Lie And Degree Of Engagement By Abdominal Palpation	2	4.0	29	58.0	27	54.0	38.175	.000*
5. Evaluates And Grades Uterine Contractions (Frequency And Duration Over A 10 Minute Period)	0	.0	15	30.0	17	34.0	20.577	.000*
6. Asks If The Baby Is Moving Regularly And Observes For Fetal Movement During The Examination	2	4.0	29	58.0	27	54.0	38.175	.000*
7. Auscultates Fetal Heart Rate (FHR) Over A 10 Minute Period (Fetal Heart Rate And Changes Before, During, And After A Contraction)	2	4.0	29	58.0	27	54.0	38.175	.000*
8. Records The Results Of The Obstetric Examination On	2	4.0	29	58.0	27	54.0	38.175	.000*
9. Explains Her Findings To The Woman And Her Husband/Companion	0	.0	15	30.0	17	34.0	20.577	.000*

Statistically Significant Difference

TABLE(4) Explore That, There Was A Statistically Significant Improvement In Total Performance Score Of Nurses Regarding **NLD-06 Standard (The Provider Properly Conducts The Obstetric Examination Between Contractions If Time Allows)** Immediately And 3 Months Later After Application Of Standards) (P <0.001)

Table (5) Distribution Nurses' Performance Regarding NLD-7 Standard

The Provider Properly Conducts A Vaginal Examination.	Pre N=50		Immediate N=50		After 3months N=50		χ^2	P-Value
	Freq.	%	Freq.	%	Freq.	%		
1-Explains To The Woman In Easy-To-Understand Language What She Is Going To Do	49	98.0	50	100.0	17	34.0	80.401	.000*
2-Performs Hand Hygiene After Removing Gloves	0	.0	50	100.0	17	34.0	104.603	.000*
3-Puts On Surgical Sterile Or High-Level Disinfected (HLD) Gloves On Both Hands	0	.0	49	98.0	17	34.0	100.487	.000*
4-Examines The Vulva (Ulcers, Blood, Liquid, Secretion)	23	46.0	50	100.0	17	34.0	51.500	.000*
5-Cleans The Vulva With An Antiseptic	0	.0	50	100.0	17	34.0	104.603	.000*
6-If The Membranes Are Ruptured, Then Conducts A Vaginal Cleansing With Chlorhexidine Prior To Vaginal Examinations	21	42.0	50	100.0	17	34.0	53.501	.000*
7-Assesses Cervical Dilatation, Molding, And Level Of Presenting Part, Caput, State Of The MRS, If Ruptured The Color Of The Liquor	21	42.0	50	100.0	17	34.0	53.501	.000*
8-Properly Disposes Of Gloves	20	40.0	50	100.0	17	34.0	104.603	.000*
9- Performs Hand Hygiene After Removing Gloves	0	.0	50	100.0	17	34.0	104.603	.000*
10-Explains To The Woman The Findings And What They Mean.	0	.0	50	100.0	17	34.0	104.603	.000*
11-Registers Findings	0	.0	50	100.0	17	34.0	104.603	.000*

Statistically Significant Difference

Table (5) Show That There Were Highly Statistically Significant Improvement In Total Performance Score Of Nurses Regarding NLD-7 Standard (The Provider Properly Conducts A Vaginal Examination) Immediately Better Than After Three Months Of The Intervention Compared With Baseline Total Score (P < 0.001).

Table (6) Distribution Of Nurses' Performance Regarding NLD-13 Standard

The Provider Uses The Partograph To Monitor Labor And Make Adjustments To Care When Necessary	Pre N=50		Immediate N=50		After 3 Months N=50		χ^2	P-Value
	Freq.	%	Freq.	%	Freq.	%		
Records Patient Information On A Partograph.	0	.0	50	100	14	28.0	108.794	.000*
Evaluates Fetal Heart Rate, Maternal Pulse, And Frequency/Duration Of Contractions In A 10-Minute Period Every Half Hour	0	.0	50	100	14	28.0	108.794	.000*
If Membranes Are Ruptured, Evaluates Color And Odor Of Liquor Every Half Hour	0	.0	50	100	14	28.0	108.794	.000*
Evaluates Blood Pressure Every Two	0	.0	50	100	14	28.0	108.794	.000*
Evaluates Temperature Every Four Hours	0	.0	50	100	14	28.0	108.794	.000*
Evaluates Cervical Dilatation And Fetal Descent Every Four Hours	0	.0	50	100	14	28.0	108.794	.000*
Performs Hands Hygiene Before And After Every Vaginal Examination	0	.0	50	100	14	28.0	108.794	.000*
If The Membranes Are Ruptured, Then Conducts A Vaginal Cleansing With Chlorhexidine Prior To Vaginal Examinations	0	.0	50	100	14	28.0	108.794	.000*
Wears Sterile Gloves For Each Vaginal Examination And Disposes Them Properly	0	.0	50	100	14	28.0	108.794	.000*
Records Required Partograph Information After Every Evaluation.	0	.0	50	100	14	28.0	108.794	.000*
If Membranes Rupture, Record Time Of Rupture And Color/ Character Of Liquor	0	.0	50	100	14	28.0	108.794	.000*
Records The Amount Of Urine Output Each Time The Woman Empties The Bladder	0	.0	50	100	14	28.0	108.794	.000*
Records Protein And Acetone In Urine Each Time They Are	0	.0	50	100	14	28.0	108.794	.000*

Statistically Significant Difference

Table (6) Explore That, There Were Highly Statistically Significant Improvement In Total Performance Score Of Nurses Regarding NLD-13 Standard (The Provider Uses The Partograph To Monitor Labor And Make Adjustments To Care When Necessary) Immediately Higher Than Improvement After Three Months Of Intervention (P < 0.001).

Table (7) Correlation Between Nurse's Performance & Their Socio-Demographic Characteristics (Pre, Post And 3 Months Later After Application Of Standards)

Items	Pre				Immediate				After 3 Months			
	Age		Years Of Experience		Age		Years Of Experience		Age		Years Of Experience	
	R	P - Value	R	P - Value	R	P - Value	R	P - Value	R	P - Value	R	P - Value
Standard 1	-.407	.003*	-.264	.064	....	....	....	....	.224	.118	.390	.005**
Standard 3	-.285	.045*	-.360	.010**	....	....	....	....	....	....	....	....
Standard 6	-.480	.000*	-.516	.000**	-.527	.000**	-.596	.000*	.429	.002**	.535	.000**
Standard 7	.055	.705	.124	.389	.247	.084	.162	.262	.127	.379	.016	.913
Standard 11	...	...	...	....	....	....	....	....	.038	.795	.162	.262
Standard 13	....	....	....	....	....	....	....	....	.034	.815	.233	.103
Standard 14	.247	.084	.162	.262	....	....	....	....	.285	.045*	.375	.007**
Standard 17	....	....	....	....	.247	.084	.162	.262	.055	.707	.032	.825
Standard 18	-.461	.001*	-.517	.000**	.247	.084	.162	.262	.546	.000**	.614	.000**
Total Performance	-.477	.000*	-.458	.001**	.389	.005**	.492	.000**	.291	.041*	.427	.002**

*Correlation Is Significant At The 0.05 Level **Correlation Is Significant At The 0.01 Level

Table (7) Shows Correlation Between Nurse's Performance & Their Socio-Demographic Characteristics (Pre, Post And 3 Months Later After Application Of Standards) It Is Evident That The Highest Strong Positive Statistically Significant Correlations Was Found Between Nurses Performance Of Standards (1,6,14and18) And Their Age And Years Of Experience (P-Value <0.05) .

Table (8) Mean Scores Of Nurses Performance Regarding (Standard 1, Standard 3, Standard 6, Standard 7, Standard 13, Standard 14, Standard 17, Standard 18, (Pre, Post And 3 Months Later After Application Of Standards).

Items	Pretest	Immediate	After 3 Months	F	P - Value
	Mean ± S.D	Mean ± S.D	Mean ± S.D		
Standard 1	9.8 ± .6	12.0 ± .0	10.6 ± .5	323.1	.000*
Standard 3	12.2 ± .4	15.0 ± .0	15.0 ± .0	246.4	.000*
Standard 6	11.4 ± 1.7	14.8 ± 3.9	13.8 ± 3.4	15.8	.000*
Standard 7	13.7 ± 1.9	20.9 ± .1	14.4 ± 4.8	89.9	.000*
Standard 13	16.0 ± .0	32.0 ± .0	20.5 ± 7.3	194.1	.000*
Standard 14	13.9 ± .1	18.0 ± .0	15.6 ± 1.5	266.4	.000*
Total Performance Level	107.1 ± 3.1	163.5 ± 8.2	138.9 ± 11.5	761.8	.000*

Table (8) Shows The Mean Scores Of Nurses' S Performance Regarding (Standard 1 , Standard 3, Standard 6, Standard 7, Standard 11, Standard 13, Standard 14, Standard 17, Standard 18, Standard 7, And Total Performance Level) (Pre, Post And 3 Months Later After Application Of Standards). The Significant Difference Was Found Concerning, Immediately And After 3 Months And Total Scores Of Nurses' Performance Were Highly Statistically Significant Difference Was Illustrated (P <0.001), While The Mean Scores Of Nurses' Performance (163.5±8.2) Immediate Post-Test Was The Higher Than 3 Months Later After Application Of Standards (138.9±11.5), And Pretest (107.1±3.1),

IV. Discussion

The Risks Of An Unfavorable Outcome To The Mother And Baby Are Commonly Maximum During The Intrapartum Period. Despite The Fact That Health Experts Have Long Preferred This Fact, Prioritization Of This Detail Of Safe Motherhood Is Relatively Latest. The Aim Of Making Use Of Standards In Normal Birth Is To Attain A Healthy Mother And Fetus With Least Feasible Degree Of Interventions That Are Well Matched With The Safety (WHO, 2015).

During Labor And Delivery, The Nurse-Midwives Ought To Apply Standards For Nursing Care To Enhance The Quality Of Nursing Overall Performance At Labor Unit. They Require Two-Fold Effort To Assess Labor Progress And Use Personal Competencies To Assess The Patients And Family's Needs During This Physically And Emotionally Stressful Time. The Cause Of Making Use Of Standards In Normal Birth Is To Achieve A Healthy Mother And Fetus With A Viable Degree Of Interventions That Is Compatible With The Safety. (Royal College Of Obstetricians And Gynecologists, Et Al., 2016)

Research Hypothesis Of This Study, There Was A Positive Effect Of Applying Standards For Nursing Care To Improve The Quality Of Nursing Performance At Labor Unit? , The Researcher Conducted This Study For Applying Standards For Nursing Care To Improve The Quality Of Nursing Performance At Labor Unit.

The Present Study Showed That NLD-01 Standard Which Was Related To “**The Provider In Charge Prepares Equipment, Supplies And The Environment To Conduct Clean And Safe Deliveries**” There Were No Statistically Significant Differences In Nurses Performance Score Regarding Only, Nearly Half Of The Criteria Among All Studied Hospitals. The Current Study Were In Agreement With The Results Of (**Kongnyuy And Van Den Broek, 2013**). But They Were In Contrast With Studies Done By (**Penfold Et Al, 2013**) Who Reported Inadequate Equipment, Drugs, And Supplies For Maternity And Neonatal Care.

With Reference To, NLD-03 Standard Which Is Related To “**The Provider Treats The Pregnant Woman In Labor In A Cordial Manner**” There Was Highly Statistically Significant Improvement In Overall Performance Score Of Nurses Only, Three Criteria Have Been Done Amongst All Studied Hospitals. The Current Study Becomes In Agreement With The Results Of (**Kongnyuy And Van Den Broek, 2013**) Who Established Local Standards For Women's Friendly Care, Which Emphasized That The Outcome Criteria Need To Be As A Minimum Eighty% Of Women Be Satisfied With The Reception They Received At The Labor Ward. Within The Same Standard, There Were No Significant Differences Among All Studied Hospitals For Criteria No 1, 2, Five, 6, Eight.

This May Be Due To The Insurance Cover From Their Organization, But The Rest Of Studied Hospitals Have Emergency Admissions Which Were Characterized By Caseload All Over The Hot Days, So They Neglect To Greet The Women, This Is Supported By Samia Et Al (2012) Who Found The Same Results, And Who Also Reported That Health Care Providers And Hospital Policy Were Not Happy To Allow Companion In Labor.

The Findings Of The Prevailing Study Have Been In Disagreement With The Findings Of (Olayinka Et Al., 2013) Who Determined That The Midwives Attitude Towards Women In Labor Was Seventy-Seven And Half % Women Have Been Warmly Received By Of Midwives During Labor And 68.75% Said They Were Given Information About Their Labor On Admission.

Concerning, NLD-06 Standard Which Is Associated With “The Provider Properly Conducts The Obstetric Examination Among Contractions If Time Allows”, For Criteria No. 2, Three, Five, Nine Were Not Achieved Among All Studied Hospitals Pre-Implementation Of The Study. Also, There Were Highly Statistically Significant Improvement In Total Performance Score Of Nurses Regarding (Pre, Post And 3 Months Later After Application Of Standards) ($P < 0.001$). These Findings Contradict With (Kagama Et Al., 2014) Who Reported That During The Initial Assessment Of Woman In Labor, The Health Workers Checked Fundal Height, Presentation, And Lie Were (99%) In Kenya Facilities (Kagama Et Al., 2014)

From The View Of Researcher It Was Reported That Using Abdominal Ultrasound Is More Accurate For Determining The Gestational Age Than Measuring Of Fundal Height (Criterion No. 3), Also Health Care Providers Depended On The Performance Of Vaginal Examination To Determine The Onset Of Labor Instead Of Abdominal Palpation (Criterion No.4).

Regarding NLD-07 Standard Which Is Related To “The Provider Properly Conducts A Vaginal Examination” There Was A Statistically Significant Improvement In Total Performance Score Of Nurses, Immediately Post Implementation And Some Dropped In Follow-Up Phases (After Three Months Of Intervention) Compared With Pre-Test Total Score ($P < 0.001$). The Drop Of Nurses' Performance Was Due To Being Not Allowed, For The Nurses To Perform The Vaginal Examination In Study Hospitals But Allowed For Physician Only And A Large Number Of Internship Physician. Another Study Conducted By (Muliira Et Al, 2013) Found That Midwives Were Not Careful About The Vaginal Examination.

Surprisingly, Criterion No. 2,3,5,9,10,11 Which Related To Performs Hand Hygiene, Put On Sterile Gloves, Cleans The Vulva, Explains The Finding To The Woman And Registers Finding Were Not Achieved Among All Hospitals Pre-Implementation Of The Standard , The Result Of The Current Was Against (WHO, 2015) Infection Control Protocols That Reported Recommended Guidelines About The Universal Precautions In Health Care Is The Primary Measure Powerful In Preventing Health Care-Associated Infection (HCAI) (WHO,2015). The Partograph Presents A Graphical Illustration Of The Progress Of Labor And Taken Into Consideration A Precious Tool For Managing Ladies.

Regarding, NLD-13 Standard Which Is Related To “The Provider Makes Use Of The Partograph To Monitor Labor And Make Adjustments To Care When Necessary”, The Current Study Findings Showed That The Partograph Is Underutilized Amongst Studied Hospitals Earlier Than Implementation Of The Standard. However, There Was A Statistically Significant Improvement In Overall Performance Score Of Nurses, Immediately Post Implementation And Some Dropped In Follow-Up Phases (After Three Months Of Intervention) ($P < 0.001$). The Current Study Finding Was In Accordance With The Results Of The Study Conducted By (Rania Et Al, 2014) Who Found That The Partograph Is Underutilized Among The Four Studied Hospitals And It Is Still Not Applied.

Staff Shortages, Busy Departments, And Limited Resources Have Been Also Additionally As Reasons For Non-Usage Of The Partograph. Researchers From Other Researches Also Indicated That Busy Departments, Workforce Shortage, And Restricted Resources Played A Big Role In The Under-Utilization Of The Partograph (Opiah Et Al., 2014) Whilst (Fistula Care And The Maternal Health Task Force, 2016) Stated, Lack Of Time' As A Reason For Not Completing Partographs.

The Results Of The Current Study Were In Agreement With The Results Of Fistula Care And The Maternal Health Task Force, 2014 Who Reported That More Than 50 Years Of Training And Investment In The Partograph In Low-Useful Resource Settings, It Remains An Underutilized Tool And Too Few Health Cares Apprehend The Way To Use It Well. Moreover, Another Study Performed With The Aid Of (Ogwang Et Al., 2015& Khonje, 2013); Revealed That The Percentage Of Skilled Birth Attendants And Facilities Using Partograph Is Low Or Not Performed, As Shown In Different Researches.

Additionally, The Present Study Showed That There Has Been A Positive Correlation Between Nurses Overall Performance Of Standards (1, 6, 14 And 18) And Their Age And Years Of Experience (P-Value <0.05).The Current Study Emphasized And Supported The Hypothesis For Applying Performance Standards For Maternal And Neonatal Health (Normal Labor And Delivery) Which Seems To Be Very Important And Effective In Improving The Quality Of Nursing Overall Performance At Labor Unit.

V. Conclusion

In The Light Of The Present Study Results, It Could Be Concluded That The Present Study Showed A Low Percentage Of Achievement Regarding Some Performance Standards For Maternal And Neonatal Health (NLD) Among All Studied Hospitals Before The Intervention. It Was Clear That There Was An Improvement In Achievements Of Performance Standards For Normal Labor And Delivery (NLD) After Application Of This Study Immediately Better Than Three Months Later Follow

Recommendations

Based On The Finding Of This Study. The Following Are Recommended:

1. Continuing Education Unit In The Hospital Should Schedule For A Training Course For Neonatal And Obstetric Nurses.
2. Ensures Availability Of Supplies And Equipment To Manage The Normal Newborn And Maternal Care.
3. Continuous Quality Control By The Nursing Manager To Ensure High Quality Of Care And Positive Attitude Towards Women In Labor.
4. Protect Women From Any Physical And Psychological Harm During Labor And Child Bear
5. Develop Evidence-Based Maternity & Neonatal Care Manual In All Hospital Based On Established Evidence-Based Practice With National Standards.

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