

## ORIGINAL ARTICLE

**Assessment of the Nurses Practices Toward Care the Child with Clubfoot at the Orthopedic Units at Baghdad City**RAAD HASSAN KSHAISH<sup>1</sup>, KHALIDA A. MANSUR<sup>2</sup><sup>1</sup>Health instructor nurse at the Baghdad/Al rusafah health directorate<sup>2</sup>Professor, Adult Nursing Department, Baghdad University.Correspondence to: Raad Hassan Kshaish, Email: [raad.hasan1104b@conursing.uobaghdad.edu.iq](mailto:raad.hasan1104b@conursing.uobaghdad.edu.iq)**ABSTRACT****Objective(s):** To improve the nurses' practice who working in the orthopedic units towards care the child with clubfoot and to find the relationship between the nurses' practices and their demographic characteristics.**Methodology:** A descriptive study was conducted at three teaching hospitals (Al-Kindi Teaching Hospital, Al-Wasiti Teaching Hospital and the Child welfare Teaching Hospital for the period from 17<sup>th</sup> of February to 2<sup>th</sup> of March of 2023. A non-probability sample had (60) nurses who working at the orthopedic units (included outpatient clinics, orthopedic wards and braces units). The pilot study performed for the period from 5<sup>th</sup> to 15<sup>th</sup> of February to 2023 on 6 nurses to test the reliability and applicability of the study tool and to determine the time consuming for doing it. The study tool constructed based on previous literatures related to the current study which included a nurses' socio demographic characteristics in part one while the second part as observational checklists in four domains. The data analyze through the spss program version (26) to interpret and explain the results of the study.**Results:** The results of the study showed the most (75%) of the nurses' practices in all domains were at low level (M.S less than 0.33) In regarding their demographic characteristics; the most (70%) of them were females, (40%) of them were within the age group (30-40 years) and 57.4% of them had a diploma in nursing.**Conclusions:** The study concluded that the studied nurses had an adequate practice regarding care of a child with clubfoot at the orthopedic units. While there on statistically significant relationship between the socio-demographic characteristics of the nurses and their nurses' practice.**Keywords:** Effectiveness, Clinical pathway program, Clubfoot, Child, Nurses' Practices, Orthopedic units.**INTRODUCTION**

Clubfoot or talipes equinovarus is one of the most common congenital deformity that present on the foot of a newborn after birth and most of them from the developed countries. A neglected clubfoot, untreated can lead to physical, social, and psychological, with financial burdens on their patients, families, and society(1).

The delay in the development of the gross motor functions( the function of the large muscles and tendons of the feet) can be note any inability for developing it at the appropriate time due to a congenital deformities associated with neuromuscular conditions like spina bifida with clubfoot that affect on their psychological and social delay if not treated or neglected(2)(3).

The early detection had an important role to diagnose and effective cure the majority of children's idiopathic musculoskeletal deformities that they need to reach their full potential and lead fulfilling lives or minimize relapsing it (4).

Many famous people like the Roman emperor Claudius, the poet Lord Byron, the comedian Damon Waymans, Gray Burghoff and footballer Steven Gerard and others. In fact, their disabilities made them to overcome on it and it became as a reason for their success(5).

The reliable and valid method to correct the idiopathic clubfoot globally is ponstti method which minimize the need to surgical interventions or on need. The ponstti method also effective method for other types of the clubfoot which associated with neuromuscular deformities like spina bifida or cerebral palsy with long term assessment by pirani scoring (6).

According to the drastic changes in the practices of medical and health care providers during the last decades by giving the patient a positive role to achieve the goals of the intervention to enable the people with disabilities to achieve an independent living and lifestyle. The nurses and health care providers became work in general and in the rehabilitative care requires a direct contact with the patient and their caregivers to reduce complications and relapse as much as possible (7).

The integrated care plan to manage the child with clubfoot deformity should be based on evidence-based practice and These interventions must be identified by a multidisciplinary team with

experience and competence in the care of these patients to improve the care provided to the patient to be final and deliberate (8).

**RESULTS**

Table 1: Description of nurses' demographic variables as frequency, percentage (study groups (n=60))

Demographic variables	Items	Study group	
		F	%
Gender	Male	22	36.7
	Female	38	63.3
Age group (Years)	20 -30	17	28.3
	31-40	21	35
	41-50]	13	21.7
	More than 50	9	15
	Mean (SD)	34.93 ± 8.73	
Marital Status	Single	17	28.3
	Married	24	40
	Divorced	12	20
	Separated	7	11.7
Educational levels	School graduate	14	23.3
	Diploma graduate	28	46.7
	Baccalaureate graduate	11	18.3
	High education graduate	7	11.7
Occupational title	Skilled nurse	19	31.6
	Technical nurse	31	51.7
	Academic nurse	10	16.7
Years of experiences in nursing field	< 5 yrs.	24	47.5
	5 - 10	18	32.5
	11 - 20	11	17
	> 20 yrs.	7	5
Years of experience in orthopedic units	< 5 yrs.	24	47.5
	5 - 10	18	32.5
	11 - 20	12	17.5
	> 20 yrs.	6	2.5
Participating in Training sessions in the orthopedic wards (for the childcare)	Yes	21	35
	No	39	65
Number of training sessions	No training sessions	34	56.7
	1_2	8	13.3
	3_4	9	15
	5>	9	15

n: number of samples, F: Frequency, %: Percent, SD: Standard deviation.

Table 2: Assessment of the nurses' practice toward care the child with clubfoot (N=60)

Nurses knowledge domains	poor		Moderate		Good		M.S	S.D	Level
	F.	%	F.	%	F.	%			
Introductory practice domain	40	66	19	31.7	1	1.7	0.33	0.180	L

Identification practice domain	51	85	5	8.3	4	6.7	0.28	0.224	L
Nursing assessment practice domain	42	70	12	20	6	10	0.18	0.281	L
Nursing practice domain during casting period	39	635	9	15	12	20	0.38	0.210	M
relapses domain	47	78.3	8	13.3	5	8.3	0.36	0.209	M
Follow up the child with clubfoot domain	45	75	10	16.7	5	8.3	0.32	0.263	L
Total	45	75	11	18.3	4	6.7	0.30	0.227	L

F=frequency, % =percentage. M.S=Mean of score(where less than 0.33 were low, from 0.34 to 0.66 foror moderate while high significant were 0.67 to 1) S.D : standard deviation,

Table 3: Analysis of variance for association between the nurses' practices with their demographic variables (N=60)

Demographic data		N	Nurses' practice	
			M.	S.D
Age(years)	20 -30	17	0.8079	0.21297
	31-40	21	0.8810	0.18099
	41-50]	13	0.8120	0.22125
	More than 50	9	0.7752	0.26371
	ANOVA	F.	0.490	
		P.	0.692	
		Sig.	NS	
Educational levels	School graduate	22	0.7933	0.21092
	Diploma graduate	19	0.8462	0.20138
	Baccalaureate graduate	15	0.9963	0.08150
	ANOVA	F.	0.949	
		P.	0.396	
		Sig.	NS	
Year of experiences in nursing field	< 5 yrs.	17	0.7971	0.22125
	5 _10	21	0.9097	0.14795
	11 _20	13	0.7993	0.21641
	More than20	9	0.8290	0.21917
	ANOVA	F.	0.429	
		P.	0.787	
		Sig.	NS	

M. = mean, S. D=Standard Deviation, ANOVA= Analysis of variance, F= f-test, P= probability value, sig.= a significant, N.S= not a significant at P≤ 0.05, S= a significant at P> 0.05, df: degree of freedom=39.

## DISCUSSION

**Part I: The discussion of the socio-demographic characteristics of the nurses who work in the orthopedic units: table(1):** Based on the results of the analysis of nurses' demographic characteristics of the studied sample; less than half (35%) of the nurses were within the age group (31-40) years and mean and stander deviation (34.93 ± 8.73). These results were coming in consistent with the findings of the studies conducted by Radhi and Tawfiq,(2016) who mentioned that the high percentage 21(42%) of their study sample ages were (30-39) years.

Regarding the gender of the studied sample, the present study showed that more than half (63.3%) of them were female, this result agrees with the findings of the study performed by Mohamed et al, (2022) who revealed that the majority (94.6%) of them were female, while it disagrees with Zghair & Atiyah,(2021) also with kadush, & Atiyah,(2020) where they revealed that their sample was (54%) and (52%) respectively.

Regard an educational level of less than half (46%) of the orthopedic nurses had a diploma graduates. This means that the number of the graduated nurses from the secondary school and technical institution of nursing in Iraq more than the nurses who they graduated from the nursing colleges. This result agrees with Zghair & Atiyah (2021) and additionally supported by the findings of Mohamed et al, (2022) who mentioned that most of their studied sample (45% and 68.9% sequentially) graduated from nursing institutes.

In regards to Social status, the result of the current study revealed that less than half of the nurses 24 (40%) were married, which consistent with the study by (Muhsin & Atiyah,2016) who revealed that their study sample were59% of them married.

Concerning the years of experience in the nursing field and orthopedic units, the results reveal that the nurses working in the nursing field and orthopedic units for the period of (<5) years were less than half of (47.5%) of the nurses. The current finding is consistent with the study of Radhi and Tawfiq,( 2016 ) who reported a similar results; where were(32%) of them had experience of (< 5) years in the general experiences and (52%) of experience in orthopedic units,

Concerning the participations in the training sessions based on the study results, the (56.7%) of the orthopedic nurses didn't participate in training courses about nursing care at the orthopedic units. This finding disagrees with a study done by Bader & Haleema, (2012) who showed that more than half (64%) of their sample had training courses.

**Part II: Assessment of the nurses' practice toward care the child with clubfoot(N=60):** According to the results fig(1), Most (75%) of the nurses' practices in all domains before applying the clinical path program(pretest) were at an moderate level.

Regarding the results in table (2)which demonstrated there a significantly need to provide integrated care that should be focus on the principles and guidelines to achieve high quality of care(7).

For all above the researcher's opinion; that to improve the nurses' performance with a resulted significant changes in their practice which presented through a significant differences observed between the nurses' practice by applying an integrated program which meet their needs to provide a good quality of nursing care and it appropriates the its requirements to reach a good patient outcomes.

**Part III: Nurses` Practices for the child with clubfoot at the Orthopedic units and Their General Information:** Based table(3) there no significant differences between the nurses' practices and their demographic variables during the three studied periods. This results in line with the results which of the study which conducted by Ammer & Attiyah (2020) and other study of the Khudhayer & Attiyah (2019) who mentioned that there is no relationships between the nurses' practice and their socio-demographic.

It is worth mentioning that the researcher's view regarding the socio demographic characteristics was; the workload and staffing shortages potentially contributing to the poor level of performance. in additionally to this should be keep that developing the nurses' practices with in consideration that some aspects of the nurses' practices are changed and affected by the items of the program where some of them needed to a short period to show the desired effect on the nurses' opposite to the practice needed to long time to make changes clear in their practice with of quality of nursing care with taking into our account the personal reflexes among the nurses. therefore, there exist significant different among the three study periods; pre, posttest one and posttest two

## CONCLUSIONS

Upon the results of this study, it can be concluded that the nurses' practice were in poor level regarding care the child with clubfoot.

**Recommendations:** The study recommended the need for education and training the nursing staff for implementation of clinical pathways to improve the quality of the care and reduce the time consuming for reaching the desired patient outcomes.

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