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RESEARCH ARTICLE

SURVEY ON ATTITUDES AND PRACTICES RELATED TO BREASTFEEDING AT THE MOHAMMED VI UNIVERSITY HOSPITAL CENTER OF OUJDA: EXPERIENCE FROM AN EMERGING COUNTRY

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Abstract

Context: Breastfeeding, acknowledged globally for its numerous health benefits, faces varied challenges among working mothers. Despite its cultural acceptance in Morocco, recent data reveals concerning trends. This study investigates breastfeeding practices among employees, including healthcare professionals, at Mohammed VI University Hospital Center in Oujda, the capital of the oriental region of Morocco.

Methodology: This cross-sectional study explores breastfeeding practices among employees of Mohammed VI University Hospital Center in Oujda, Morocco. Data from 264 participants were collected using a validated questionnaire covering sociodemographic details, pregnancy and childbirth information, breastfeeding practices, and spousal support. The analysis involved descriptive statistics, chi-square tests, and multivariate analysis.

Results: The study included 264 participants, with a majority falling within the age range of 20 to 40 years. The majority of participants (69.7%) did not receive continuing education on breastfeeding. For the timing of the first feed, 48.5% initiated breastfeeding within the first hour after birth, while 27.3% did so after six hours. Regarding the mode of breastfeeding, 48.5% practiced exclusive breastfeeding, 39.4% practiced mixed feeding, and 12.1% practiced exclusive formula feeding. Statistical analysis revealed a significant association between professional status and mode of breastfeeding ($\chi^2 = 7.142$, $df = 8$, $p = 0.0075$). The mean duration of breastfeeding was found to be 10.8 months. The main challenges encountered during breastfeeding included unfavorable work conditions (60.6%), time constraints (60.6%), lack of knowledge (34.1%), lack of family support (15.2%), maternal health issues (15.2%), and lactation problems (30.3%). Participants provided recommendations to improve breastfeeding conditions, including extending maternity leave, improving work schedules, establishing dedicated breastfeeding spaces, providing breastfeeding training, setting up nurseries within the hospital, avoiding night shifts during breastfeeding, and preparing mothers before childbirth.

Conclusion: This study underscores the imperative for robust support to enhance breastfeeding rates and working conditions for mothers in the workplace, including those at university hospitals.

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Introduction:-

Breastfeeding is universally recognized as one of the most effective interventions to promote infants' and mothers' health and well-being. Recommended as the optimal method of infant nutrition by the World Health Organization (WHO), it offers notable short and long-term benefits[1]. According to the WHO, exclusive breastfeeding for the first six months of life, followed by appropriate complementary feeding until age two, is strongly advocated to promote children's growth, development, and overall health[2].

Despite these recommendations, breastfeeding rates vary considerably from one country to another and even within regions of the same country. Globally, statistics show that only 48% of infants under six months of age are exclusively breastfed [3]. In Morocco, although breastfeeding is deeply rooted in culture and tradition, recent data reveal concerning trends [4]. Despite its multiple public health benefits, this highlights persistent challenges in promoting and supporting breastfeeding in the country.

In this context, it is essential to understand the practices, perceptions, and attitudes, especially those of healthcare professionals, who play a central role in guiding and supporting mothers in their breastfeeding choices. Therefore, this study examines the practices, knowledge, attitudes, and perceived obstacles of all staff at the Mohammed VI University Hospital Center (CHU) of Oujda regarding breastfeeding. By analyzing these aspects, we can identify gaps and formulate recommendations to improve breastfeeding support within our institution and beyond.

Materials and Methods:-

We conducted a cross-sectional study involving 264 women employed at the Mohammed VI University Hospital Center of Oujda, who practiced breastfeeding during their work in this establishment. Participants were randomly selected from the staff, including physicians, nurses, laboratory technicians, physiotherapists, and administrative personnel. Women who refused to participate in the study were excluded.

The main objective of this study was to examine various sociodemographic and professional factors influencing breastfeeding.

Data were collected using a pre-tested and validated questionnaire, comprising several sections: sociodemographic details (age, marital status), parity, pregnancy follow-up (private or public), mode of delivery, term of delivery, baby's hospitalization after delivery, ongoing training on childbirth, time of the first feed, frequency and duration of breastfeeding, total duration of breastfeeding in months, breastfeeding mode, encountered limitations during breastfeeding, spouse's opinion on breastfeeding, and ideas about the advantages and disadvantages of breastfeeding.

The data entered into Microsoft Excel were cleaned to correct errors or inconsistencies, and then analyzed using SPSS 20.0 software. Categorical variables (mode of delivery, pregnancy follow-up) were presented as proportions, while continuous variables (age, duration of breastfeeding) were presented as means and standard deviations or medians. The chi-square test was used to compare proportions between different groups. All statistical tests were two-tailed, and a P-value less than 0.05 was considered statistically significant.

Results:-**Age Distribution:**

Participants in our study are mainly distributed across two age groups: 39.4% of women are aged between 20 and 30 years, 54.5% are between 30 and 40 years, and 6.1% are over 40 years old. The mean age of participants is estimated at 31.6 years, with a standard deviation of 4.82 years. This distribution indicates a relatively young population within our sample.

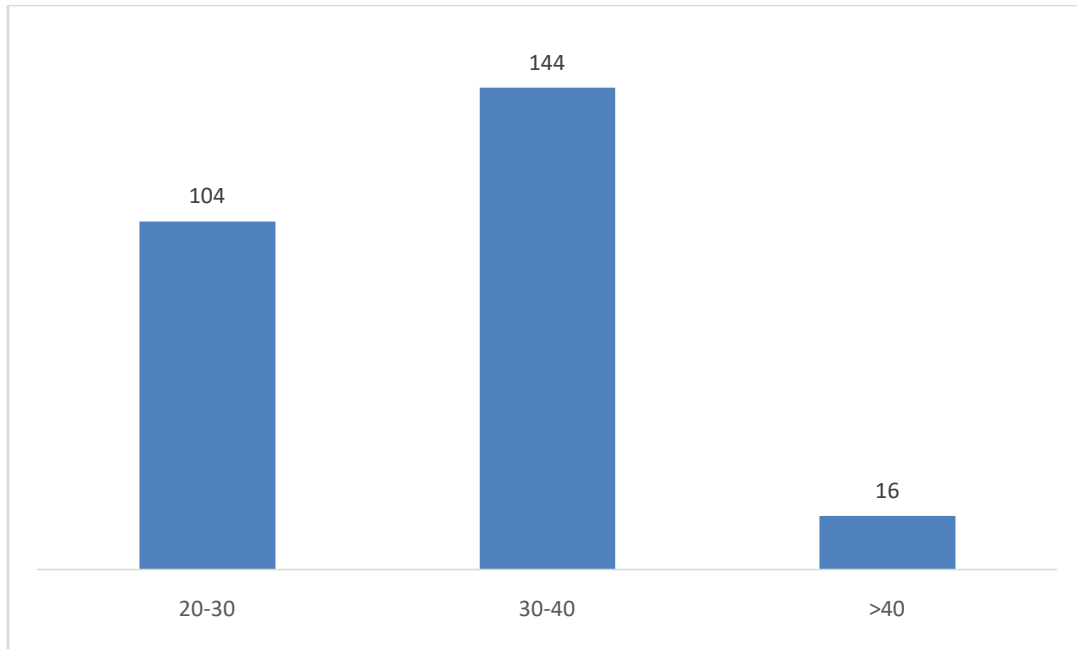


Figure 1:- Distribution of the sample (n=264) by age.

Professional Status

The distribution of participants according to their professional status shows that 43.9% are nurses, 30.3% are physicians, 7.6% are laboratory personnel, 3.8% are physiotherapists, and 14.4% are administrative staff. This professional diversity allows for a comprehensive evaluation of breastfeeding conditions within the institution.

Parity

In terms of parity, 45.5% of women have one child, 39.4% have two, and 15.1% have more than three.

Pregnancy Follow-up

Pregnancy follow-up for participants was mainly conducted in the clinics for 80.3% of cases, while 15.2% of women were followed up in public hospitals and 4.5% within the University Hospital Center.

Term and Infant Hospitalization:

Out of 264 deliveries, 11.4% were preterm. Additionally, 9.1% of babies required postnatal hospitalization.

Continuing Education on Breastfeeding

The majority of participants (69.7%) did not receive continuing education on breastfeeding. Among those who received training, the main sources included participation in conferences, internet research, and breastfeeding promotion days conducted by the pediatrics department.

Time of First Feed

Regarding the time of the first feed, 48.5% of women initiated breastfeeding within the first hour following birth, and 27.3% did so after six hours.

Frequency and Duration of Feeds

For feed frequency, 79.5% of women breastfeed their baby at least eight times a day, while 20.5% do so less than eight times a day. Regarding feed duration, 44.7% of women breastfeed until the baby is satisfied, 41.7% breastfeed for 10 to 20 minutes, and 13.6% practice feeds lasting five minutes.

Breastfeeding Mode

The breastfeeding modes adopted by participants are as follows: 48.5% practice exclusive breastfeeding, 39.4% practice mixed breastfeeding, and 12.1% practice exclusive formula feeding.

The Chi-square test of independence showed that the relationship between professional status and breastfeeding mode is statistically significant ($\chi^2 = 7.142$, $df = 8$, $p = 0.0075$).

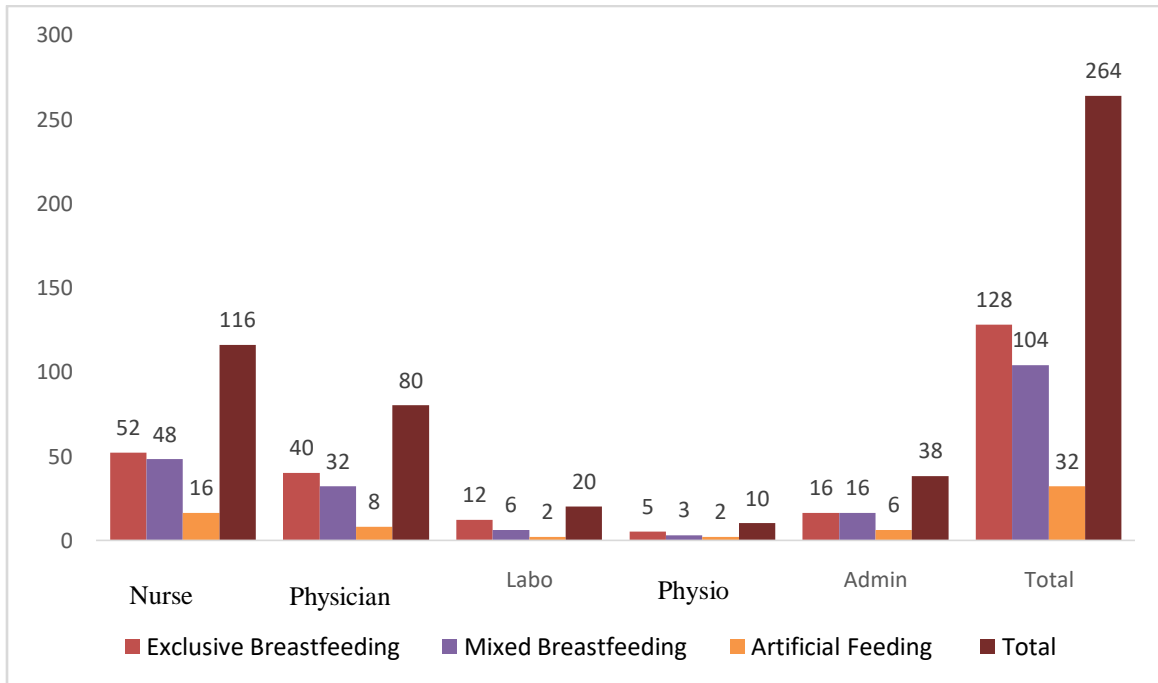


Figure 2:- Distribution of breastfeeding modes by professional status.

-The average duration of breastfeeding is 10.8 months.

Limitations and Support

The main limitations encountered by participants during breastfeeding include unfavorable working conditions (60.6%), time constraints (60.6%), lack of knowledge about breastfeeding methods (34.1%), lack of family support (15.2%), maternal health problems (15.2%), and lactation problems (30.3%).

Recommendations for Improving Breastfeeding Conditions

Participants suggested several recommendations to improve breastfeeding conditions: increase maternity leave, improve working hours, create dedicated breastfeeding areas, provide breastfeeding training, establish nurseries within the facility, avoid night shifts during the breastfeeding period, and prepare mothers before childbirth.

Results of Multivariate Analysis:-

A multivariate logistic regression was conducted to identify factors associated with breastfeeding beyond 6 months. The results are shown in the table (Table 1)

Table 1:- Factors associated with exclusive breastfeeding beyond 6 months.

Factor	Odds Ratio (OR)	95% Confidence Interval (CI)	p-value
Mother's Age (30-40 years vs 20-30 years)	1.5	1.2-1.8	0.02
Professional Status (doctors vs administrative staff)	2.2	1.4-3.4	0.001
Parity (two children vs one child)	1.8	1.3-2.5	0.004
Parity (three children vs one child)	2.1	1.4-3.2	0.002
Continuing Education on Breastfeeding	1.7	1.2-2.4	0.005
Spousal Encouragement	2.0	1.5-2.7	< 0.001

Table 2:- Characteristics of Participants (n=264) and Breastfeeding Data at University Hospital Centre in Oujda.

Parameter	Category	Number	Percentage (%)
Age Group	20-30 years	104	39,4
	30-40 years	144	54,5
	>40 years	16	6,1
Professional status	Nurse	116	43,9
	Physician	80	30,3
	Laboratory Personnel	20	7,6
	Physiotherapist	10	3,8
	Administrative staff	38	14,4
Parity	I	120	45,5
	II	104	39,4
	III	40	15,2
Pregnancy Follow-up	Clinics	212	80,3
	Public hospitals	40	15,2
	University Hospital Centre	12	4,5
Term	Preterm	30	11,4
Baby hospitalization	Yes	24	9,1
Continuing Education	No	184	69,7
Time to First Feed	<1hour	128	48,5
	> 6 hours	72	27,3
Frequency of feeds	≥ 8 feeds	210	79,5
	< 8 feeds	54	20,5
Duration of Feeds	To satisfaction	118	44,7
	10-20 min	110	41,7
	5 min	36	13,6
Breastfeeding Mode	Exclusive Breastfeeding	128	48,5
	Mixed Breastfeeding	104	39,4
	Formula feeding	32	12,1
Challenges Encountered	Working conditions	160	60,6
	Time constraints	160	60,6
	Lack of Knowledge	90	34,1
	Lack of Family support	40	15,2
	Maternal Health Problems	40	15,2
	Lactation Problems	80	30,3
Medications for Lactation	Yes	40	15,2
Encouraging Spouse	Yes	153	58,0

The results of the multivariate analysis indicate that several factors, such as the mother's age, professional status, parity, continuing education on breastfeeding, and spousal encouragement, are significantly associated with the likelihood of breastfeeding beyond 6 months. These findings underscore the importance of ongoing education and family support in promoting extended breastfeeding.

Discussion:-

Our survey holds crucial importance globally and nationally, shedding light on the challenges primarily faced by healthcare professionals and institutions to improve their working conditions, and consequently, significantly optimize the outcomes of their interventions. In Morocco, although breastfeeding is a common practice, significant challenges persist in enhancing its adoption and duration.

To address these challenges, the country has implemented several initiatives to promote breastfeeding, incorporating diverse strategies to support mothers and raise awareness among the population. These efforts include the National Nutrition Strategy and the Baby-Friendly Hospital Initiative (BFHI) supported by the WHO and UNICEF, aiming to encourage breastfeeding-friendly practices in healthcare facilities. The involvement of healthcare professionals is essential in this endeavor as they play a key role in both implementing these initiatives and providing direct support to breastfeeding mothers.[5]

It is within this context that our study was conducted. We sought to assess the current status of breastfeeding at the Mohammed VI University Hospital Center of Oujda, analyzing breastfeeding rates, common practices, and obstacles faced by mothers. Our results reveal an exclusive breastfeeding rate of at least 6 months of 48.5%, aligned with national data [4]. In comparison, the study by Ranjitah in India reported a rate of 60% [6], while Sattari [7] in the United States recorded 25%, and Canada 35.6% [8]. These variations could be due to cultural and structural differences.

Regarding the average duration of breastfeeding, our study indicates 10.8 months, compared to 9.9 months in the United States [7] and 16.7 months in Turkey [9].

Participants in our study identified several challenges encountered during breastfeeding, including unfavorable working conditions (60.6%), time constraints (60.6%), lack of knowledge (34.1%), lactation problems (30.3%), lack of family support (15.2%), and maternal health issues (15.2%). In our context, the absence of equipment and dedicated spaces to promote breastfeeding constitutes a significant limitation for continuing breastfeeding, which corroborates observations made in other international studies.[6]

The study by Agadayi et al. [9] revealed that the main reason for early cessation of breastfeeding was workplace challenges. Returning to work was cited as one of the primary reasons why women stopped breastfeeding. This conclusion was drawn from studies conducted by Akbayram in Turkey [10], Muda et al. in Malaysia [11], and in Australia [12].

Women included in our study made several recommendations to improve breastfeeding conditions. These suggestions include extending maternity leave beyond 12 weeks, improving working hours, creating dedicated breastfeeding spaces, implementing breastfeeding training programs, installing nurseries within the facility, reducing night shifts during the breastfeeding period, and preparing mothers before childbirth.

Many studies have also highlighted the correlation between workplace support and the total duration of breastfeeding. For example, the study by Sattari et al. showed that for each unit increase in organizational support, the duration of breastfeeding increased by 1.3 months. Similarly, women with workplace accommodations to support breastfeeding were 1.5 times more likely to continue breastfeeding compared to those without access [7].

In India, an association was observed between exclusive breastfeeding for six months and workplace breastfeeding support [6]. In the United States, support from management within the workplace had a positive impact on job satisfaction as well as the extension of the exclusive breastfeeding period [13]. These various studies underscore the importance of a breastfeeding-friendly work environment to prolong the duration of breastfeeding, thereby highlighting the need for better workplace support and the establishment of conducive infrastructures for continued breastfeeding.

A significant limitation of this study is the lack of comparison with other university hospital centers in Morocco, as well as not surveying other healthcare facilities in the same region of the country. This comparison would have allowed for a more in-depth analysis of breastfeeding practices and challenges in different hospital contexts and could have provided additional insights to guide recommendations and interventions aimed at improving breastfeeding support in the region and nationally.

Conclusion:-

Our study sheds light on the challenges and needs of women employed at the Mohammed VI University Hospital Center of Oujda regarding breastfeeding. The results suggest the need for more robust support policies to improve breastfeeding rates and the working conditions of breastfeeding mothers. These measures could include extended maternity leave, ongoing training, and better institutional and family support, thus aiming to promote national improvements in breastfeeding practices and the working conditions of breastfeeding mothers.

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Conflict of Interest Statement:

The authors declare no conflicts of interest.

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