

# An Investigation of the Level of compliance with Standards in Family Performance in the Field of Infant Care and its Relationship with Some Factors in the Families Referring to Medical Clinics of Ardabil City

**S.F. Mousavi<sup>1</sup> and N. Sadeghi<sup>2\*</sup>**

<sup>1</sup>Faculty of Nursing and Midwifery, Azad Islamic University, Isfahan (Khurasgan) Branch, Iran

<sup>2</sup>Corresponding Author: Narges Sadeghi, community Health Research Center, Islamic Azad University, Isfahan (Khurasgan) Branch, Iran

## ARTICLE INFO

### Article history:

Received 10 July. 2018

Accepted 12 Aug 2018

Published 27 Sept. 2018

### Keywords:

Standard,  
Infant Care,  
Family,  
Performance,  
Specifications of Family

## ABSTRACT

**Introduction and purpose:** Infancy is one of the most sensitive life stages which needs accurate knowledge and presentation of careful cares. Since family is considered as a valuable element in presenting services to newborns, the present study aims to determine the level of compliance with standards in family performance in the field of infant care in the families referring to Medical Clinics of Ardabil City in 1395 (2016). **Methodology:** In this cross-sectional descriptive-analytical study, 132 families having infants attending in Clinics of Ardabil City selected by the access method were studied. Criteria to enter into the study include caring infant by family, healthiness of the infant from birth, lack of history of hospitalization during infancy and non-membership of parents as health staffs. Data were collected through author-made questionnaire which its validity was fulfilled using recommendations of 10 professional experts in this field and its reliability was fulfilled after doing an preliminary study and determining Cronbach's alpha ( $\alpha = 0.80$ ). Data were analyzed by SPSS Statistics 21. **Findings:** The average score for overall family performance in field of family's baby caring, of the total score 270 is  $224/053 \pm 0/5246$ . This means the overall family performance in the field of baby caring had been at a very low level. Of 132 studied samples, 60 persons (45 per cent) had female infants and 72 persons (55 per cent) had male infants. In fathers, the most frequency relates to self-employed persons (50.5 per cent) and the least frequency relates to unemployed persons (4.5 per cent). Also, results from mothers' employment indicate that the most frequency relates to house-wives (90.9 per cent) and the least frequency relates to employees (9.1 per cent). Results indicate that by promotion of parents' education, standards of baby caring increases, too. But employment variables in this context have not important roles. **Discussion and conclusion:** The level of compliance with standards from the families participated in the present research in the field of infant care was very good. The present study showed that the level of family performance in the field of standards in baby caring closely relates to some specifications of family and also some family characteristics are able to predict standards of infant care. Therefore, the more the level of specifications of family is promoted, the more standards of baby caring are increased.

## 1. Introduction

Infancy is one of the most sensitive life stages, which needs accurate knowledge and offering of careful cares (Bowman, 2005). On the other hand, infants based on their special biologic and physiologic conditions need more accuracy and subtlety in the field of infancy cares. Lack of adequate knowledge of families about the specific issues during this course causes decline of caring quality and it enhances problems as a defect cycle and endangers quality of health of the infant (Taghavi, 2005).

By presenting correct and standard cares in infancy, the opportunity of growth and evolution of the infant which is his natural right is provided. The most important time to form personality, to develop correct emotional relationships and to preserve physical and mental health of children, is infancy especially the first hours of birth. This time has a significant role in human health in all dimensions including mind, body and safety. Therefore, beginning to correctly and principally preserve infants from birth is very important. On the other hand, offering favored care to infants causes to have a healthy society, increase of health costs in all ages of

childhood and even other ages of life, and as a result increase of social capitals (Cleveland, 2008).

Now, according to the mentioned facts, it is the time to look deeply at the quality of growth pattern of children and to use the results from Iranian researches and international experiences to increase physical and mental capabilities of Iranian children (Bowman, 2005). Of these experiences is to use participation activities of parents and families in promoting health of community so that nowadays World Health Organization (WHO) has declared that family participation is the base of promotion of health and the main key of presenting early health services (Yari, 2009).

Since in determining purposes and especial needs and doing interventions, family is considered as a valuable element in offering services to infants (Cleveland, 2008), knowledge of parents and especially mother about how to correctly solve problems of infants and how to present necessary cares in this period can influence on enhancing self-confidence of mothers in protecting infants and removing most of incorrect beliefs and traditions in this field (Bowman, 2005). And one of the best and most effective ways to prevent from the strains and damages resulting from hospitalization is

\*Corresponding author: N.Sadeghi@gmail.com

DOI: <https://doi.org/10.24200/jrset.vol6iss04pp1-5>

parents' actively involvement in caring for infants (Taghavi, 2005) because this promotes ability of parents to facilitate evolution of infants and decreases degree of hospitalization of their infants (Doyle et al. 2003). Annually birth of more than one million newborns in Iran is an important reason to deal with physically and mentally dimensions of infants' health provision (Doyle, 2004). National investigations of assessment of children growth in 1377 (1998) showed that a high percentage of Iranian children has growth decline (Doyle, 2004).

Training parents and utilizing their participation during growth course of infants is completely necessary (Daneshvar, 2010). Studies show that to have essential information and knowledge about standards of daily caring for infants and to honestly answer to the resulting questions are of the most important requirements of parents (Hoseini and Shahbazi, 2010).

Participation of parents is one of the principles which WHO and scientific resources have emphasized on to improve health. Therefore, we can take concerning to more participation of parents into account as one of the approaches to improve children's growth.

Therefore, because family performance is considered as one of important indexes warranting quality of life and health of the whole family in the field of caring for children and especially infants, and by considering the fact that researches have not much information about knowledge of families regarding caring standards of infants and studies have not been found in this field, so the present study aimed to determine the level of compliance with standards in family performance in the field of infant care and its relationship with some factors in the families referring to clinics of Ardabil City in 2016 so that by use participation activities of parents and families in promoting health of community so that nowadays World Health Organization (WHO) has declared that family participation is the base of promotion of health and the main key of presenting early health services (Yari, 2009).

Since in determining purposes and especial needs and doing interventions, family is considered as a valuable element in offering services to infants (Cleveland, 2008), knowledge of parents and especially mother about how to correctly solve problems of infants and how to present necessary cares in this period can influence on enhancing self-confidence of mothers in protecting infants and removing most of incorrect beliefs and traditions in this field (Bowman, 2005). And one of the best and most effective ways to prevent from the strains and damages resulting from hospitalization is parents' actively involvement in caring for infants (Taghavi, 2005) because this promotes ability of parents to facilitate evolution of infants and decreases degree of hospitalization of their infants (Doyle et al. 2003). Annually birth of more than one million newborns in Iran is an important reason to deal with physically and mentally dimensions of infants' health provision (Doyle, 2004). National investigations of assessment of children growth in 1377 (1998) showed that a high percentage of Iranian children has growth decline (Doyle, 2004).

Training parents and utilizing their participation during growth course of infants is completely necessary (Daneshvar, 2010). Studies show that to have essential

information and knowledge about standards of daily caring for infants and to honestly answer to the resulting questions are of the most important requirements of parents (Hoseini and Shahbazi, 2010).

Participation of parents is one of the principles which WHO and scientific resources have emphasized on to improve health. Therefore, we can take concerning to more participation of parents into account as one of the approaches to improve children's growth.

Therefore, because family performance is considered as one of important indexes warranting quality of life and health of the whole family in the field of caring for children and especially infants, and by considering the fact that researches have not much information about knowledge of families regarding caring standards of infants and studies have not been found in this field, so the present study aimed to determine the level of compliance with standards in family performance in the field of infant care and its relationship with some factors in the families referring to clinics of Ardabil City in 2016 so that by next to child (maximum score 30 and minimum 6), and family performance in relation to infant immunization (maximum score 15 and minimum 3).

Score average of family performance was investigated in the field of compliance with standards in various dimensions. Total score for each family can be between 54 and 270. Then, score average was classified and investigated at five very low, low, average, good and very good levels. Therefore, scores (1-54) were considered as very low performance, scores (55-108) as low performance, scores (109-162) as average performance, scores (163-216) as good performance and scores (217-270) as very good performance.

To determine validity, the above questionnaire was offered to 10 professionals in this field and their correctional comments were obtained. To determine reliability, a pilot study (with 10 samples) was used and amount of Cronbach's alpha ( $\alpha = 0.80$ ) was calculated.

Criteria to enter into the study include caring for infants by families, healthiness of infants in birth and lack of hospitalization history in infancy and non-membership of parents as health professionals. Criterion to exit from the study includes distribution of questionnaires. Obtained data entered into SPSS statistics 21 after coding and was analyzed by using descriptive and analytical methods after assuring from accuracy of entrance of data. Descriptive statistics was as drawing tables, diagrams and report of statistical indexes (mean and standard deviation for quantitative variables and amount and rate for qualitative variables). In analytical statistics, to determine the level of compliance with standards by parents, according to conditions, Fisher's exact statistical test, Chi-square test and correlation coefficient were used. In all of the statistical tests, p amount lower than 0.05 was considered as a level of significance.

This study was confirmed in Committee on Ethics of Isfahan Medical University. Before filling-in questionnaires, written informed consent was achieved from the studied units and after explaining research purposes, they were assured that they can exit from the research at every step of the study without offering any reason and without any effect

in the trend of investigating infant in clinic. All questionnaires were given codes and these codes were used in all of the steps. After filling-in questionnaires, those families who had problems in the field of standards of caring for infants received adequate trainings.

### Results

In this research that its population includes the parents with infants referring to clinics of Ardabil City in 2016, 132 families with infants were investigated that among them 60 people (45 percent) had baby girls and 72 people (55 percent) had baby boys. From 132 studied samples, the most frequency related to 1-10 days age class (67 infants, equals 75.75 percent) and the least frequency related to 21-28 days age class (32 infants, equals 24.25 percent) (Table 1). Data related to fathers' education indicate that among 132 studied samples, the most frequency related to cycle education level (49 people, 37.13 percent) and the least frequency related to illiterate class (3 people, 2.27 percent). Also, results of mothers' education indicate that of 132 studied samples, the most frequency related to diploma education level (42 people, 31.8 percent) and the least frequency related to illiterate class (1 person, 0.75 percent) (Table 1).

Data related to parents' employment indicates that of 132 studied samples regarding jobs of fathers, the most frequency related to self-employed persons (67 people, 50.50 percent) and the least frequency related to unemployed persons (6 persons, 4.50 percent). Also, results of mothers' occupation indicate that of 132 studied samples, the most frequency related to housewives (120 people, 90.90 percent) and the least frequency related to employees (12 people, 9.1 percent) (Table 1).

Based on Table 2, it is observed that descriptive information of all variables is shown and family performance average in feeding and lactating was higher than other variables. Average score of family performance in the field of caring for eyes is as  $12.3939 \pm 1.7156$  from score 15, of dressing is  $34.8258 \pm 1.7550$  from score 40, caring for umbilical cord is  $34.9394 \pm 3.7630$  from score 40, clipping nails is  $19.7481 \pm 4.3470$  from score 25, of feeding and lactating  $78.780 \pm 4.3382$  from score 80, sleeping next to child  $28.6364 \pm 9.0783$  from score 30, and family performance in relation to newborn immunization  $224.053 \pm 0.5246$  from total score

270; in other words, the whole of family performance in the field of infant care was at very good level.

Standard Beta coefficient for two variables of specifications of family and standards of infant care equals 0.195 and absolute value of t-amount is higher than 1.96 error level (9.123) and because level of significance was obtained lower than 0.05 and we can reject null-hypothesis, it is concluded that specifications of family can predict standards of infant care and this prediction is as positive; in other words, by promotion of specifications of family, standards of infant care will increase.

Standard Beta coefficient for two variables of father's education and family performance in the field of standards of infant care equals - 0.063 and absolute value of t-amount was lower than 1.96 error level (- 0.528) and level of significance was higher than 0.05; and also standard Beta coefficient for two variables of mother's education and family performance in the field of standards of infant care equals 0.285 and absolute value of t-amount is higher than 1.96 error level (2.380); and because level of significance was obtained from 0.05, we can conclude that mother's education can predict family performance in the field of standards of infant care; in other words, mother's education can predict 28.5 per cent of family performance in the field of standards of infant care. According to the fact that level of significance for parents' jobs was obtained higher than 0.05, one can say that employment of parents cannot predict family performance in the field of standards of infant care.

Table 1- Frequency of distribution of persons based on demographic characteristics

MVariable		Sort	Frequency	Percent
Gender		boy	72	55%
		girl	60	45%
Age level of infants		1-10 days	67	50.75
		11-20 days	33	25.0
		21-28 days	32	24.25
Education	Fathers	Illiterate	3	2.27
		Cycle	49	27.13
		Diploma	33	25
		Associate's Degree	9	6.8
		Bachelor's Degree	27	20.45
	Master's Degree and Higher	11	8.35	
	Mothers	Illiterate	1	0.75

		Diploma	38	28.46
		Associate's Degree	11	8.35
		Bachelor's Degree	32	24.24
		Master's Degree and Higher	8	6
Employment	Fathers	Selfemployed	67	50.5
		Employee	30	22.5
		Worker	30	22.5
		Retried	0	0
		Disable	0	0
		Unemployed	6	4.5
	Mathers	Housewife	120	90.9
		Employee	12	9.1

Table 2- Descriptive information of variables

Dimension	Mean	Standard deviation
Family oerformance in caring for eyes	12.3939	1.7156
Family performance in dressing	34.8258	1.7550
Family performance in caring for umbilical cord	34.9394	3.7630
Family performance in clipping nails	19.7481	4.3470
Family performance in feeding and lacting	78.7803	4.3382
Family performance in relation to sleeping next to infant	28.6364	90.0783
Family performance in relation to infant immunization	14.8788	1.4156
Total family performance	224.053	0.5246

### Discussion

Results indicated that the level of compliance with standards by the families participated in the present research in the field of infant care has been at a very good level. And by promotion of parents' education, standards of infant care increase, too. But employment variable is not effective in this field.

According to results of the research, one can conclude that whatever amount of family's demographic specifications such as parents' education level increases, standards of infant care increase, too. Results of this part of the research corresponds with results of Sharafi (1388) who measured effect of mothers' knowledge of infants hospitalized in hospitals of Rasht Town about infant care and then observed that those mothers with higher education have the highest average of knowledge score.

In explanation of these results, we can say that these relations suggest that family performance in newborn caring is controlled by different demographic and social variables and at the time of doing caring of infancy, one should consider their increasing and decreasing role to improve family performance and if necessary, should do appropriate plannings to improve these variables.

Results of the present study in the field of parents' education showed that mothers' education can predict family performance in the field of standards of infant care;

in other words, mother's education can predict 28.5 percent of family performance in the field of standards of infant care.

In the article of Nazari (2011) entitled 'An Investigation of Parents' Knowledge about Genetic Diseases of their Children,' results indicated that there is a significant relationship between education level and average of scores of parents' knowledge such that if education level increases, average of scores of parents' knowledge increases ( $P < 0.005$ ). In a research by Sharafi (2009) entitled 'An investigation of Mothers' Knowledge with Infants Hospitalized in Hospitals of Rasht Town' in order to study cares of infancy, results showed that mothers with higher education had the highest average of knowledge scores (47.53%). It is inferred from results that there is a correspondence between results of other researches and results of the present research about effect of education level of families on family performance.

In explaining these results, one can say that these relationships suggest that education level of parents can effect on the level of family performance in the field of standards of infant care so that by promotion of education level, standards of caring improves, too. Then, parents having lower education level should be paid more attention. In relation to parents' employment, results of the present study indicated that parents' employment cannot predict family performance in the field of standards of infant care.

Results of Sharafi (2009) which aimed to investigate mothers' knowledge with infants hospitalized in hospitals of Rasht Town about cares of infancy indicated that in relation to employment the highest average of knowledge score was for the persons working in private sector compared to housewives and there is a meaningful relationship between education level, employment and knowledge level.

Results indicate that results of other researches do not correspond with results of the present study about effect of parents' employment on family performance. Maybe this non-correspondence of the present results is because the trainings presented to parents at the time of infants' release for all parents with different jobs are appropriate and based on family needs.

### Conclusion

The present study indicates that the level of family performance in the field of standards of infant care is at a very good level but according to the fact that a big part of community health relates to correct implementation of the plan of

Limitations of the study

One of the limitations of the present study is lack of adequate place to interview with the persons.

### Acknowledgements

We would like to thank Nursing and Midwifery Faculty of Isfahan Islamic Azad University to offer physical and mental support in doing this research.

### References

1. Mirmolayi, S; Amel Valizadeh, M; Mahmudi, M; and Tavakkol, Z. 2012. An Investigation of Effects of Offering Cares after Childbirth at Home on Performance of Mothers in Infant care. *Journal of Urumiya Nursing and Midwifery Faculty*, 10th period. No. 3. Progressive 38. P 448.
2. Nazari, Sh; Sadeghi Kupayi, M; and Abdollah Gorji, F. 2011. An Investigation of Parents' Knowledge about Genetic Diseases of their Children. *Genetic in third millennia*. 9th year. No. 1.
3. Bowman, KG. 2005. Postpartum Learning Needs. *J Obstet Gynecol Neonatal Nursing*. 34(4): 438-43.
4. Cleveland, LM. 2008. Parenting in the Neonatal Intensive Care Unit. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 37(6): 666-691
5. Daneshvar, AZ. 2010. To Educate Parents. Presented in 8th National Pediatric Nursing Congress, Imam Hall Complex Imam Khomeini Complex Hospital Tehran, October ;10-14.
6. Doyle, LW; Ford, G; Davis, N. 2003. Health and Hospitalizations after Discharge in Extremely Low Birth Weight Infants. *Semin Neonatal*. 8(2): 137-45.
7. Doyle, LW. 2004. Changing Availability of Intensive Care for Extremely Low Birth Weight Infants in Victoria over Two Decades. *Med J Australia*. 181(3):136-139.
8. Hosseini, M; Shahbazi, N. 2010. Family Needs of Neonates Admitted in NICU. Presented in 8th National Pediatric Nursing Congress, Imam Hall Complex Imam Khomplex Hospital Tehran. 10-14.
9. Khaledi, N; Shoaee Anjom, F; Rezaeizadeh, G; and Farahani, Z. Evaluation of Parents' Awareness and Knowledge about Problems and Issues Related to Their Premature Infants in An Iranian Hospital. *Open Journal of Nursing*, 2015, 5, 465-469.
10. Khorshidifard, M; Pishva, N. Bonyadi, F. 2013. Assessment of Knowledge, Attitude and Behavior of Mothers on Neonatal Jaundice in Kazeroon City in 2013. *NJV*. 2(3): 59-68.
11. Sharafi, R. 1388. Knowledge Assessment of the Mothers of Admitted neonates in the Hospitals of Rasht ,about Neonatal Cares. *Urmia Medical Journal*. 20(1): 21-25 .
12. Taghavi, M. 2005. The Mortality Rate of 23 Provinces of Country in 2005. Tehran: The Ministry of Hygiene and Cure of Medical Training.
13. Yari, A. Alhani, F; and Ebrahimi, B F. 2009. Survey the Family Centered Care Implementation Ability in Emergency Department and its Effects. Presented in 7th National Pediatric Nursing Congress, Imam Hall Complex Imam Khomeini Complex Hospital Tehran. 10-14.