Original Article

# Article Occurrence of Colic and Stomach Pain in Infants; An Observational Study

Colic and Stomach Pain in Infants

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## **ABSTRACT**

**Objective:** To investigate the occurrence of colic and stomach pain in infants; an observational study.

Study Design: Observational study

**Place and Duration of Study:** This study was conducted at the department of Pediatrics and Obstetrics, Al-Tibri Medical College and Hospital of Karachi- Pakistan from February 2022 to April 2022.

**Materials and Methods:** The study was initiated after taking the Ethical Approval by the Ethical Review Committee (ERC) of the Organization while the participants were asked to duly sign the consent form for ensuring the transparency of the research throughout the process. A total population of 200 participants was evaluated through a well-structured questionnaire which is based on 10 situational items. The demographic data included Age, Educational Status, Nature of job, No. of children, and Financial Stability of the participating mothers of infants undergoing colic and stomach pain in infants. The dependent and independent factors to assess the extent of remedial measures to dismiss colic or stomach pain in infants were statistically analyzed by using analytical software (SPSS; version 20.0).

**Results:** The use of herbal medicine to relief the colic pain in infant was found statistically significant at P value <0.05. And the ratio is very much higher in mothers of socially deprived areas. Qualitatively most of the mothers need support in care as extract the main theme after the interview.

**Conclusion:** The herbal medicine is the major remedial action taken by most of the mothers who's infants suffering from colic and stomach pain. It has been also found that the colic and stomach pain is more prevalent in underprivileged areas and most of the mother need support care.

Key Words: Colic, Infants, Prevalence, Pediatrics, Pain.

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## INTRODUCTION

Infant colic and stomach pain is the most common problem with few months old infants which is characterized as unnecessary crying of baby with abdominal distress and pain. It occurs in every 1 out of 10 children equally in baby girl and baby boy. Colic pain also termed as Functional Abdominal Pain Disorders (FAPD) which has been reported as the most common disorder in infants, affecting around 25% of all infants globally (1,2).

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Received: May, 2022 Accepted: May, 2022 Printed: June, 2022 Careless nursing while feeding, indigestion of baby's formula milk, gas, acid reflux, and infrequent burping are some reasons which results in infantile colic pain. Whereas, crying with higher pitch, constipation, tight fists, burping are some signs to assess colic pain. In spite of thousands of studies in all over the world, the pathogenesis of infantile colic pain leftovers unsatisfactory and it's supposed to be multifactorial (3,6). According to a study carried out by Reust & Williams, acute abdominal pain is the main cause of all visits to hospitals and health for infants and children and accounts 9% of total visits (4). Similarly, Despriee ÅW et. al, reported the highest frequency of abdominal pain (22%) in infants followed by discomfort and colic pain 6% and 3% respectively. According to a study carried out in Sweden reported that abdominal pain is predominant in 26% of all the children (2,5).

In study, Wessels developed some rules to define colic pain according to his rule of three colic is describes as bothering, irritability or crying without any obvious reason for prolong duration at least three hours a day or 3 days a week. But in practice it is very difficult for parents to calculate crying hours <sup>(6,9)</sup>. For this reason, this rule has been excluded in ROME IV standards to

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conclude colic pain. Pediatricians use ROME IV classification for supplement of pathophysiology and treatment of gastrointestinal disorder <sup>(5,7)</sup>. The modified ROME IV classification has excluded the term discomfort in the diagnosis criteria as it is nonspecific and has been reported to generate ambiguity as it has different sense in different languages. Therefore, after eliminating discomfort only abdominal pain has been included in ROME IV classification and is considered to be the most updated criteria <sup>(8,5)</sup>.

# MATERIALS AND METHODS

**Study Design and Study Setting:** In the proposed study, the mothers of infants had participated from February 2022 to April 2022. The Al-Tibri Medical College and Hospital in Malir District at Karachi, Pakistan reserves all the rights of conducting this observational study by collaborating with the obstetrical division of the hospital while taking the prior ethical approval from the Ethical Review Board (ERB) of the institute. The study included the infants of just-born babies (i.e., 24 hours) till 2 months.

**Population of the Study:** The investigations were carried out to study the prevalence of colic and other stomach pain in infants. Recently delivered women i.e., the mothers of infants had participated in the study by random sampling while other pregnant mothers (i.e., of pregnancy less than 35 weeks) or with previous records of severe neonatal infections were excluded from the study.

**Data Collection:** A total population of 200 participants was evaluated through a well-structured questionnaire. This Questionnaire consisted of 10 well-developed and situational questions. The data collected had been analyzed by using the statistical software (SPSS; version 20.0) to statistically correlate the associated factors with the disease and to determine the prevalence in the studied population. While all the participating mothers were provided free post-delivery consultations for the better handling of colic and stomach pain in infants.

## **RESULTS**

Table No.1: Showed demographic factors

**Table No.2**: Assessment of extent of remedial measure to dismiss colic or stomach pain in infants

**Table No.3**: Themes of the response of mother of

infants in colic pain Is has been observed that the use of herbal medicine in found statistically significant in mother from rural areas and socially deprived families.

Table No.1: Demographic factors and their association with the remedial action taken my mothers of infants in colic pain again factors

Variable	Herbal	P-Value
	Medicine	

Age	20-25	2.62 ±0.1	
	26-31	4.35±2.5	P<0.05
	32-36	2.8±0.15	
Residence	Urban	2.54±0.03	P<0.05
	Rural	3.54±0.23	P<0.03
Economic Status	Low	3.06±0.03	
	Middle	3.48±0.4	P<0.05
	Upper	2.8±0.03	
Educational	Illiterate	3.1±1.2	P<0.05
Status	Literate	3.02±1.23	r<0.03
Job Status	Housewife	3.24±1.2	P<0.05
	Employer	3.21±1.4	

Table No.2: Assessment of the extent of remedial measures to dismiss colic or stomach pain in infants

Relatable Questions from questionnaire		
Do your baby's colic/stomach problems affect you?		
How do you provide infant care during the episode		
of colic or stomach pain?		
What measures do you take to solve these colic and		
stomach pain problems?		
As a mother, what do you feel when your baby is in		
pain?		

Table No.3: Responses of mothers of infants in colic pain

Main	Themes	Subthemes
Themes		
	Lack of	Frequent visit to doctors
	trust on	Change doctor
	doctors	
	Full time	Lack of time for my work
	care	Put aside all previous work
	Feeling of	Feeling confused
	inadequacy	Inability to Care
Support	Persistent	Unrest inside
needs for	anxiety	Child paun anxiety
care	Care	Feeling lonely
	without	Inadequate spouse support
	help	
	Looking	Looking for an effective
	for	medicine
	methods to	Searching of child pain
	control	relief
	pain	Use of herbal medicine

### DISCUSSION

In the subjective stage, we investigated the encounters of mothers who were really focusing on newborn children with colic irritability. The fundamental subject extricated from the information was mothers support needs for care, which incorporates the accompanying subcategories: "absence of confidence in specialist"; "full-time care," "insecurity," "persistent nervousness, "care without assistance," and "searching for ways of controlling distress." Many guardians, particularly mothers, didn't expect colic irritability in their children, and they were not intellectually prepared to defy what

is happening. Long haul crying of the baby made mothers restless and focused. They need instructive, mental, and profound help for really focusing on their children. That's what daelemans recommends albeit this present circumstance is harmless, the newborn child's folks and family are mentally impacted. Guardians, particularly mothers, as the fundamental parental figures of newborn children, may deal with numerous issues during early stages. Subsequently, giving exact data to guardians and, specifically, mothers can minimize their vulnerability and help them mentally. Giving guardians data on the most proficient method to quiet down a child prior to managing colic irritability can assist guardians with dealing with their circumstance without speaking with individuals with different wellsprings of data and experiences (9,10). Having sufficient data about infection the executives can work on their self-adequacy and caregiving (11). The observations of surveys can be useful for mothers. In 2018 Al Saadoon showed that below 30% of the families knew about how to control the colic irritability. The Lack of care information has held them back from managing their infant youngsters (12). Concerning subcategory of the Lack of trust in the trained professional, Luyckx K showed that constant experiences with subject experts, modifications in the treatment and medications were astoundingly strong in making mental issues in the patient and families (13). Full-time care is another subcategory. In Pakistani families, mothers are liable for housekeeping and managing family members, which are hard for them Dissimilar to the discoveries of the ongoing Study, Sabzevari discovered that utilized mothers were freer, felt all the more remarkable with expanded responsibility in dealing with youngsters, and they had higher future (14,15). Additionally, one more review showed that mothers needed to foster their associations with their loved ones (16). In this study, "mothers' determined nervousness" is another subcategory. By and large, the mother's psychological status influences the nature of care. Likewise, a few examinations considered the mother's psychological status as a persuasive calculate deciding the seriousness of the childish colic. Besides, the mother's day to day environments and, surprisingly, her work position can influence the childish colic (17). As indicated by studies, mothers with much pressure caused serious childish colic irritability. Mothers are the fundamental wellsprings of a kid. One review suggested mental help for mothers under nervousness and stress (18). These discoveries showed that mothers had a "deep-seated insecurity "in the consideration cycle. Attributable to the way that mothers didn't accurately comprehend the pathogenesis of colic irritability, its causes, signs, and side effects, they experienced issues in dealing with their babies. In addition, mothers didn't know about the consideration cycle, they utilized mistakes and

preliminaries or the experience of different mothers to deal with their youngsters. One investigation discovered that guardians felt restless and unfit to deal with youngster and they had unfortunate selfviability<sup>(19)</sup>. Ko observed that instructive mediations were a central issue for expanding the nature of taking care of oneself and diminishing nervousness in patients with malignant growth and their families (20). One review showed that the itemized instructive projects for guardians were useful in the improvement of care and control of sickness (5). A report on the mothers of youngsters with DM and those with epilepsy showed an elevated degree of tension (21). In this study, care without a helpline relates to Pakistani culture on the grounds that the mothers had numerous obligations. Their spouses were working external the house, so they needed more opportunity to help their wives. Notwithstanding mothers' diminished nature of care, this issue additionally influences their personal satisfaction. Howard Sharp detailed that mindful alone caused despondency in mothers of youngsters with disease in the long run (22). Thuy showed that family support related to exhaustion of mothers (23). Kim showed that family was one of the power hotspots for mothers of sick youngsters (24). In this review, mothers searched for ways of controlling infants' agony since they attempted to quiet their kids in any capacity. Many mothers had an uplifting outlook toward home grown drugs, yet they were unsure about them. In this review, the mothers asked various individuals for various arrangements. Be that as it may, they couldn't pursue a conclusive choice in view of clashing suggestions. As demonstrated by the expert's experiences, Kermani people routinely use normal drugs, for instance, Teucrium Polium and peppermint for the facilitating of colic torture. One motivation behind why mothers have serious qualms about the use of standard drugs is the dark pathology of the fundamental colic torture (25). Also, various factors, similar to mother and kid awareness, mother's kind of food, family loaded with feeling status, and the association among mother and father impact the aggregate and reality of colic torture<sup>(17)</sup>. Today, probiotic drugs are moreover used to reduce colic torture in infant youngsters (26). This study's cutoff study was the mothers were in difficult situations and required greater chance to converse with; it was attempted to chat with them fittingly. The outcomes of this study showed that despite the fact that we couldn't hinder and puerile colic torture, clinical specialists should work with the thought cycle for mothers with colicky infants. Neighborhood pediatric clinical orderlies can help families by enlightening gatekeepers, conveying the physiological thought of the irritation, having an impact on family members' viewpoints about kid the board, and giving genuine information on the thought of a youngster with colic torture. It is in like manner possible to additionally

foster the family idea of care by offering mental and educational assistance packages and creating commonsense guidelines around here.

## CONCLUSION

The herbal medicine is the major remedial action taken by most of the mothers who's infants suffering from colic and stomach pain. It has been also found that the colic and stomach pain is more prevalent in underprivileged areas and most of the mother need support care.

### **Author's Contribution:**

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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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