

Prevalence of myths concerning growth and health of children among females of local population of Pakistan

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Abstract

Objectives: To analyse the prevalence of myths among women regarding growth and health-related issues of children, and to study the impact of basic demographic factors in this regard.

Methods: The educational, cross-sectional, descriptive study was carried out at the Combined Military Hospital, Peshawar, Pakistan, from January 2016 to January 2017. It comprised women reporting to paediatric outpatient clinics, and the subjects were selected using convenience sampling. A self-designed questionnaire was used which contained demographic details and 15 closed-ended questions encompassing common myths concerning child health-related issues. Total answers given by a client as YES (beliefs in myths) were grouped as >50% YES or <50% YES; and was cross-tabulated with independent variables. SPSS21 was used for statistical analysis.

Results: Of the 422 subjects, 301 (71.3%) believed in the existence of 'Garam' foods. Overall, 278 (65.9%) subjects had <50% YES, and 144 (34.1%) had >50% YES answers. Three most commonly believed myths were: a neonate must be tied for better growth 281 (66.6%), 'Garam' food should not be given to children in summers 225 (53.3%), and diseases like 'Kala Yarqaan' are transmitted through lactation 223 (52.8%).

There was a significant impact of education ($p < 0.001$) and regional background ($p = 0.006$) on predilection for harbouring myths. There was no significant impact of age ($p = 0.415$), marital status ($p = 0.790$) or socio-economic class ($p = 0.196$) on the matter.

Conclusion: Significant prevalence of myths pertinent to children's health-related issues among ladies was observed. The lacunae identified must be aptly addressed at clinical level as well as via lectures and seminars.

Keywords: Developing country, Child health, Child development. (JPMA 67: 1562; 2017)

Introduction

Health is a multi-dimensional and multi-faceted phenomenon. Convictions relatable to health and disease are usually the strongest of all beliefs harboured by any society.¹⁻³ Individual health behaviours embedded in cultural pattern are usually transmitted generation after generation.⁴ These connotations are not always supported by scientific verifications, but many people adhere to socio-cultural fallacies negating medical evidence.^{2,5} A child is the kingpin of every family. Everyone's attention revolves around his/her health. A mother, being the linchpin to a family, enjoys the prerogative in decision-making apposite to development and growth of child/children.⁶ Ironically, myths and fallacies are more religiously practised when it comes to a child's growth, health and disease. Literature documents that regional myths prevail encompassing neonatal and early childhood diseases.⁵ Pakistan is a developing country where vivid traditions and customs are in vogue. Here religion and culture dominate various aspects of life. Educational status is unambiguously meagre; even in formally educated families, myths/fallacies over-rule

medical evidence.^{1,7} Pakistan has second highest child mortality rate,⁷ therefore, apart from advocating adherence to medical practice, deterrence to those non-medicinal practices which are detrimental to a child's growth and survival must be addressed with full potential. This diverse and intensified subject of beliefs in myths and fallacies is sparsely studied in Pakistan as well as abroad.

This study was conducted in Peshawar, a metropolitan city of Pakistan, which is engrossed in socio-cultural ethnicities rendering obstacles to health education and practices. The current study was planned to see the prevalence of myths concerning a child's growth and health in society, to measure their intensity, and to see how demographic features affect them.

Subjects and Methods

The educational, knowledge-attitude-practice (KAP), cross-sectional, descriptive study was carried out at the Combined Military Hospital (CMH), Peshawar, Pakistan, from January 2016 to September 2016. After approval from the institutional review board, the sample size was calculated, keeping Peshawar's population at 3.6 million; confidence level 95%, response distribution 50%, and margin of error 5%. A simple self-designed questionnaire

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was used as the study instrument (Annexure), containing essential demographic details and 15 closed-ended questions pertinent to common myths regarding child development and health issues, with three possible answers, YES(wrong concept/myth), NO (correct answer, discarding myth), and DON'T KNOW(unsure). Demographic details (age, education, rural/urban background, marital status and socioeconomic class [SEC]) were independent variables. Few local terms used in the questions are described as under: 'Garam food'; foods which are thought to enhance metabolism and cause side effects like epistaxis, headache, increased blood pressure etc. 'Ghutti'; special food given to neonate soon after birth followed by daily doses during infancy, 'Surma'; a chemical applied in eyes as medicine and cosmetic. 'Qahwa'; different teas. 'Kala-Yarqaan'; hepatitis Band C, liver disease etc. 'Taweez'; amulet worn/used for health and protection.

Test-retest reliability method was applied by asking the same questions under the same conditions producing the same results. Face validity, criterion validity and content

validity, when applied, rendered satisfactory results. No similar inventory could be found to determine the prevalence of commonly-believed myths in concerned area. Therefore, concurrent validity was not done. No other nationally/internationally validated instrument was available to conduct subject research.

Frequencies of answers of every question were calculated. Total answers given by a client as YES were summed up and grouped as >50% or <50%. This was considered a dependent variable and was cross-tabulated using chi-square test with independent variables.

Subjects were females who had reported to paediatric outpatient department (OPDs) of the hospital. Those below 18years, those who had language barrier or any diagnosed psychological/psychiatric disturbance were excluded.

First 1000 volunteers were incorporated through convenience sampling. The purpose of the study was explained to them, forms were distributed and they were allowed to communicate/ask questions. Issues of language

ANNEXURE QUESTIONNAIRE ABOUT CONCEPTS ON CHILDREN'S HEALTH

This study is being conducted to analyse the level of knowledge among females concerning children's growth, development and health. Participation is on voluntary basis, and confidentiality is strictly undertaken. All the forms will be discarded after completion of research. Your kind participation will definitely help the doctors to improve the public knowledge about the subject.

SER	QUESTION	1	2	3	4	5
1.	Name (optional)					
2.	Age (optional)					
3.	Age group (Years)	<20	20-39	40-59	≥60	x
4.	Marital status	Single	Married	X	X	x
5.	Education					
6.	Education Gp	Nil	Primary- Matriculate	Intermediate-Master	Professional/ Consultant	
7.	Socioeconomic class	Low	Middle	Upper	X	x
8.	Area	Rural	Urban	X	X	X

S.No	QUESTIONS	ANSWERS		
1.	Do you think feeding mother must avoid intake of GARAM food?	YES	NO	Don't know
2.	Do you think feeding mother must avoid intake of cold fluids and juices, as that would cause respiratory problem in the child?	YES	NO	Don't know
3.	Do you think feeding mother must avoid putting hand in water to wash utensils or clothes as child may catch cold when fed by that mother?	YES	NO	Don't know
4.	Do you think some diseases are transmitted through breast milk like KALA YARQAAN?	YES	NO	Don't know
5.	Do you think diluted cow/buffalo/goat milk should be given to an infant beyond 3 month's age?	YES	NO	Don't know
6.	Do you think new born must be tied for better growth?	YES	NO	Don't know
7.	Do you think new born should be given GHUTTI	YES	NO	Don't know
8.	Do you think that breast milk is insufficient for newborn in first few days after delivery?	YES	NO	Don't know
9.	Do you think it's good to administer SURMA to newborns	YES	NO	Don't know
10.	Do you think giving QAHWA improves digestion of newborns?	YES	NO	Don't know
11.	Do you think spitting on child can prevent him from bad effects like envy/jealousy	YES	NO	Don't know
12.	Do you think that circumcision after the age of 7 years can cause infertility in the boy?	YES	NO	Don't know
13.	Do you think GARAM food should not be given to children in summers?	YES	NO	Don't know
14.	Do you think certain foods can cause epistaxis in children?	YES	NO	Don't know
15.	Do you think TAWEEZ can prevent/treat certain diseases in children?	YES	NO	Don't know

barrier and inability to comprehend/fill the forms due to lack of education were resolved by providing assistance by doctors fluent in the mother tongue of the respondents.

Statistical analysis was done using SPSS 21. $P < 0.05$ was considered significant.

Results

Of the 1000 forms distributed, 422(42.2%) were found to be completely filled, they were good enough for analyses.

Table-1: Qualitative demographic features of study participants (n=422).

S.No	Demographic Feature	Frequency	Percentage
A	Age(Years)		
1	<19	71	16.8
2	20-39	223	52.8
3	40-59	114	27.0
4	≥60	14	3.3
B	Education		
1	Nil	110	26.1
2	Primary-Matriculate	116	27.5
3	Intermediate-Masters	121	28.7
4	Professional-Consultant	75	7.8
C	Socio-economic class (SEC)		
1	Low	154	36.5
2	Middle	156	37.0
3	Upper	112	26.5
D	Marital Status		
1	Married	263	62.3
2	Single	159	37.7
E	Regional Background		
1	Rural	345	81.8
2	Urban	77	18.2

Table-2: Frequencies and percentages of myths related to children's health (n=422).

S.No	Do you think that??	Yes		No		Don't Know	
		υ ¹	% ²	υ ¹	% ²	υ ¹	% ²
1	Feeding mother must avoid intake of GARAM food?	147	34.8	214	50.7	61	14.5
2	Breast milk is insufficient for newborn in first few days after delivery?	119	28.2	259	61.4	44	10.4
3	Feeding mother must avoid intake of cold fluids and juices, as that would cause respiratory problem in the child?	197	46.7	188	44.5	37	8.8
4	Feeding mother must avoid putting hand in water to wash utensils or clothes as child may catch cold when fed by that mother?	139	32.9	236	55.9	47	11.1
5	Some diseases are transmitted through breast milk like KALA YARQAAN?	223	52.8	154	36.5	45	10.7
6	Diluted cow/buffalo/goat milk should be given to an infant beyond 3 month's age?	162	38.4	237	56.2	23	5.5
7	New born must be tied for better growth?	281	66.6	125	29.6	16	3.8
8	New born should be given GHUTTI	157	37.2	209	49.5	56	13.3
9	Giving QAHWA improves digestion of newborns?	181	42.9	205	48.6	36	8.5
10	It's good to administer SURMA to newborns	176	41.7	167	39.6	79	18.7
11	GARAM food should not be given to children in summers?	225	53.3	165	39.1	32	7.2
12	Certain foods can cause epistaxis in children?	179	42.4	149	35.3	94	22.3
13	Circumcision after the age of 7 years can cause infertility in the boy?	105	24.9	213	50.5	104	24.6
14	Spitting on child can prevent him from bad effects like envy/jealousy	100	23.7	300	71.1	22	5.2
15	TAWEEZ can prevent/treat certain diseases in children?	129	30.6	240	56.9	53	12.6

1. υ: Stands for Frequency. 2. %Stands for Percentage.

Mean age was 33.45 ± 11.788 years (range: 19-70 years) and mean academic exposure was 9.27 ± 6.555 years (range: 0-23 years) (Table-1).

Of the total, 301(71.3%) respondents believed in the concept of 'Garam' foods, 85(20.1%) disagreed and 36(8.5%) were unsure (Table-2).

Overall, 278(65.9%) subjects had less than 50% YES answers, and 144(34.1%) had more than 50%.

Three commonest myths believed were: a neonate must be tied for better growth 281(66.6%), 'Garam' food should not be given to children in summers 225(53.3%), diseases like 'Kala Yarqaan' are transmitted through breast milk 223(52.8%). Three strongly disregarded myths were: spitting on child can prevent him from bad effects like envy/jealousy 300(71.1%), breast milk is insufficient for newborn in the first few days after delivery 259(61.4%) and 'Taweez' can prevent/treat certain diseases in children 240(56.9%). Highest scores for unsure answers were: circumcision after the age of 7 years can cause infertility in the boy 104(24.6%), certain foods can cause epistaxis in children 94(22.3%), and it's good to administer 'Surma' to newborns 79(18.7%).

The outcome variable was cross-tabulated with independent variables. There was a strong impact of education ($p < 0.001$) on predilection for harbouring myths. There was a significant impact of regional background on outcome variable ($p = 0.006$). There was no significant impact of age ($p = 0.415$), marital status ($p = 0.790$) or SEC ($p = 0.196$) on the dependent variable. The less educated were more prone to harbouring myths,

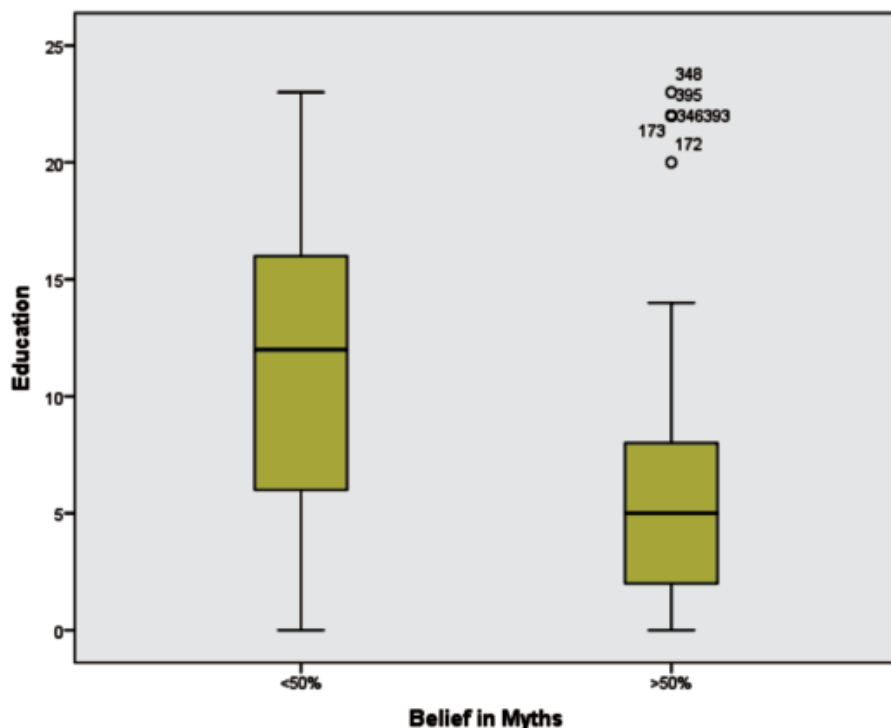


Figure: Relation between belief in myths and educational status of the participants (n=422).

with less variance and stronger consistency compared to their counterparts (Figure).

Discussion

A mother's behaviour foretells her child's health outcomes.⁶ Myths are commonly practised during a child's upbringing, frequently affecting his/her health.^{2,7,8} Researchers have studied impact of various demographic features on prevalence of myths and malpractices among various societies.^{3,9-11} Different fallacies prevail in different cultures,^{3,4,10} where socio-economic values overshadow medical evidence.^{2,5,9} Regional impact on health-related practices was verified by this study wherein respondents with rural background were more prone to believing in fallacies. Literature has documented similar results.⁷ In this research educationally deprived were stronger candidates to harbour more myths. According to the study, malpractices due to regional myths were more frequent in the less-educated females,^{9,11} which attenuate with proper education.^{7,10-12}

In this study, majority of clients believed in existence of 'Garam' food with impact on child's health and development. Literature reveals that ladies consider various food are 'hot' or 'Badi', few being 'cold', and multiple food items are restricted or prohibited without medical proof.¹¹

Breastfeeding symbolises love, affection and bonding between the mother and the child. It is a challenging phase of a mother's life; various socio-cultural adversities affect its practice. Clear definitions and guidelines regarding lactation are available.⁶ Exclusive breastfeeding is a vital strategy to control child mortality, which means offering only breast milk to infants for the first four to six months of life, with absolutely no need of any other food or supplement.^{6,12-14} It is an infant's ideal diet, whose significance for newborn's immunity, development and survival cannot be over-emphasised.^{6,9} Its protective effects outweigh any meagre chances of spread of infection, provided the child is appropriately vaccinated as per protocol.¹⁵⁻¹⁸

Women very frequently adhere to myths during lactation.^{10,11} Even during neonatal and early infantile period syrups, certain liquids and ritual fluids are supplemented with

breastfeeding.⁶ Ironically, even in set-ups where 99% mothers considered breastfeeding safe and nutritious, only 23% practised it.¹⁴ Malpractices in breastfeeding leads to health hazards to the child, even leading to enhanced infant and under-five mortality rates.¹⁹ Breastfeeding is appreciably practised in Pakistan, nevertheless, myths and malpractices prevail, especially in neonates' life.^{7,14,20} In this study, various myths regarding lactation were observed to be believed; breast milk was considered insufficient in early phase by 28.2%, 'Qahwa' and 'Ghutti' administration to enhance digestion were advocated by 42.9% and 37.2% respectively, and dilution of animal milk after 3 months of age was supported by 38.4%. Socio-cultural myths adversely affect breastfeeding in Pakistan,^{1,12,20} Bangladesh²¹ and Saudi Arabia.^{22,23} There is a gradual decline in breastfeeding practices more in urban and working women than their counterparts.⁷ Lack of adequate lactation enhances mortality and morbidity in both infants and mothers.^{12,14}

Researchers documented that mothers stop or decrease lactating the child to treat diarrhoea.¹ In this study, more than half of the respondents believed that 'Kala Yarqan' spreads through lactation. Medical evidence proves that breast milk does not enhance the chances of spread of Hepatitis B/C or human immunodeficiency virus (HIV),¹⁶⁻¹⁸

it has rather been documented to have a protective effect to attenuate chances of spread of hepatitis C virus (HCV) to child due to antiviral activity credited to endogenous lipase-dependent generation of free fatty acids in breast milk.¹⁵ Lack of adequate awareness, perception and counselling are the most easily preventable causes of inadequate lactating practices.^{7,12}

This study did not reveal any surprising results; question posed was proven with scientific data. This research is unique and first of its type in the country, encompassing an interesting, widely spread, yet inadequately documented phenomenon. It can prove to be a pioneer to provide the way forward for similar future researches. Selection and interview bias could not be overruled as a limited sample size with volunteers taken from a single tertiary care hospital represented a localised population of Pakistan. Only more commonly encountered myths were questioned about, leaving many stones unturned. Incorporation of males could have yielded interesting inferences. Adequate and more recent literature was not available on similar subjects. Nevertheless, considering the socio-economic and cultural backgrounds, the results are applicable to most of the Asian developing countries, especially in south-east Asia.

Conclusion

Significant prevalence of myths among females was observed which could be detrimental to child's health and well-being. The lacunae identified must be addressed with specified lectures and seminars focussed on general public awareness, specifically targeting females' awareness regarding the subject. Clinical support system must be enriched to augment client education.

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Conflict of Interest: None.

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