

Original Article

**Knowledge Attitudes and practice of parents regarding
Fever in children and its management at home.**

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Abstract

Fever may be a sign of both infectious and non-infectious disorders, occurs commonly in children and makes their parents unduly worried and panic as they perceived it a danger ailment. There are numerous myths and fallacy among parents related to fever management in children **Objectives** Study aimed to identify the parent's knowledge regarding childhood fever and understanding of belief and attitude in the management of fever. **Methods:** A descriptive hospital based cross sectional study carried out among parents whose children under age 6 years were admitted to pediatric wards of a public sector teaching hospital in Peshawar with different medical conditions. **Results:** More than (93%) person were wrong about normal body temperature. About (37%) don't know about causes of fever where (90%) parents detect fever through tactile method, about (57%) parents don't know about appropriate body part for placing thermometer to record accurate temperature and large number of parents (40%) visit chemist for treatment after detecting fever in their kids, about (37%) brought their children to hospitals and only (13%) of total treat their children for fever at home **Conclusion:** Parent's knowledge about fever and its home management was found poor in the study. Need is there to educate parents about proper assessment, detecting, recording of fever and safe practicing of fever management at home

Keywords

Knowledge, attitude, practice, Thermoregulation. Antipyretics, Fever management

Introduction

When Body temperature reading rises more than 38 °C per rectum, 37.8 °C orally and 37.4 °C in axilla the conditioned is termed as Fever (Oshikoya & Senbanjo, 2008). Fever may be a sign of both infectious and non-infectious disorders. The process of fever begins to be a defensive response , when pyrogens eternally secretes into blood stream in reaction to entrance of microbes their toxins and other mediators these chemicals migrates to hypothalamus a part of brain involved in thermoregulation. Hypothalamus get disturb and respond in raising of body temperature or fever (Hart & Briggs, 2011). Fever occurs commonly in children and makes their parents unduly worried and panic as they perceived it a danger ailment denoting some serious illness in their children (Lawani & Akhogba, 2015). Despite established evidence since 1980 about the positive effects of mild to moderate fever parents still consider it dangerous in children (Walsh, 2007) and studies from all over the world regarding parenteral beliefs about fever and its management reveals that nothing has been changed on their part in perception of fever (Tran, 2014).

Infectious disease are one among leading cause of morbidity in developing countries like Pakistan where infectious disease share 95% burden in all pediatric illness(Mehnaz, 2009). Fever is common

symptom associated with infections in childhood and about 60% of children experience fever three to six time in a year during their first five years of age.(Hay, et al., 2005). The process of fever begins to be a defensive response , when pyrogens eternally secretes into blood stream in reaction to entrance of microbes their toxins and other mediators these chemicals migrates to hypothalamus a part of brain involved in thermoregulation. Hypothalamus get disturb and respond in raising of body temperature or fever (Hart & Briggs, 2011). Accurate management of fever is still not clear to public although it is very prevalent (Walsh & Edwards, 2006) therefore parents perceive it as disease rather a symptom and if their child develop fever they become panic and anxious. (Singhi et al, 1991) the unjustifiable Fear and anxiety associated with fever by a large number of parents and even some health care providers is to an extent which is categorized as fever phobia (Agrawal et al, 2013). In the united states about 12% parents cannot describe clinically considerable fever adequately, 46% among them believe that fever alone can damage brain and even 8% considered fever as the main cause of death thus more than 63% parents were found very much worried about fever in their children (Kwak et al, 2013). Above two third (70%) parents in Saudi Arabia were not able to define fever accurately and more than

half 62% were not aware about indication of antipyretic usage however most of them 95% revealed unnecessary fear regarding consequences of fever like brain damage, convulsion and death (Al-Eissa, et al, 2000). In an Indian study 92% parents were fail to define normal temperature, 65% parents were administering inadequate dosage of fever medicine to their children and most of them about 63% were feared uncontrollable rise in temperature (Rajput, Kulkarni & Wagh).

Evidence about parents' fever management knowledge and attitudes is limited in Pakistan and particularly in Peshawar. Parents actual practices for handling childhood fever and factors influencing their practices have not been investigated. It is evident in literature that internationally fever management is very complex and study shows that there are numerous myths and fallacy among parents related to fever management in children. Therefore, this study aimed to explore knowledge, beliefs and practices of parents relating to childhood fever whose children are admitted to public sector teaching hospital of Peshawar with different medical conditions. Hopefully study findings can be utilized as a guide to arrange teaching programs for parents regarding management of common symptoms like fever to improve the general health of population particularly children who are more vulnerable to develop fever frequently in their early span of life.

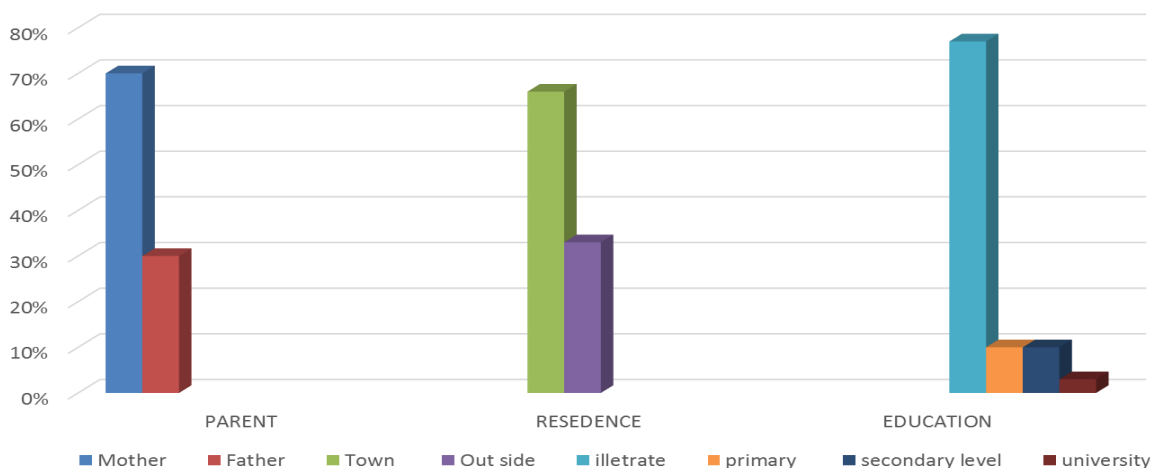
Methodology

Study aimed to identify the parent's knowledge regarding childhood fever and understanding of belief and attitude in the management of fever. A descriptive hospital based cross sectional study carried out among parents whose children under age 6 years were admitted to pediatric wards of a public sector teaching hospital in Peshawar with different medical conditions. Study tool was a questionnaire administered by investigator and resident physicians who were prior trained for questionnaire administration.

Data obtained from parents whose children were admitted to children ward in Hayat Abad medical complex and were willing to participate in the study. Study aim and purpose along with statement of no harm and confidentiality was explained to them. All participants signed consent form before administering questionnaire. Convenient sample of thirty study participants were taken. Completed questionnaires were checked for error, edited, coded and cleaned than Data was entered in version 19 of statistical package for social sciences (SPSS) .findings were analyzed, stored and tabulated. Descriptive statistics tools were applied to derive means, variance, and standard deviations and draw percentage of different study variables. Mean and standard deviation was used to describe scores on overall scale and subscales.

Results

Fig.01 Socio Demographic Characteristics



Different socio demographic characteristics of the study participants are presented in Fig.01.

Large number of study participants (73%) consists of mother of children, about (33%) participants were living in urban areas and (77%) among them were illiterate in the remaining only 10% were qualified to the level of secondary education. Almost (70%) study parents were below the age of 40 years while the age of youngest children were found under 2 years among (60%) parents.

Parent's knowledge about fever

Fig.02 Knowledge of parents regarding fever

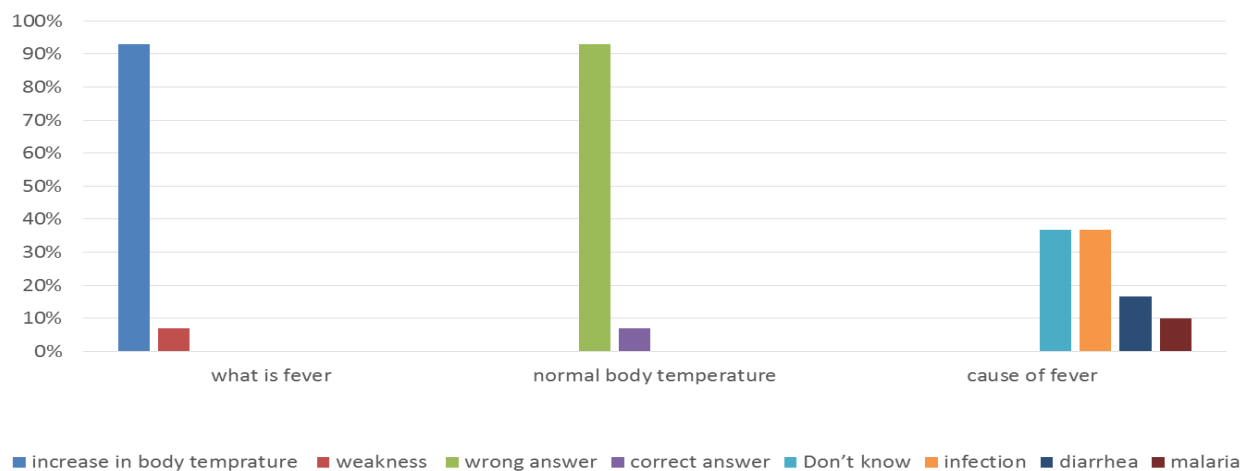


Fig.02 presents parent's knowledge about fever and about (93%) parents consider temperature as hotness of body or increase in temperature of body while remaining (7%) termed it as weakness, but only two out of thirty parents answered correctly about normal body temperature and more than (93%) person were wrong about normal body temperature. About (37%) don't know about causes of fever, only (10%) answered malaria cause fever, (17%) parents think that diarrhea cause fever in children while remaining 37% parents replied infections is responsible for causing fever. More than half (53.3%) parents fear seizure as complication of fever, (30%) think coma, and about (17%) believe that even death occur if fever left untreated.

Parent's attitude and practice of fever management

Fig.03 Practices of parents regarding fever management

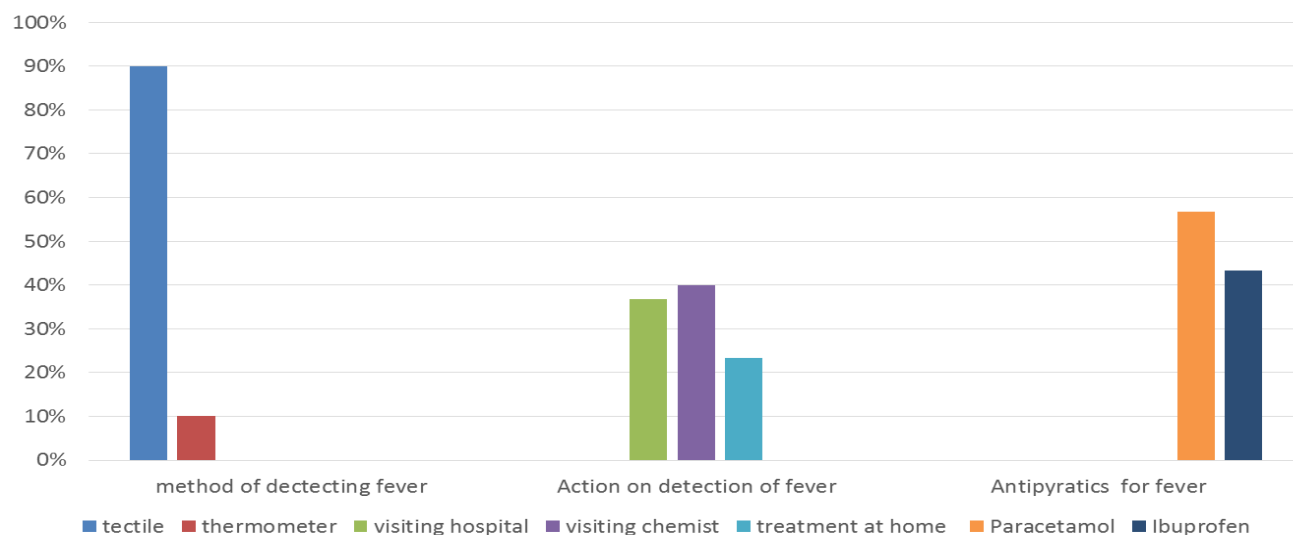


Fig.03 shows parents practice regarding fever and its management in children where (90%) parents detect fever through tactile method, about (57%) parents don't know about appropriate body part to placing thermometer to record accurate temperature only (30%) know that thermometer should be placed under armpit for detecting body temperature and (13%) parents answered mouth to be the right place for checking temperature in children but interestingly (87%) parents answered wrong about duration for placing thermometer to find accurate reading.

Large number of parents (40%) visit chemist for treatment after detecting fever in their kids, about (37%) brought their children to hospitals and only (13%) of total treat their children for fever at home. Mostly (77%) parents give

only antipyretics to their children for lowering fever while remaining (23%) administered antipyretics along with cold or tepid sponging.

About (57%) prefer paracetamol for lowering fever in their children while (43%) named Ibuprofen as fevering lowering drug, however (90%) parents regular domestic teaspoon or bottle cap for measuring and administering drugs and very small number of parents (7%) use specific measuring medication spoon.

Less than half (47%) parents practice fever lowering drugs in response to advice from a physician in the past, (20%) parents consult other persons and about (17%) decided their selves about fever lowering medicine.

While giving accurate dosage about (53%) parents consider age of child, (26%) consider nothing, about (14%) parents decide dose of drug in accordance to severity of fever , and less than (4%) parents set dose in relation to weight of children.

Discussion

In our study we find that large number of parents use tactile method for detecting fever, which is similar to the findings of (Hart & brigs, 2011) where more than (76%) Nigerian mothers used to detect temperature by touching their children. Our findings shows that paracetamol is most common drugs practiced by parents for lowering the fever which verified the findings of (Hart & brigs, 2011), who studied that paracetamol was the drug of choice among parents in treatment of fever. Our study shows that large number of parents visit chemist for treatment after detecting fever in their kids, about (37%) brought their children to hospitals and only (13%) of total treat their children for fever at home, these findings are different to other studies where more parents treat fever at home (lawani & akhogba,2015). Our study present that mostly parents fear, seizure, coma or even death as complication of fever which is comparable to the findings of a study from Jordan where parents beliefs that hyperpyrexia may lead to brain death, seizure or death of children (Athamneh et al, 2014). This study find that most of the parents were wrong about normal body temperature which is in accordance to findings of a study from Riyadh Saudi Arabia where very little information were found regarding normal range of body temperature among parents (Al-Eissa et al, 2000). These findings are also in compliance with the results of (Rajput, Kulkarni & wagh, 2014) where little percentage of Indian parents have knowledge about normal body temperature. Our research results shows that about (48%) of parents acquired knowledge about fever lowering drugs previous advice of a physician

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which is similar to the study findings of (Rajput, Kulkarni & wagh, 2014).

Conclusion

Parent's knowledge about fever and its home management was found poor in the study. There was poor knowledge regarding detecting, assessing and recording fever in children. Parents were not aware about normal body temperature and they were practicing antipyretic drugs dosage not correctly. They were overestimated and feared about complications of fever in children.

Recommendation

Need is there to educate parents about proper assessment, detecting, recording of fever and safe practicing of fever management at home.

Conflict of Interest

There is no Direct or indirect conflict of interest among authors.

Limitations

Small sample size, lack of resources, and study in a particular setting was limitations of our study. Future research should be carried out with large sample size with equal representative sample and different study settings should be included in studies.

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