

## Bathing and cleaning practices in the camp of Jalozai Pakistan, for internally displaced people, based on Sphere Standards and Indicators

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### Abstract

**Objectives:** To evaluate the bathing and cleaning practice, based on Sphere Standards and Indicators, of internally displaced people in the camp of Jalozai, Pakistan.

**Methods:** This descriptive cross sectional survey was done in displaced population of Jalozai camp Nowshera from February to September 2010. Systematic Random Sampling was done (10% of Phase II Population). Study unit was a single family residing in the camp. A customized structured questionnaire was administered to households and information as recorded by the researchers. Informed consent and confidentiality was maintained while interviewing the household.

**Results:** Although 97% (n=111) families were using soap for bathing but surprisingly none of them were on required Sphere Standards. Similarly 93% (n=107) were using laundry soaps and 49% (n=56) were using washing powder but again were not fulfilling the standards. It was discovered based on our survey that 64% (n=71) displaced people were not using anything for cleaning their children and none were using washable nappies. It was also observed that 99% (n=114) were using toothpastes and other local means for dental hygiene. Less than 10 toothpastes/year were provided to 79% families while 21% (n=24) were not provided at all.

**Conclusion:** Our survey population was not on required SPHERE standards for sufficient bathing and laundry soap and they had no access to sufficient amount of toothbrush and toothpaste. Children were not provided with washable nappies or diapers.

**Keywords:** Hygiene, Displaced people, Sanitation, Sphere standards and indicators (JPMA 61: 1169; 2011).

## Introduction

Natural disasters such as floods, earthquakes, tsunamis armed conflicts are associated with mass displacement of people from place to place. In the chaos that follows natural disaster, impact of diseases because of unhygienic practices is often presumed to be very high. Under such circumstances hygiene levels are to be maintained to prevent the spread of diseases. In Pakistan military operations in Federally Administered Tribal Areas (FATA) and Provincially Administered Tribal Areas (PATA) resulted in mass movement and people fled away from their homes, residing in camps. Poor families spend 80% of their disposable income on food dropping out the healthy foods when prices are high, so little or none is left for hygiene.<sup>1</sup> Every year almost 10 million pregnant mothers and young children die, mostly because of preventable causes.<sup>1</sup> Inadequate food provisions and poor hygiene in crowded camps are contributing factors that give rise to increased number of communicable diseases.<sup>2</sup>

A study showed that when sanitation facilities were provided in one camp the cholera rate was 1.6 per 1,000 while in the other camp where sanitation facilities were not provided the rate was 4.0 and 4.3 per 1,000, but still cholera was not eradicated highlighting the magnitude of hygiene support.<sup>3</sup> Literature review shows strong coordination of water, sanitation and hygiene. During displacement the population must have urgent access to safe water and basic hygiene to ensure they live their life with dignity until they go back to their home. A study conducted in a similar camp showed that 15 liters of water should be available per person per day in displaced population for washing cleaning and drinking.<sup>4</sup> This provides an ample chance to decrease the risk of communicable diseases spread. Another study showed that risk factors to increase mortality and morbidity in refugees settings includes breakdown of health services, malnutrition, displacement, crowding and poor sanitation.<sup>5</sup> Hygiene levels should be maintained to prevent the spread of diseases. In an another study it was concluded that 66% of diarrhoea episodes are attributed to contaminated water and food, likewise life expectancy has increased due to improved hygiene, water and sanitation and decrease in infectious diseases.<sup>6</sup> Use of hand washing with soap is more effective than washing hands with water. A study conducted in Malawi showed that diarrhoea episodes may be reduced in refugee population by provision of adequate soap regularly.<sup>7</sup> Similarly sufficient quantity of water of low quality is better than very little water of high quality.<sup>4,8</sup>

To improve quality of assistance for catastrophe affected people, World Health Organization launched a SPHERE Project to set minimum standards in areas of humanitarian assistance. The SPHERE Standards and

Indicators were developed by a group of humanitarian agencies to establish universal minimum standards in disaster response, in five key sectors (water supply and sanitation, nutrition, food aid, shelter and health services).<sup>9</sup>

The Internally displaced people are accommodated in a very small area with limited resources and there is very high risk of spread of various diseases among them. The knowledge of poor access of Internally Displaced People to personal body hygiene products will help us to increase the means to meet their daily needs according to SPHERE Standard in order to improve their personal hygiene and so to reduce the risk of communicable diseases if the personal hygiene brought to the mark (SPHERE Standard). Contiguous and communicable diseases may become endemic and may involve large population of the areas where the internally displaced people are settled. Few studies have been done on hygiene status in this regard. The research was done to evaluate the bathing and cleaning practice of internally displaced people.

## Methodology

This descriptive cross sectional survey was conducted in sprawling camp of Jalozei, district Nowshera for Internally Displaced People (IDPs). At the time of the survey the population of Jalozei was 20,000 families (110,000 people) distributed in 17 phases. Each phase was divided into 8-14 sectors and each sector was further categorized into blocks. Our study was conducted in Phase II with a population of 1150 families 10% of Phase II population was sampled [115 families] based on Systematic Random Sampling (SRS). Study unit was a single family residing in the camp. The survey was carried out from February 2010 to September 2010. A customized structured questionnaire which was pilot tested was administered to the head of family. The enumerators received orientation training for one day. Only those families residing in the camp were included in the survey.

Permission from the camp was acquired after explaining the objective of the study, informed consent was taken from the households and the interviewers were explained that their participation in the study was voluntary and they could withdraw at any time. All information provided was kept confidential. The data was cross checked, coded and analyzed using SPSS version 17.0.

## Results

Sphere Standards and Indicators highlights additional quantities of bathing and laundry soap for people with special needs (urinary incontinence, HIV/AIDS, diarrhoea, older people, disabled people and with other impaired mobility). In our survey half of the population 50% (n=57) were with special needs.

It was determined that 97% (n=111) families were

using soap for bathing. SPHERE standards suggest each person has access to 250 gm bathing soap per month however in our study none of them were on required standards. Sphere standards suggest provision of 84 soaps (250 gram each) per year per family surprisingly 96% (n=110) families we interviewed reported having less than 20 soaps per year.

During a detailed interview we were informed that 93% (n=107) families were using laundry soaps but the results in this parameter were also disappointing as 96% (n=110) of our survey population was not on required standards [SPHERE Standards suggests 67 laundry soaps (200 gram each) per year per family].

When asked about children consumables like washable nappies for children less than two years, astoundingly no family was provided or using washable nappies, whereas 64% (n=71) were not using anything for cleaning their children. [SPHERE Standards suggests 12 washable nappies or diaper].

In all 99% (n=114) families reported to the survey team that they were using tooth paste (75ml/ 100gm) but again 79% (n=89) were not on required SPHERE Standards [SPHERE Standards suggests 84 tooth paste per year per family.

## Discussion

In displaced people camps due to overcrowding and limited resources there is a high risk of epidemics. In the initial phase of disaster, internally displaced people should be given access to the basic needs such as food, shelter, clean water and medical supplies however in long term there should be awareness programmes regarding hygiene and should be provided with basic hygiene facilities and products in order to prevent spread of diseases. Hygiene products include washing and laundry soap, washable nappies for children, tooth pastes and tooth brushes.

Infections are considerably reduced by providing water and soap and much has been said on hand washing is essential in prevention of various diseases especially before eating or preparing food and after defecation. Refugees living in camp settings are at risk of having diarrhoeal diseases such as cholera because of limited access to clean safe water and sanitation. Public health measures include provision of clean safe drinking water and maintaining good hygiene. Sphere Standards suggest each family should have access to bathing, 84 soaps (250 gram each) per family per year.<sup>10</sup> We found based on our survey that almost all the population (97%, n=111) were using bathing soap but 96% (n=110) were below required standards (20 soaps per family per year). The results in this parameter were very much below par and call for attention. A study conducted in Nyamithuthu refugee camp in Malawai showed 27% less episodes of diarrhoea were noted in households when compared to one where no soap was

used.<sup>7</sup> Likewise in a randomized controlled trial in high risk communities in Pakistan showed those infants getting plain soap and hand washing promotion were having 39% fewer days with diarrhoea than infants living in control region.<sup>11</sup>

A case study of physical and social barrier to hygiene and child growth in remote Australian Aboriginal community's report that factors such as overcrowding, poor infrastructure, sub-standard personal and domestic hygiene trigger the high burden of infection experienced by children of remote communities.<sup>12</sup> Apart from bathing soap should also be available for laundry and washing facilities. Literature shows that provision of soap even in the absence of behaviour modification and health education can play a key and protective role.<sup>7</sup> Sphere Standards recommends provision of 67 laundry soaps (200 gram each) per family per year.<sup>10</sup> A detailed interview with the households revealed 93% (n=107) households to be using laundry soaps whereas disappointingly 96% (n=110) were not fulfilling required Sphere Standards.

Sphere Standards and Indicators suggest that children's faeces are more dangerous than those of adults, therefore they need particular attention.<sup>10</sup> Provision of 12 washable nappies (diapers) should be ensured for children below 2 years age.<sup>10</sup> However it was seen that none of the households was using washable nappies or diapers for cleaning their children. A new study conducted on Vietnamese refugees in Norway showed that after the age of 20 almost all index teeth had dental plaques, and sub gingival calculus was observed in 9 of 10 teeth while Gingival bleeding was seen on all index sites of 26.5% of the subjects and all subjects above the age of 40 had gingivitis adjacent to one or more index teeth. This could be attributed to the fact that lack of dental hygiene can lead to this condition. When asked about dental hygiene in our study we found that almost all of them were using tooth paste but again 79% (n=89) were not on required Sphere Standards. [Sphere Standard suggest 84 tooth pastes (75ml/ 100 gram) per year per family.<sup>10</sup>

## Conclusion

The findings of this study showed that the camp population was not on required SPHERE standards for sufficient bathing and laundry soap and they were not supplied sufficient amount of toothbrush and toothpaste. Children were not provided sufficient amount of washable nappies or diapers as suggested by the SPHERE standards. Provision of regular and adequate soap, tooth paste and diapers should be ensured in displaced population as it is a cheap and effective measure to reduce diseases.

## Limitations of the Study:

1. Only 10% of population was sampled and the sample size was not calculated according to the required formula.
2. Study unit was not individual rather was a family residing in the camp.

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