

EVALUATING LOCALLY LED EARLY ACTION AGAINST HEATWAVES IN SIBI, PAKISTAN

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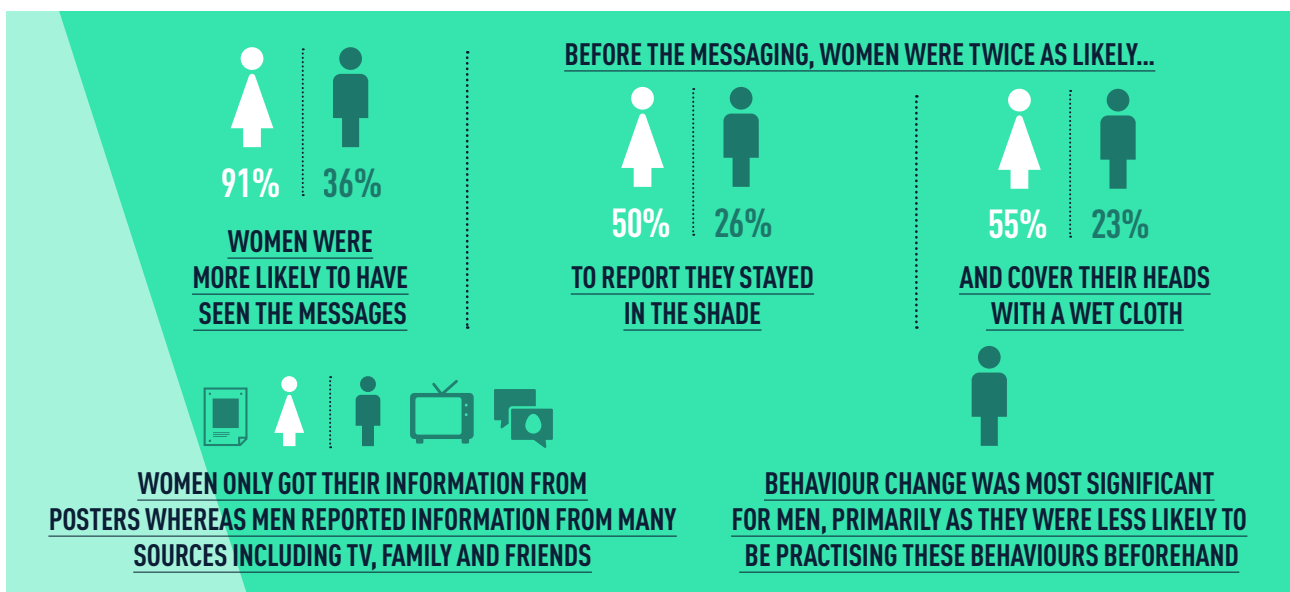
01 EXECUTIVE SUMMARY

In June 2021, Bright Star Development Society Balochistan (also known as BSDSB or Bright Star) were funded to assist in mitigating against the anticipated heatwave in Sibi (Pakistan). In this locally-led anticipatory action response, Bright Star provided behaviour messaging in addition to “cooling facilities” with cold water and a place to rest.

This report summarises the findings from an independent monitoring of the humanitarian response provided, after listening to communities in receipt of the assistance and the local administrative bodies who were consulted in its implementation.

- Heatwaves are a major problem in Sibi; they are getting worse each year and impact negatively on peoples’ health and livelihoods
- People were using the cooling facilities and benefiting from them in terms of their health and wellbeing
- The cooling facilities represented something new for the community - a locally led public service – and acted as an example others could follow
- 100% of those interviewed who had used the cooling facility felt the environment was safe and comfortable
- People felt that Bright Star’s close consultation with the local administration and understanding of communities’ needs were critical in establishing this culturally appropriate service
- People were able to benefit from the behavioural messaging, some messages were new and helped dispel myths, and they passed these messages on to others
- People were practising positive behaviours more often after the messages compared to before except in cases where they could not because this would impact negatively on their livelihoods
- People suggested improving access to messaging through, for example, using loudspeakers to cater to those who could not read
- People suggested access to the cooling facilities could be improved for girls and women by creating female friendly spaces

A key finding of particular relevance for other behavioural messaging campaigns were marked gender differences in access, knowledge and behaviour related to the messaging.



As the informational messaging resulted in such a marked behaviour change in men, future behavioural messaging campaigns should work hard to get these messages across to this group – only a third said they saw the messages even though most were using the cooling facilities where messages were posted.

02 BACKGROUND/INTRODUCTION

ON 1 JUNE 2021, AN ACTIVATION WAS MADE FOR A POTENTIAL HEATWAVE IN THE AREA OF SIBI IN BALOCHISTAN PROVINCE OF PAKISTAN. THE SUBSEQUENT HEATWAVE RESPONSE BUILT UPON CONTINGENCY PLANS THAT HAD BEEN SUPPORTED AS PART OF START NETWORK'S DISASTER RISK FINANCING SYSTEM. THIS PAPER SUMMARISES SOME OF THE EVIDENCE AND LEARNING FROM AN EVALUATION OF THIS RESPONSE.

WHY IS HEATWAVE ANTICIPATION AND MITIGATION IMPORTANT?

Air temperatures near the surface of the earth are rising. Analysts predict that when compounded by increases in atmospheric water vapour, which reduces humans' and land species' ability to dissipate heat, more frequent periods of heatwave will have much higher adverse consequences for human wellbeing and economic productivity (Matthews et al, 2017). Researchers say that at a wet bulb reading of 35°C, the body can no longer cool itself by sweating and such a temperature can be fatal within a few hours. The recent Intergovernment Panel on Climate Change (IPCC) report. notes that the past 5 years were the hottest on record, and that 1.6 billion people will be exposed to heatwaves by 2050 (800% rise from 2021) (IPCC, 2021). People working outdoors are most at risk to heatwave exposure. This is worse in urban areas which are hotter than their surroundings due to the urban heat island (UHI) effect (Rahaman, 2021).

WHY IS HEATWAVE ANTICIPATION AND MITIGATION IMPORTANT IN PAKISTAN?

In the summer of 2021, temperatures in Jacobabad (Sindh province of Pakistan) rose above 50°C, making it one of only two places on earth to have now officially passed a threshold hotter than that which the human body can withstand. Jacobabad crossed the 35°C wet bulb threshold (heat and humidity combined) in July 1987, then again in June 2005, June 2010 and July 2012. Each time, the boundary may have been breached for only a few hours, but a three-day average maximum temperature has been recorded hovering around 34°C in July 2012, June 2010 and June 2001. The dry bulb temperature is often over 50°C in the summer (Farmer, 2021). In the neighbouring city of Sibi in Balochistan, extremely high temperatures have also been recorded, and analyses show these have been increasing year-on-year.

TEMPORAL DIFFERENCES ACROSS THE YEAR AND OVER THE PAST YEARS

AVERAGE DAILY TEMPERATURE IN °C

	APRIL	MAY	JUNE	JULY.	AUG	SEPT	OCT
2021	40	45	47	46	46	45	37
2020	39	44	48	48	45	43	38
2019	35	40	42	43	41	41	35
2018	35	38	40	41	39	36	30

Data source: <https://weather-forecast.nz/pak/973/sibi/>




WHAT IS START NETWORK DOING ABOUT HEATWAVES?

With technological advancements, heatwaves can now be predicted. Early actions before the occurrence of heatwaves can reduce their impact, human suffering and losses. Start Network has been pioneering anticipatory action for heatwaves and other humanitarian crises through its Disaster Risk Financing (DRF) work. DRF draws together a quantitative risk analysis, with pre-agreed finance and contingency planning. This enables humanitarians to create trigger points for action when a risk threshold is met and release funds automatically for a forecasted crisis. In 2020, Start Network took a disaster risk financing approach to managing extreme heat in Pakistan for the first time. A heatwave model was created to release pre-agreed funds to implement heat contingency plans when a heatwave was imminent. The model built on pioneering research by the London School of Economics and made use of Pakistan Meteorological Department forecasts. On 22 May 2020, the model was triggered for Karachi and the organisation Health & Nutrition Development Society (HANDS) was awarded Start Network funds to provide awareness raising messages. A Knowledge, Attitude and Practice evaluation of the response alluded to the difficulties of translating knowledge into practice (Ambreen and Barr, 2020). This project is a part of Start Network's Start Ready which aims to scale-up locally-led anticipatory action. Start Ready is a new financial service for the humanitarian sector, with innovative crisis financing mechanisms to deliver faster, more efficient, and more effective global humanitarian action.

WHAT HAPPENED THIS TIME?

On 1st June 2021, the Heatwave Technical Working Group informed Start Network's team that a heatwave was imminent based on monitoring the daily output from the model; this was ratified by members' confirmation of increasingly hot and harsh weather conditions in Sibi districts and surrounding areas of Sibi. Based on existing contingency plans, Bright Star were funded on 1st June, 2021 through another Start Network member to respond in anticipation of the heatwave, receiving just under £25,000 for their project. Implementation of cooling facilities and behaviour messaging started on 15th June 2021 for a duration of 20 days. Records show that nearly a quarter of a million visits were made by people to the three cooling facilities over the 20 days they were provided.

 We provided a number of activities to help with the heatwave. Cooling facilities were established at three bus station sites that see a large influx of people. We deployed our staff at the facilities to ensure that the needs of people were catered to. The sites displayed the complaints and feedback registration mechanism in Urdu and English and the information, education and communication (IEC) material was provided to the visitor. More than 100 rickshaw owners were also engaged to display banners containing IEC messages on their rickshaws.

NASEER CHANNA, CEO BRIGHT STAR

WHAT ARE WE HOPING TO FIND OUT MORE ABOUT?

We hope to increase our evidence and learning around the impact of this heatwave response, specifically changes it made to peoples' lives and wellbeing, and considerations for future action.

03 METHODOLOGY

WHAT WAS OUR GENERAL APPROACH TO THE EVALUATION?

WHAT TOOLS DID WE EMPLOY?

HOW DID WE CONDUCT INTERVIEWS AND SURVEYS?

WHAT WAS OUR GENERAL APPROACH TO THE EVALUATION?

We used a mixed method approach and interviews to collate a comprehensive picture of the impact cooling facilities and behaviour change messaging had on those accessing them as well as those who had been part of the facilitation process.

WHAT TOOLS DID WE EMPLOY?

01



A SHORT SURVEY TOOL

that asked questions about the cooling facilities and messaging to a random sample of 120 people that were located close by to a cooling facility across a 3 day period.

02



A SEMI-STRUCTURED IN-DEPTH INTERVIEW

which focused on gathering stories and examples to a sample of 11 local people either involved in design and implementation of the response or the utilisation thereof.

03



A CHECKLIST

for onsite observations of the three cooling facilities (Bus Stop at Allah Abad Road, Talli Vans Stop and Quetta & Jacobabad Van stop at Nashtar Road).

HOW DID WE CONDUCT THE INTERVIEWS AND SURVEYS?

Data collection was managed by GLOW Consultants who were able to mobilise and train a team to conduct in-person interviews in local languages.

WHAT IS A COOLING FACILITY?

The offering of water or milk to the general public at certain religious occasions is a part of our cultural and religious values. The idea generated from this norm. We didn't face any challenges in the execution. Initially, we identified the locations in coordination with district administration which was very supportive throughout the duration of the project. Cooling Facility, as suggested by its name, is a place with facilities to protect against the heat. It was this sense of civic service which became the source of this idea. The limited funding was a challenge for us and only three sites were established. There exists a huge demand for these facilities in the city which could be met if more funding was available... Water coolers were placed at the entrance and two corners of the sites with steel glasses and jugs, and the glasses were cleaned on an hourly basis. Chairs were placed inside the cooling station for people to sit in the shade to avoid the heat, carpets were laid to avoid the dust and to address the concerns of Covid-19, we set up a facility for hands and face washing.

NASEER CHANNA, CEO BRIGHT STAR



THREE COOLING FACILITIES WERE FUNDED, ALL AT THE BUS STATIONS. THESE WERE TEMPORARY STRUCTURES. THE ONSITE OBSERVATIONS AND PHOTOS SHOW THEY MOSTLY CONSISTED OF A TENT WHICH PROVIDED SHADE AND 12 CHAIRS. THERE WERE TABLES OUTSIDE THE TENT AREA THAT HOUSED THE WATER COOLERS, JUGS OF WATER AND STEEL CUPS. THERE WAS A PLACE TO WASH YOUR HANDS, CARPET TO PROTECT AGAINST THE DUST AND POSTERS AND PAMPHLETS WITH HEALTH MESSAGING. STAFF WERE AVAILABLE REPLENISHING THE WATER, EXPLAINING TO PEOPLE HOW TO USE THE COOLING FACILITY AS WELL AS MANNING THE FACILITY.

WHAT THE SAMPLE OF AT-RISK COMMUNITIES LOOKED LIKE?

120 INTERVIEWED



ALLAH ABAD RD
BUS STOP



QUETTA & JACOBABABAD
VAN STOP



TALLI VAN
STOP

NEARLY HALF OF THOSE INTERVIEWED WERE NOT RESIDENTS OF SIBI



65 / 120

Lived close by and the others were travellers using bus stations in the vicinity of the cooling facilities.

MAIN REASONS GIVEN BY THE TRAVELLERS FOR VISITING SIBI

SHOPPING

TO FIND WORK AS A DAILY WAGE LABOURER

TO VISIT RELATIVES FOR FAMILY GATHERINGS E.G. WEDDINGS

TO VISIT DOCTORS 26 PEOPLE REPORTED SEEKING MEDICAL TREATMENT

MOST INTERVIEWED WERE CLOSE TO A POSTER WITH HEATWAVE MESSAGING AND THE COOLING FACILITY



SOME INTERVIEWS WERE HELD AT THE COOLING FACILITY AND OTHERS UP TO 40-50 METRES AWAY.



79 / 120 were within 10 metres of a poster with heatwave messaging.

MOST RESPONDENTS WERE MALE, WITH ONLY 22 FEMALES INTERVIEWED








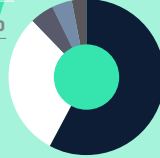

THE LOW NUMBER OF WOMEN WAS PRIMARILY A RESULT OF FEWER WOMEN BEING FOUND AROUND IN THE BUS STATIONS.



12 / 22

of the women interviewed had come to Sibi for medical treatment

RESPONDENTS VARIED WIDELY

AGE	HOUSEHOLD SIZE	MAIN HOUSEHOLD INCOME	LANGUAGE SPOKEN
 <p>28 - 52 YEARS OLD</p>  <p>18 - 70 YEARS OLD</p> <p>AVERAGE AGE: FEMALE - 41 YEARS OLD MALE - 36 YEARS OLD</p>	<p>RANGED WIDELY FROM 2 TO 20</p> <p>34% OF RESPONDENTS HAVE 10 OR MORE PEOPLE IN THEIR HOUSEHOLD</p>	<p>33%  FARMING</p> <p>18%  FAMILY BUSINESS</p> <p>39%  DAILY WAGE EARNERS</p>	<p>SINDHI 58%</p> <p>BALOCHI 30%</p> <p>BAROCHI 5%</p> <p>PASHTU 4%</p> <p>URDU 3%</p>  <p> spoke only Sindhi or Balochi</p>

ALTHOUGH ALL RESPONDENTS HAD SEEN OR USED THE COOLING STATIONS, LESS THAN HALF (55/120) REPORTED HAVING SEEN OR HEARD ANY BEHAVIOURAL OR HEALTH MESSAGES RELATED TO HEATWAVE.

THIS DIFFERED BY GENDER

91%  |  36%

Two people (both females) knew about the cooling facility but did not use it


04 MAIN FINDINGS

THE IMPACT OF THE HEATWAVE
COOLING FACILITIES
HEALTH AND BEHAVIOUR MESSAGING
PREVENTATIVE MEASURES
WARNING SIGNS OF HEATSTROKE
CHANGES PEOPLE HAVE MADE
EXPERIENCE OF HEATSTROKE
RESPONSE IN GENERAL
OVERALL IMPACT AND CHANGES


IMPACT OF THE HEATWAVE

SIBI IS WELL KNOWN FOR EXTREME HEAT IN THE SUMMER

Respondents shared stories of residents moving to cooler neighbouring regions in the summer, if they are able, and reported that this is one of the hottest regions in Pakistan.

 Sibi is famous for its heat all over Pakistan. People give example of Sibi's heat. Its residents take refuge from the heat of Sibi in other cooler areas - towns and villages - where the weather is more bearable. In the summer the number of people living in Sibi goes down...


LOCAL ADMINISTRATION, MALE RESPONDENT INTERVIEWED IN BALUCHI

 Our staff and volunteers contacted the District Head Quarter Hospital, Rural Health Centers, Basic Health Units and Private Clinics of Sibi who noted that during the peak heatwave period of June and July, more than 5000 cases are reported with heatwave-related symptoms such as diarrhea, emesis and fever. According to the staff at these health facilities the majority of patients are labourers, hawkers, farmers and passengers on public transport.


NASEER CHANNA, CEO BRIGHT STAR

THE NEGATIVE IMPACT ON HEALTH IS MADE WORSE BY LACK OF KNOWLEDGE

Lack of knowledge means people do not know how to protect themselves, so they put themselves at risk, and when they do get symptoms, do not know how to recognise these and how to treat them.

 The lack of information among the public regarding the symptoms and causes of the heatstroke is unhealthy as people aren't treated appropriately which may be fatal...


MALE MEDIA REPORTER INTERVIEWED IN URDU

 The people are less aware about its symptoms and preventive measures and this makes the negative effect of heat on health even worse...

MALE RESPONDENT FROM TALLI VILLAGE INTERVIEWED IN URDU

THE NEGATIVE HEALTH IMPACT IS FELT MOST ACUTELY BY THE POOREST, THE ELDERLY AND CHILDREN

Old people and children are seen as being particularly at risk, because of their vulnerability to dehydration and their reduced/lessened ability to cope with extreme temperatures. Children are also more exposed to the heat and sun as they play outside, as are those who have to go out and earn a living.

 I have to move across the city and stay exposed to sun due to the nature of my work which increases the risk of me getting heat stroke. My fruits are also getting spoiled due to heat and I have to put water on them to keep them wet. The heatwave is dangerous for human life especially for children who can't stay inside as they want to play or go to school. I get worried for my children too, and also for children of other people in the community. I worry more for the poor as the rich people aren't affected as they have a luxurious life, and they do not have to work in the heat. It is the common and poor people who are affected. They are affected just like me by working in the sun the whole day trying to sell goods. I can observe other shop keepers and vendors at the bus stand, even they do not get customer. Next season I may do a different business like selling cold drinks or juice as this business will thrive when it is very hot.

MALE FRUIT CART OWNER INTERVIEWED IN BALUCHI

THE HEATWAVE NOT ONLY IMPACTS PEOPLE'S HEALTH BUT ALSO THEIR LIVELIHOODS

People are unable to work the land as it is too hot, people do not go outside so shops get no customers, daily wage earners find it hard to get work as everything closes down, people have less money so reduce their charity towards beggars, and health workers are under an increased burden.



People are greatly affected by heat in Sibi as shops get closed and people stop all their work. It means if you are a daily worker, you will not get work. If you are a shopkeeper, you will not get a customer. It affects everyone very negatively.

MALE LANDLORD FROM LIMJ INTERVIEWED IN URDU

EVERYONE IS AFFECTED TO SOME DEGREE

Although there are certain groups – such as old people, children and the poor - who are most vulnerable, the heatwave affects everyone to some degree with frequent power cuts reported and absenteeism from work.



I am getting less visitors in my office nowadays due to the heat. I am also experiencing more absenteeism among my staff as many are getting ill or at least using it as a reason for not coming to the office. I have also seen we are losing electric power more frequently as compared to three months back. When I spoke with the WAPDA [relevant government department] they said it is due to increased demand for electricity due to usage of air conditioners. In our regular planning meetings, we also spoke about a spike in deaths due to heatwave, but so far, thankfully, we have not seen it. In a sense you can see every walk of life is affected by the heatwave problem in Sibi.

LOCAL ADMINISTRATION, FEMALE INTERVIEWED IN URDU

THERE ARE ALSO COSTS ASSOCIATED WITH GETTING SICK

There are medical bills that need to be paid and if you are sick you are not able to work.



But nowadays people do try to avoid heat by putting cloth on their heads as when they get sick it costs a lot of money to get the medicine and you can also not work when you get sick. I think all these factors may change people to act more reasonably with respect to heat. Particularly as in the past it was not this hot as compared to now.

HOUSEWIFE FROM SIBI INTERVIEWED IN BALOCHI

SIBI HAS ALWAYS BEEN HOT, BUT THE HEATWAVES ARE GETTING WORSE

People reported that the heatwaves are getting increasingly worse each year.




The summer days in Sibi are too hot for us to bear... Sibi is the hottest area in the region, and the heat is increasing each summer now.

MALE FRUIT CART OWNER INTERVIEWED IN BALOCHI

COOLING FACILITIES

THE COOLING FACILITIES WERE BEING USED AND FULFILLED A NEED

The feedback from the onsite observations was that people were using the facility. Over a 30 minute period around 10-35 people entered the cooling facility, depending on the location. The busiest facility was close to the bus stop at Allah Abad Road where a maximum of 60 people were observed during one 30 minute period. The observers noted that the number of people varied during the day, with more in the afternoon, and when buses arrived.

 This water provision is a very good step in the summer and fulfills the needs. I am drinking water from it and so do my other fellow shop keepers and cart-owners. The poor, beggars and travellers all need water in this summer and they are being facilitated through cold water and sitting facility.

MALE FRUIT CART OWNER INTERVIEWED IN BALUCHI

120 INTERVIEWED ALL HAD SEEN THE COOLING STATION

118 HAD USED IT

69% HAD USED IT MORE THAN ONCE

37 HAD USED IT ONCE OR TWICE
81 HAD USED IT MANY TIMES

THE COOLING FACILITIES WERE NOT OVERCROWDED AS PEOPLE DID NOT SPEND LONG THERE

The onsite observations spoke of a steady flow of people coming in and out, and as a result people did not have to wait long to access the water; just a few minutes at most.

 The environment was friendly and staff were very cooperative. There is clean and cold water for us. Chairs are available. Place was not very crowded for us.

26 YEAR OLD MALE DAILY WAGE EARNER FROM SIBI INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

118 OF THE INTERVIEWED WHO HAD USED A COOLING FACILITY:

58% HAD USED IT FOR 5 MINUTES OR LESS

1/3 HAD USED IT FOR 10 MINS OR MORE



No-one interviewed reported spending more than 20 minutes there.




Disaster Risk Financing (DRF) - Pakistan Heat Wave Project
Location: District Sibi - Balochistan
"Temporary Cooling Facility"
Location Name: Talli Bus Stop Sibi
Implemented by: Bright Star Development Society Balochistan (BSDSB)
Supported by: Care International in Pakistan
Funded by: Start No.

Disaster Risk Financing (DRF) - Pakistan Heat Wave Project
Location: District Sibi - Balochistan
"Temporary Cooling Facility"
Location Name: Talli Bus Stop Sibi
Implemented by: Bright Star Development Society Balochistan (BSDSB)
Supported by: Care International in Pakistan
Funded by:


THE COOLING FACILITY ENVIRONMENT WAS SEEN AS SAFE, COMFORTABLE AND RELAXING

When asked, all those interviewed felt the cooling facility environment was safe and comfortable. They spoke about it being safe because of its structure and location, about the good behaviour of staff, its cleanliness and that it was not overcrowded, and that it was a safe place for people out of town and that people felt at home. Many spoke about its comfort in terms of furniture to help them stay out of the heat and rest, especially for those who had come from out of town, and the availability of cold and clean water.




 The cooling station is the best place for me other than my home.


60 YEAR OLD MALE DAILY WAGE EARNER VISITING SIBI INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

 It was relaxing place for me as I was thirsty at this time. I reached here, and finding clean cold water was no less than a dream for me at this place.


28 YEAR OLD MALE RICKSHAW DRIVER INTERVIEWED IN BALOCHI AT TALLI VAN STOP

 All comforts are available at the place for laborers too. We can't go to expensive places to have water and shade, and in this case, this place is best.


40 YEAR OLD MALE DAILY WAGE EARNER FROM SIBI INTERVIEWED IN BAROHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

 This is a good place for all of us especially for women as we have clean and cold drinking water. The arrangement is also good.

52 YEAR OLD FEMALE VISITING SIBI FROM GISHKORI FOR MEDICAL TREATMENT INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

 I am feeling quite relaxed here, and it is peaceful too because of the facilities it has.

35 YEAR OLD FEMALE VISITING SIBI FROM MITHRI FOR MEDICAL TREATMENT INTERVIEWED IN BALOCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD


 I don't feel strange at this place. I mean it is good station that has been organised.

52 YEAR OLD FEMALE VISITING SIBI FROM HAJI SHAHER FOR MEDICAL TREATMENT INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP




THE AVAILABILITY OF COLD CLEAN WATER WAS SEEN AS ONE OF THE KEY BENEFITS

When asked which aspects of the cooling station were most beneficial, most people mentioned the availability of clean, cold water free of charge to anyone and everyone. It was seen as a basic need in the heat. People noted that water was being sold in the bus station, but it was neither cold nor clean.

 In this hot weather I feel thirsty frequently, so this cold water at the cooling station helps me a lot. I am a beggar and used to drink hot water wherever I found it. Now, due to this cooling station, I have access to clean drinking water which is safe for me.

70 YEAR OLD BEGGAR INTERVIEWED IN SINDHI AT TALLI VAN STOP

 It is a problem to access safe drinking water outside the home, and mineral water is expensive for people. This station has taken care of it.

32 YEAR OLD MAN VISITING SIBI IN SEARCH OF WORK INTERVIEWED IN SINDHI AT TALLI VAN STOP



HAVING SOMEWHERE TO REST AND DRINK THE WATER OUT OF THE HEAT WAS ALSO IMPORTANT

The cooling station has set up chairs for people to rest. They can come here, drink water and rest if they need to. These are the most beneficial aspects of the centre in my view.

26 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN BALOCHI AT TALLI VAN STOP

Talli Van stop (conducting the interview with a cooling station user)



It is difficult for females to rest if they need to when they are outside of their homes. This is the most beneficial aspect of this facility that I have a place to rest here.

38 YEAR OLD FEMALE FROM SIBI INTERVIEWED IN SINDHI AT TALLI VAN STOP

The most beneficial aspect of the station is that it provides a comfortable space for people who don't belong to this city.

32 YEAR OLD MALE VISITING SIBI FOR MEDICAL TREATMENT INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

I am a labourer and you know that people like me don't have the money to afford all these facilities. I feel so relaxed to be here in the cooling station.

51 YEAR OLD MALE FROM LUNI LOOKING FOR WORK IN SIBI INTERVIEWED IN BAROHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

I think the cooling station is beneficial for everyone, and this is the most amazing aspect of it.


55 YEAR OLD BUSINESS OWNER INTERVIEWED IN BALOCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

IT WAS APPRECIATED AS A GENUINE PUBLIC SERVICE, FREE OF CHARGE AND AVAILABLE TO ALL


A key aspect that was repeatedly raised was that this was a public service, free of charge to everyone, and of particular benefit to those who could not be at home - that were travelling or working close by - or those who could not afford to buy water. Women also stressed that it provided an important service for them as it was hard to find places for them to rest outside of the home.

IT WAS ALSO IN THE RIGHT LOCATION


It was noted that the cooling facilities were located in busy bus stations where there were lots of people who could benefit from the facilities, especially travellers who were away from home. In addition to making it easily accessible, their presence in busy locations were also seen as an attribute to making them safe environments.

 The location of the cooling station makes it accessible by the majority of the people that are around this place. This place in Sibi is very populated so many people are benefiting from this centre.


45 YEAR OLD DAILY WAGE EARNER INTERVIEWED
IN BALOCHI AT TALLI VAN STOP

 The locations were selected to cover the maximum people and protect them against heatwave. The bus stations are crowded and filled with people throughout the day, and the people, mostly travellers, have nowhere to go and rest while waiting for their buses. Each morning, roughly 50 buses come to Sibi filled with people from the surrounding villages. The bus stations have no facilities like fanned areas, shaded halls, clean and cold water. The travellers were comfortable in using these facilities. The buses are not air conditioned, and it becomes unbearable for the travellers to bear this heat. It is even more difficult for women travellers as they use the veil covering their complete body and face.


NASEER CHANNA, CEO BRIGHT STAR

 I would say that the use of the cooling station helped me to take care of my health through escaping the heat exposure, and to drink water to avoid the water deficiency and dizziness.


18 YEAR OLD DAILY WAGE EARNER INTERVIEWED
IN SINDHI AT ALLAH ABAD ROAD STOP

 The cooling station is wonderful place for a driver. As you know we are tired due to our job nature, and a short time of rest here in the station helps me in restoring my energy.

38 YEAR OLD PICKUP DRIVER INTERVIEWED
IN SINDHI AT QUETTA & JACOBABAD VAN STOP
AT NASHTAR ROAD

 I have come from another city for medical treatment, and this is a good place for me to stay here for a while. It is financially as well as emotionally beneficial for me.

40 YEAR OLD FARMER INTERVIEWED
IN SINDHI AT ALLAH ABAD ROAD STOP

 It helps people to protect themselves from heatstroke and it provides cold water for people free of cost. The cooling station is an amazing initiative as it contributes to the best thing in the world - health.


38 YEAR OLD FARMER INTERVIEWED
IN SINDHI AT ALLAH ABAD ROAD STOP

IT HAD A POSITIVE IMPACT ON PEOPLE'S HEALTH AND SAVED THEM MONEY


Many people using the cooling facility spoke about the benefits to their health and wellbeing, enabling them to rest, protecting them from heatstroke, restoring their energy and dealing with their thirst. One person also spoke about the emotional benefits it gave them.

IT PROVIDED THEM WITH INCREASED KNOWLEDGE AND POSITIVE BEHAVIOUR CHANGE

When asked about the impact of the cooling facilities many respondents spoke about increased knowledge and resulting behavioural change from seeing the various messages at the facility. These will be explored in more detail in the section on behavioural messaging.

 The use of the cooling facility had positive impacts on me as I came across the messages, and I have adopted them like drinking more water.


38 YEAR OLD FEMALE FROM SIBI INTERVIEWED IN SINDHI AT TALLI VAN STOP

 The organisation has taken an excellent initiative to save people from heatstroke. This step will surely help in saving lives of people. I am completely satisfied with the assistance because it has contributed to my knowledge about the heatwave, along with providing me access to these facilities. I have shared the information with other people too.


28 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN PASHTU AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

THE COOLING FACILITIES WERE A NEW IDEA

Many of the respondents spoke about the novelty of the cooling facilities; that this was the first time they had seen such an initiative.

 The concept of this cooling station fascinates me. In our country, there is no concept of public water facilities, and our people have no resources to buy mineral water for drinking.


30 YEAR OLD MALE FROM SIBI INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

 I would say that the establishment of such a cooling station is beneficial for the people. I think it is the first time in my lifetime that I am seeing a place like this.


38 YEAR OLD BUSINESS OWNER FROM SIBI INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

OTHERS WERE NOW FOLLOWING THIS EXAMPLE


Not only were these facilities providing short-term relief from the heat, they were also influencing others to set up similar stations. Respondents shared examples of other communities setting up similar stations, that they themselves would like to set up similar initiatives in their communities and that this public welfare approach should be something that is organised by the general public or other community philanthropists.

 If you are looking for examples of behaviour change because of this response, you should look at how this has created an example for others to follow. So tomorrow even if Bright Star is not here, I am sure some of our people who can afford may do similar work next year.

MALE LANDLORD FROM TALLI INTERVIEWED IN URDU

 I have seen this cooling station at bus stop Sibi which seems an amazing idea to me, and I am very impressed. I would like to establish a cooling station in my own area, and I will try to replicate the same model.

MALE LANDLORD FROM LIMJ INTERVIEWED IN URDU

 For changing behaviour, yes, it is... I came to know of other communities ... wishing to establish the same setup in summer for the ease of people in hot days in Sibi. This is one example where Bright Star has encouraged the community to do something about heatwave by establishing its own water provision points.

LOCAL ADMINISTRATION, MALE RESPONDENT INTERVIEWED IN BALUCHI

HEALTH AND BEHAVIOUR MESSAGING

120   WERE ASKED : DID YOU RECEIVE OR SEE OR HEAR ANY MESSAGING OR INFORMATION AROUND BEHAVIOUR CHANGE AND THE HEATWAVE?

MOST THE WOMEN INTERVIEWED HAD SEEN OR HEARD THE MESSAGING, BUT THIS WAS ONLY A THIRD FOR MEN



ONLY 2 OF THE 22 WOMEN INTERVIEWED **HAD NOT SEEN OR HEARD** THE BEHAVIOURAL MESSAGING



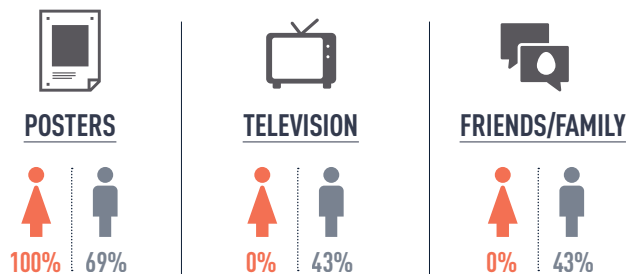
WHEREAS 63 OF THE 98 MEN INTERVIEWED **HAD NOT SEEN OR HEARD** THE BEHAVIOURAL MESSAGING


This was even though all the men interviewed had used the cooling facilities which had both banners up on health messaging related to heatwave and Bright Star staff providing information.

SOURCE OF MESSAGING

POSTERS WERE THE MAIN SOURCE OF MESSAGES, AND THE ONLY SOURCE FOR WOMEN

Women reported that posters were the only source of messaging that they received. In contrast, men reported receiving the messaging from a range of sources, though posters were the most frequent (69%), with 43% stating they had seen them on the TV or had heard from friends or relatives.



 I have received the messages through poster and TV, along with your organisation’s cooling station and friends. It was a range of messages about the people who can fall victim to [heatstroke] more than others like aged people, measures to stay safe, and the precautionary measures such as covering head with wet cloth, staying indoors during 11:00 AM to 3:00 PM.

36 YEAR OLD MALE FROM SIBI INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD



NO-ONE REPORTED HEARING ANYTHING ON THE RADIO

Interestingly, no-one reported hearing messages on the radio, and this may be because listening to the radio was not commonplace in this setting. This could have important implications for future heatwave messaging campaigns in the region.

I do not listen to radio, so I have not heard any messages on it. But for posters, yes, I have seen them. You can also see them even now. The information, which is on the posters, has many new things for us.

MALE FRUIT CART OWNER INTERVIEWED IN BALOCHI

Bright Star gave out messages through FM Radio. A total of 10 programs were conducted of 60 minutes each in the local languages. The coverage of FM Radio is very limited in the area especially in the surrounding villages. It is due to the fact that it is a mountainous area. Also, in public transport, radio is not much used in Sibi. The overall use of radio is also minimal.

NASEER CHANNA, CEO BRIGHT STAR



Disaster Risk Financing (DRF)- Pakistan Heat Wave Project

Location: District Sibi –Balochistan

Heat Stroke ہیٹ اسٹروک

ہیٹ اسٹروک سے کون متاثر ہو سکتا ہے؟
Who is at Risk?

بزرگ بچے کھلاڑی مزدور
Seniors Children Sportsmen Labour

کی نشانیات اور علامات
Signs And Symptoms

پہلے ہوش ہو جانا چکر آنا شدید پیاس لگنا الٹی و متلی آنا گرم سرخ و خشک جلد ہو جانا پسینے کا نہ آنا
No sweating Heat, red Dry Skin Vomiting and nausea Extreme thirst Dizziness Unconsciousness

احتیاطی تدابیر
Preventive Measures

گرمی سے بچیں پانی اور مشروبات کا استعمال زیادہ کریں ٹھنڈے پانی سے غسل کریں گرم مشروب سے پرہیز کریں ایمرجنسی کی صورت میں ڈاکٹر سے رجوع کریں
Avoid Direct Heat Exposure Drink Plenty of water and Juices Shower with cold water Avoid hot drinks Consult Doctor in Emergency

Implemented by: Bright Star Development Society Balochistan (BSDSB)

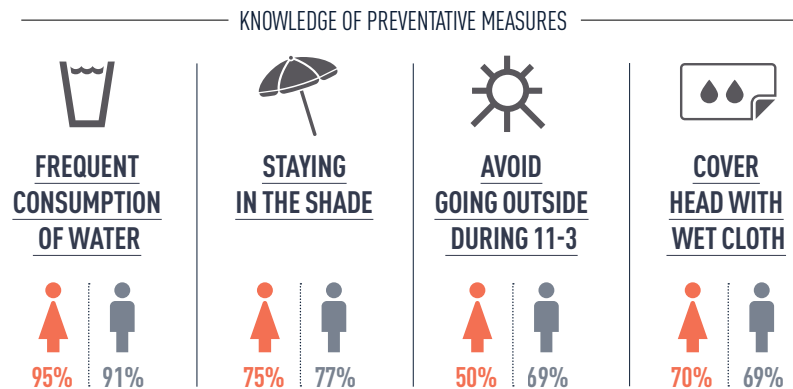
Supported by: Care International in Pakistan (CIP)

Funded by: Start Network

PREVENTATIVE MEASURES

KNOWLEDGE ON THE KEY PREVENTATIVE MEASURES WAS HIGH

When asked as an open-ended Question – **What measures do you know to avoid in heatwave?** - most people mentioned one of four measures: frequent consumption of water (90%), staying in the shade (76%), avoid going outside during 11-3 (64%) and cover head with wet cloth (69%). These responses were similar for men and women.



The poster was full of information and pictures. I only got small a amount of information, but I think it is useful for me. ...We should drink water a lot so that we are hydrated and there is no deficiency of water in the body.

30 YEAR OLD FEMALE INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

The messages I heard are about drinking a lot of water and to avoid direct exposure to sun light. It reached me through poster, TV and some of my friends.

32 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

MEN MENTIONED SOME MEASURES THAT WOMEN DID NOT

Men also mentioned unprompted the importance of not sitting in vehicles for a long time (17 respondents) and avoiding hot tea (3 respondents). These were not mentioned by women.

The messages also included information about preventive measures like avoid leaving your children in the car during the summer, monitor your heart rate, and avoid working in the humid environment.

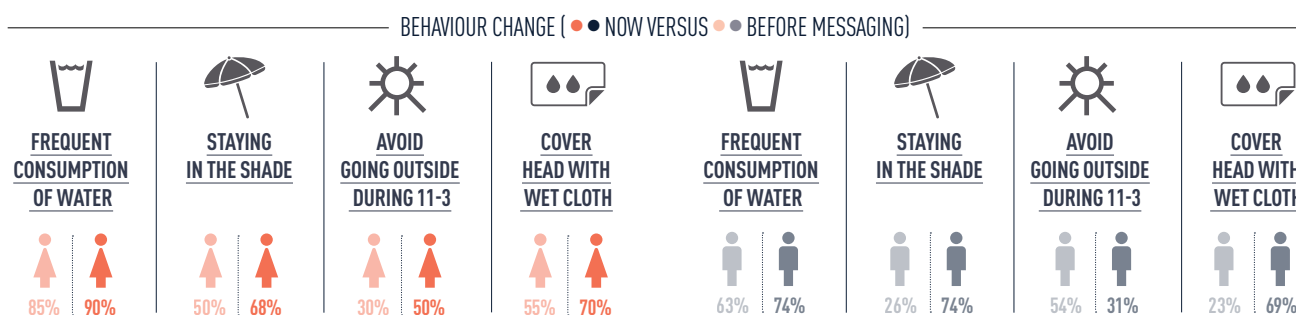
37 YEAR OLD FARMER VISITING SIBI FROM AEERE VILLAGE IN KARACHI, AND INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

One should drink water and juices, avoid exposure to sun and taking hot drinks like tea during the summer when it is extremely hot weather.

19 YEAR OLD SKILLED WORKER VISITING SIBI AND INTERVIEWED IN BALOCHI AT ALLAH ABAD ROAD STOP

MEN WERE LESS LIKELY TO HAVE BEEN PRACTISING SOME BEHAVIOURS BEFORE THE MESSAGING

A smaller percentage of men in comparison to women reported frequent consumption of water (63% vs 85%), and women were twice as likely to report they stayed in the shade (50% vs 26%) and covered their head with a wet cloth (55% vs 23%) compared to men before they had received the recent messaging.



THERE HAD BEEN SIGNIFICANT POSITIVE BEHAVIOUR CHANGE SINCE RECEIVING THE HEALTH MESSAGING, ESPECIALLY FOR MEN


The survey asked respondents for practices before and after they received the messaging and the data is shown above. This information suggested the messaging had changed behaviours and this was most significant for men since more than twice as many men reported staying in the shade and covering their head with a wet cloth after the messaging than before. Females also showed an increase in these practices after the messages, but the change was not as marked, primarily because many were already practicing these behaviours before the messaging. ***It is not clear how much of an effect providing the cooling facilities enabled people to practice positive behaviour change.***

THESE CHANGES HAPPENED EVEN THOUGH THE MESSAGING WAS NOT NEW


Most of this knowledge was not new to the people interviewed. For example, only one male respondent noted that staying in the shade was new to him and one female mentioned that she previously did not know that putting a wet cloth on your head could protect against heatstroke. However, after receiving the messages for behaviours they already knew were important, they went on to make changes to their behaviour. This suggests that even if people already know what they need to do, continued reinforcement of these messages could help enable behaviour change. ***It is not clear if they changed their behaviour because of the messaging or adopted them pre-emptively.***

SOME PREVENTION MEASURES WERE PROVING HARD TO DO

Although many of the men knew that avoiding the midday sun and sitting in vehicles was something that protected against heatwave, many were finding it difficult to implement. This was possibly because the respondents were travellers or daily wage earners who could not avoid putting themselves in these situations. For example, 69% (24 of the 35) men knew that they should avoid going outside between 11 and 3 but only 11 (half) were practising this. Key informants noted that it was hard for some to practice these behaviours as they need to go outside in the sun to work.

 They are providing water, information and a place to sit for people in this hot weather. They are calling these water places cooling stations. Generally, Bright Star has done a great job through this. The banners and posters are informative for the public as they are raising awareness among the public who visit the cooling stations to rest and drink water. It is definitely influencing their behaviour, but the laborers can't stop working due to heat as it is the only source of income for them. It is still good to have awareness as they can take the measures accordingly...

LOCAL ADMINISTRATION, MALE RESPONDENT INTERVIEWED IN BALOCHI

 I am not sure if your messages will make people change their behavior as people have to work and survive even in summer. The messages on heat are good but people cannot practice it as they have to work in summer, otherwise they will find no way to eat, if they have no income.

HOUSEWIFE LIVING IN SIBI TOWN INTERVIEWED IN BALOCHI



Talli van stop (showing the signs of heatstroke)

RAISING AWARENESS CAN HAVE KNOCK-ON EFFECTS FOR OTHERS

Even if they cannot make these changes for themselves as they have to work, they can make them for their family and children. All respondents (53 who responded to the question **Can you describe who you have shared heatwave messages with?**) had gone on to share this information with family and friends, with some specifically mentioning their children, and a few also mentioning speaking to people at markets or in their contact lists.

“The difference it will make will be that more people will know what to do and how to behave. Even if some people cannot take these precautions due to their work, they will do it for their children and other family members.”

MALE MEDIA REPORTER INTERVIEWED IN URDU

“...It is still helpful as the literate people can read it, and they can further inform other people about it.”

MALE RESIDENT OF SIBI WORKING AT CARITAS PAKISTAN AND INTERVIEWED IN URDU

“These messages were so important that I have shared them with many women from my family, friends as well as neighbours.”

40 YEAR OLD FEMALE VISITING SIBI FOR A MEDICAL CHECKUP, AND INTERVIEWED IN SINDHI AT TALLI VAN STOP

WARNING SIGNS OF HEATSTROKE

KNOWLEDGE ON THE WARNING SIGNS OF HEATSTROKE WAS SYMPTOM SPECIFIC

All 55 people who had received messaging were asked: **What are the warning signs and symptoms of heatstroke?** Although many respondents mentioned unprompted extreme sweating (85%), a body temperature above 104F (68%) and headache or feeling dizzy (63%), symptoms of tiredness (35%) and nausea (27%) were mentioned less.

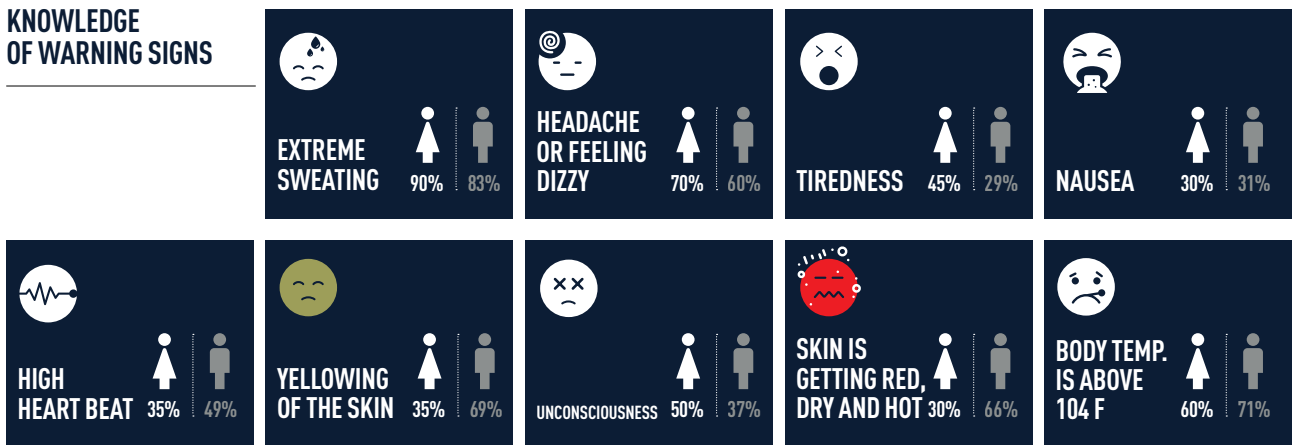
“The messages on the poster, although I don't know all of them, were about high fever and headache as the symptoms, and it also forbade exercise in the sun. When I work in the kitchen for the longer hours for instance on any festival, most of the times I get headache, and now I understand the reason behind it.”

40 YEAR OLD FEMALE VISITING SIBI FOR A MEDICAL CHECKUP, AND INTERVIEWED IN SINDHI AT TALLI VAN STOP

“Some messages which we have seen in posters include sweating, extreme thirst, and unconsciousness as the signs of heatstroke. It is important to watch out for these conditions especially when it is extremely hot weather. We should be careful about our body's energy, and try to avoid working in the sun if we don't have the energy to do so.”


40 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN BAROHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

KNOWLEDGE OF WARNING SIGNS



WOMEN WERE LESS LIKELY TO RECALL KNOWLEDGE RELATED TO CHANGES IN THE SKIN

Although more women mentioned symptoms such as extreme sweating, headache and feeling dizzy, they were less likely than men to mention changes to the skin, such as yellowing or getting red, dry and hot.

 I am more careful about my body temperature and skin color now. It was completely a new thing for me which no one had told me earlier. Thanks to these messages of the organization, I know about it now.

60 YEAR OLD BUSINESS OWNER INTERVIEWED IN BALUCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

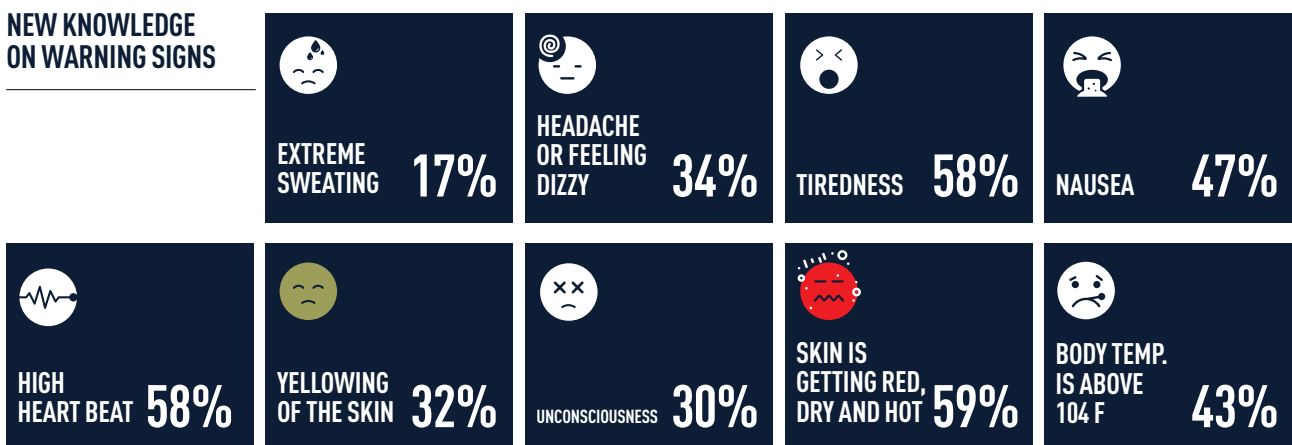
 Yes I heard from a friend. He told me about the symptoms and the preventive measures to save oneself from this unbearable heat. The messages were related to feeling dizziness, redness and dryness of the skin, and unconsciousness.

37 YEAR OLD FARMER INTERVIEWED IN IN SINDHI AT ALLAH ABAD ROAD STOP

MANY OF THE WARNING SIGNS OF HEATSTROKE MESSAGING WERE NEW TO THE RESPONDENTS

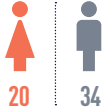
More than half of the respondents noted that their knowledge of the symptoms of tiredness, high heart rate and skin getting red, dry and hot was new information that they did not have before receiving the messaging. Just over a third noted this for body temperature above 104F, nausea and headache or feeling dizzy.

NEW KNOWLEDGE ON WARNING SIGNS



CHANGES PEOPLE HAVE MADE


54




ANSWERED THE QUESTION: *CAN YOU DESCRIBE IN YOUR OWN WORDS THE CHANGES YOU HAVE MADE SINCE SEEING OR HEARING THESE MESSAGES AND INFORMATION*

PEOPLE NOTED BEHAVIOUR CHANGES RELATED TO WATER CONSUMPTION AND STAYING IN THE SHADE

Half mentioned that they now consumed more water to stay hydrated and a similar proportion also noted they now avoid the heat and stay in the shade, though only a quarter mentioned both. These proportions were similar for men and women.

 I have increased my daily water intake, and now it is habit that whenever I feel dehydration, I drink water, and stay hydrated.


48 YEAR OLD FEMALE VISITING RELATIVES IN SIBI INTERVIEWED IN BALOCHI AT TALLI VAN STOP

 I am now following the instructions and measures I received from heatwave messages. I don't leave my home between 11am to 3pm if there isn't any emergency.


36 YEAR OLD MALE FROM SIBI INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

ONLY MEN MENTIONED CHANGES RELATED TO AVOIDING HOT DRINKS & USING A WET CLOTH

Nearly a third of men mentioned that they now avoid hot drinks (11/34) and nearly a quarter mentioned they now use a wet cloth to cool themselves (8/34). None of the 20 women mentioned these changes in this open-ended question and it is not clear whether this is because this activity does not relate to them or they just did not pick up these messages.

 I don't take hot drinks and stay in the shade now. Also, I don't allow children to play outside, and they can only go outside in the evening.

55 YEAR BUSINESS OWNER INTERVIEWED IN BALOCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

 Since receiving these messages, I have increased my intake of water and juices which was minimal earlier. Also, I keep a piece of cloth on my head now.

45 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN BALOCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD


DISPELLING THE MYTH OF DRINKING HOT DRINKS TO COOL YOU DOWN




In many cultures, especially in the tropics, drinking a hot drink is thought to cool you down. This has been proven scientifically but only works under dry conditions (Bain et al., 2012). When you ingest a hot drink, sweat is produced and if the sweat is able to evaporate it cools you down, more than compensating for the added heat to the body from the fluid. However, under humid conditions and when layers of clothing are worn, as would be typical in the context of a Pakistan summer heatwave, sweat does not evaporate, so you don't get the cooling effect and drinking a hot drink just makes you hotter. Under these conditions it is better to consume a cold drink that cools down your core body temperature.

WOMEN FOCUSED ON ENSURING THEY RESTED MORE

A quarter of the women specifically mentioned that they now rested more and avoided overworking or overburdening themselves. Only 1 man mentioned this.

 I take showers with cold water and take proper rest if I feel dizzy. I never used to do that earlier. Earlier, I would always do my work no matter what my health condition is.


40 YEAR OLD BUSINESS OWNER VISITING A FRIEND IN HOSPITAL IN SIBI INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

 Since I received the messages, I have developed this habit of waking up early in the morning. I try to finish my chores before it is too hot. I have brought this change in me.


28 YEAR OLD FEMALE INTERVIEWED IN BALUCHI AT TALLI VAN STOP

USING UMBRELLAS TO SHADE FROM THE SUN WAS ALSO A NEW BEHAVIOUR FOR WOMEN


Three of the women also specifically mentioned that they now used an umbrella to shade themselves from the sun. Using umbrellas this way was also mentioned in other parts of the survey where people noted that this was traditionally only used to protect them from rain.

 I use an umbrella now since I received the messages about avoiding heat exposure. Also, I am now more careful about my health, and especially when I feel any of the heatstroke symptoms like headache and tiredness.

38 YEAR OLD FEMALE INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD


 I take proper time out of my daily routine to rest. Also, I take shower with cold water. I use an umbrella whenever I leave home, and it is the most important habit which I have developed after the messages.

48 YEAR OLD FEMALE IN TRANSIT INTERVIEWED IN SINDHI AT TALLI VAN STOP

 I shared the information with my family about using the umbrella to reduce heat exposure. This is something new for us as we had used it for rain until now.

30 YEAR OLD FEMALE INTERVIEWED IN SINDHI AT TALLI VAN STOP

THEY ALSO MENTIONED THAT THEY LOOK AFTER OTHERS DIFFERENTLY

 I don't allow children to leave home when it is still hot. Now, they only go out in the evening to play with their friends. Also, I give more water to male elders in my family.

35 YEAR OLD FEMALE INTERVIEWED IN BALUCHI AT TALLI VAN STOP

PEOPLE ALSO SPOKE ABOUT CHANGES THEY HAVE MADE IN CHECKING THEIR HEALTH AND CHECKING FOR HEATSTROKE

Seven of the women (35%) and seven of the men (20%) specifically mentioned that they now paid more attention to their health and looking out for symptoms of heatstroke.



I have come to know that it is important for us to visit the doctor even if we are not well due to weather. We shouldn't take it lightly. Now, after hearing this message, I am more careful about health in general and consulting the doctor in particular.

52 YEAR OLD FEMALE VISITING HER DAUGHTER IN SIBI INTERVIEWED IN SINDHI AT TALLI VAN STOP



I am more careful about my health conditions like headache and tiredness... it is because of the banners in the cooling station.

40 YEAR OLD FEMALE VISITING SIBI FOR A MEDICAL CHECKUP AND INTERVIEWED IN SINDHI AT TALLI VAN STOP

EXPERIENCE OF HEATSTROKE

120   WERE ASKED: DID YOU EXPERIENCE SYMPTOMS OF HEATSTROKE IN THE PAST FEW WEEKS?

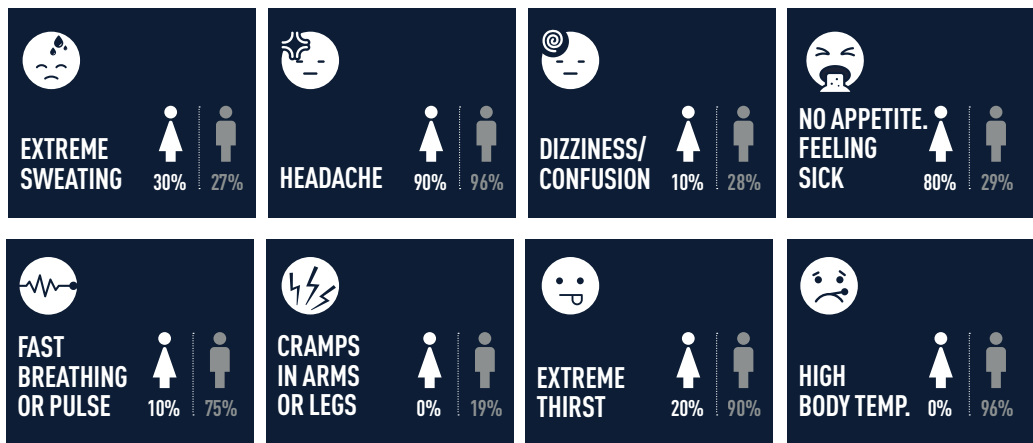
NEARLY HALF OF THOSE INTERVIEWED HAD THEMSELVES EXPERIENCED SYMPTOMS OF HEATSTROKE

58 out of the 120 interviewed mentioned having suffered from heatstroke, and this was similar for men (49%) and women (45%). This was also equivalent for those who had received health and behavioural messaging (53%) and those who had not (45%).

THE REPORTED SYMPTOMS WERE DIFFERENT FOR MEN AND WOMEN

Although both men and women frequently reported having a headache (more than 90%), women were more likely to report a much higher rate of loss of appetite or feeling sick (80% compared to only 29% of men), but fewer other symptoms. In contrast, men mentioned many and varied symptoms including fast breathing or pulse (75% of men compared to only 1 woman) and a high body temperature (96% of men compared to no women).

SYMPTOMS IN THOSE THAT SUFFERED WITH HEATSTROKE



WOMEN WERE MORE LIKELY TO REPORT SEEKING MEDICAL TREATMENT FOR THEMSELVES OR OTHER FAMILY MEMBERS COMPARED TO MEN


HAS ANY FAMILY MEMBER (INCLUDING THEMSELVES) SOUGHT MEDICAL TREATMENT BECAUSE OF HEATSTROKE SYMPTOMS IN THE PAST FEW WEEKS?

Although 62% of respondents or their family members overall had sought medical treatment, this was much higher for female respondents (80% compared to 58% for men). Only 12 of those that reported seeking medical treatment had also received the messaging from Bright Star and there was no marked difference in whether they had sought this treatment before (7 people) or after the messaging (5 people).

THE RESPONSE IN GENERAL


AN INCLUSIVE APPROACH – CONSULTING RELEVANT STAKEHOLDERS

The approach Bright Star Development Society Balochistan used was very inclusive and this was appreciated by those that were being consulted and also led to the very positive outcomes in terms of impact. Those that we interviewed stressed how important it was that Bright Star had consulted with local government officials and communities and this facilitated trust from the community and facilitation by the relevant administration.

 I am well aware of the fact that the staff of Bright Star in Sibi has established strong coordination with the local administration. It helps Bright Star to know the needs and include the recommendations of the public in its project delivery... It is important for organisations like Bright Star to consult with the community and us as government to ensure they have all the required support and protection for their activities. For example, the three sites are at prime locations of Sibi and if the community would not have permitted them, they would not have been able to start their activities in these areas.

LOCAL ADMINISTRATION, MALE RESPONDENT INTERVIEWED IN BALOCHI

They also listened to the advice of technical experts. For example, a media person recommended the use of pictures in the posters and noted a positive collaborative process with Bright Star.

 Yes, I was consulted and was in close contact with representatives of Bright Star. They also took onboard some of my suggestions in their media related work such as using pictures in the messages. It was an amazing experience as I was heard when I recommended anything for the project. The consultation was co-operative and a thorough coordination was carried out.

MALE MEDIA REPORTER INTERVIEWED IN URDU

A LOCAL APPROACH – BUILDING ON THE NEEDS OF COMMUNITIES AND BUILDING TRUST

Bright Star's working model is to really understand communities and their needs, and this current response exemplifies this in that they provided a very simple but effective approach of using cooling facilities to reach those in need of assistance during the heatwave. The feedback from the key informants, both local people and the local administration, is that a great deal of trust has been established primarily because Bright Star works so closely with those they are assisting.

|| Bright Star is a local NGO in Sibi. It is working in the locality for a long time and has delivered many successful projects in Sibi with the help of its trained team... Their working experience with the local community creates leverage for them over the INGOs as they are well established in the area. Bright Star are delivering the project more efficiently due to better adaptability to local conditions. So, I will say they are more trusted as compared to other local NGOs and INGOs as they have a history.

MALE RESIDENT OF SIBI WORKING AT CARITAS PAKISTAN AND INTERVIEWED IN URDU

|| The good thing Bright Star did was to speak with the bus stand trader leaders, I think this really helped to gain the trust of people. Also the staff were local and they were even drinking water from the coolers, so it made me feel okay that this water is safe to drink.

40 YEAR OLD FEMALE VISITING SIBI FOR A MEDICAL CHECKUP AND INTERVIEWED IN SINDHI AT TALLI VAN STOP

A COMPREHENSIVE APPROACH – PROVIDING A DIVERSE PACKAGE

The approach was comprehensive in providing information and the resources to act on this information. This comprehensiveness included the use of a range of media platforms to increase their reach and accessibility, that were also placed at the facilities where shade and water were being provided.

|| One good thing about Bright Star was their comprehensive approach where they were providing water, shade to sit and information on heatwave. These activities were taking place in high population movement areas, so it made their work more relevant to people.

MALE MEDIA REPORTER INTERVIEWED IN URDU




OVERALL IMPACT AND CHANGES


The cooling facilities and behaviour/health messaging were well received. People utilised, benefited and were satisfied with the facilities at the cooling stations and gained knowledge with some behaviour changes being reported.

In addition to the expected health benefits and behaviour change, there were also unexpected benefits related to dispelling myths and motivating others to copy this model.

Dispelling myths such as drinking tea kills heat and that as a resident in Sibi you are not affected by the heat.

 They have designed, drafted and posted quality messages on banners and posters to raise awareness about heatwave among the community of Sibi. These messages are important as it helps people understand that the measures they are taking are appropriate as well as introduce them to new messages. These messages also remove the myths on heatwave such as people in Sibi will not get affected by heat as they are used to it.


MALE RESIDENT OF SIBI WORKING
AT CARITAS PAKISTAN AND INTERVIEWED IN URDU

 People also learn from the messaging as well, such as not drinking tea in hot weather. This is something which people do not know here, instead they think tea kills heat. I do hope some people who will read this message, will change their behaviour.

MALE RESPONDENT FROM TALLI VILLAGE
INTERVIEWED IN URDU


Motivating others to copy this model with examples given that people with resources would like to do similar initiatives and that others had already copied this cooling facility model in other areas.

The evaluation did not look at any changes in hospital cases but there was anecdotal information that fewer people were seen to be unconscious at the bus stands as shared below by one of the bus drivers.

 The place also contains banners and posters to spread awareness about the heatwave and how to make oneself safe from it through various precautionary measures. It increased my knowledge about the heat problem and people now have cold water to drink to protect against the heat. This is something that was not there before. Previously, if someone became unconscious, we used to put water on him. This has not happened recently as those who need help come here to this water stand and get water and sit in the tent. This is good. I can tell you no one has done such work before either at this bus stand or in any other bus stand. The community must trust this NGO otherwise they would not drink their water.


MALE BUS DRIVER INTERVIEWED IN URDU

People noted that the team were respectful.

 I do not know who they are. But your people here are nice people doing a nice job. May God bless them (Allah un ko khush rahi). They called me mother or sister, which is respectful. They are providing water and shade to people and also telling them how to protect against heat.

HOUSEWIFE TRAVELLING WITH HER HUSBAND
INTERVIEWED IN BALOCHI

They were the only ones who were helping with the heatwave.

 We have very few NGOs now in Balochistan. In flood times, we had many, but not anymore. For this heatwave, no one is providing any support. No one is even talking about it. So I am pretty happy with this NGO.

MALE LANDLORD FROM LIMJ INTERVIEWED IN URDU

05 RECOMMENDATIONS FOR FUTURE IMPLEMENTATION

The people we spoke to also provided some constructive feedback on how the response could be improved. These findings are likely to be relevant not only to future responses in the Sibi area of Balochistan, but also for other implementers planning similar interventions elsewhere, especially those hoping to replicate the innovative cooling facilities provided by Bright Star.

It is important to place these recommendations into context as most of them would have required additional funding which was not available to the agency. As such Naseer Channa, the CEO of Bright Star, provides his reflections alongside each of these. The evidence for this section primarily came from:

Onsite observations at the 3 stations made by the interviewers on questions related to overcrowding, presence of staff, who was using the facility and whether they heard any complaints.

Short survey question: *What aspects of the cooling station could be improved?* It should be noted that this question was answered by only three women (19 women decided not to reply to this question), and 96 of the men (only two had missing information). One woman spoke about female-friendly spaces and two about increasing the space inside the tent.

01 ADDRESS THE CLEANING OF CUPS

Many respondents mentioned concerns about the cleanliness of the cups they used for drinking. Some mentioned using disposable cups or a special facility to wash the cups, such as a water tub.

13 people (all men) specifically mentioned a way to clean the glasses as a recommendation from the question: ***What aspects of the cooling station could be improved?*** In addition, 2 people (both men) specifically raised this in the section on ***Did you experience any of the following difficulties at the cooling station?*** Only one of the onsite observations referenced complaints related to the glasses: *“a few people suggested disposable glasses rather than the reusable steel glasses.”* QUETTA & JACOBABAD VAN STOP

“I couldn’t differentiate between clean and dirty glasses”

55 YEAR OLD FARMER VISITING SIBI AND INTERVIEWED IN BAROCHI AT ALLAH ABAD ROAD STOP

“There can be steps to increase the cleanliness of the utensils used to avoid waterborne diseases”

24 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

“If disposable glasses are used instead of steel glasses, it can be safe for the people who are using these glasses.”

21 YEAR OLD BUSINESS OWNER IN TRANSIT AND INTERVIEWED IN BALOCHI AT TALLI VAN STOP



The idea of using the disposable cups was rejected due to a number of reasons. First, it was the limited funding which didn’t allow us to procure these cups as they are used just once. If we had chosen disposable cups, we had to purchase thousands of them which was costly. The reusable steel glasses were placed in the cooling station, and they were washed after each hour. This is a good suggestion to use disposable glasses in the cooling facilities if additional and enough funding is available.

NASEER CHANNA, CEO BRIGHT STAR

02 EXTEND THE DURATION OF THE COOLING STATIONS

Respondents strongly suggested that these cooling facilities should be open for longer, for at least the whole summer and should be a permanent feature, not a temporary one. The primary driver for this was there was a need for these, particularly as the heatwave season is long and this facility had been seen to really help people.

29 men suggested that the duration should be extended, both in terms of the hours they are open and the days they are available when asked *What aspects of the cooling station could be improved?* The request for longer opening hours also was raised in the section on *Did you experience any of the following difficulties at the cooling station where a daily wage earner went to access it in the evening but found it closed?*

"The cooling station is meeting the needs of the people, and it would only be wise to keep it here as the more intense weather is approaching."

26 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT ALLAH ABAD ROAD STOP

"Cold water and shade are the most important aspects because this is unprecedented heat in Sibi, and these things should be available all the time."

40 YEAR OLD BUSINESS OWNER INTERVIEWED IN BALUCHI AT ALLAH ABAD ROAD STOP

"I came in the night to drink water but it was closed."

35 YEAR OLD DAILY WAGE EARNER FROM MITHRI INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR



Observations at two of the cooling facilities also specifically noted requests by people for the facilities to stay open for longer: *Everyone who came to the cooling stations were all very happy and they were also very grateful. They wanted this cooling station to always be present in the summers.* **TALLI VAN STOP;** *They suggested it should not be a temporary area, rather should be converted into a long-term solution.*

ALLAH ABAD ROAD STOP

In-depth interviews with key stakeholders also reported a limitation in that the facility was only open for a short duration and that the heatwave problem is not going away.

"As I have seen the project myself, I can tell you this is successful, so you do not have to do anything else to find whether or not it is successful, just extend it more as it is getting closed shortly."

"One issue with them is the fact that their work is for short duration. They should start some long-term projects to address heatwave issue as this problem is not going to disappear."



The project was implemented for 20 days due to limited funding. Bright Star couldn't ask for additional funding due to funding ceiling of £30,000. The funding ceiling has been revised to £60,000 now and we hope to generate a better response next year for a longer time duration. There certainly exists a possibility of extending the project to more days with additional funding.

NASEER CHANNA, CEO BRIGHT STAR

03 CREATE MORE SPACE AND PROVIDE MORE COOLERS

Many respondents mentioned that it would be better to increase the space in the tent and the number of coolers to provide access for more people, avoid overcrowding and people having to wait out in the sun to access the water coolers.

24 people (22 men and 2 women, representing approximately 24% of the 99 people who responded) specifically mentioned that the space could be made larger and/or the number of water coolers increased when responding to the question: *What aspects of the cooling station could be improved?* In order to create more space between people, some of the respondents suggested that the coolers could be re-arranged in a different manner. One respondent specifically mentioned the risk of COVID-19 in relation to overcrowding.

"There can be more measures to ensure that there is more space between the people. It can be done through increasing the space of the station or by increasing the number of water coolers."

40 YEAR OLD FEMALE VISITING SIBI FOR A MEDICAL CHECKUP, AND INTERVIEWED IN SINDHI AT TALLI VAN STOP

"I would recommend that the space should be bigger as it will help in catering to more people when the weather is getting extreme"

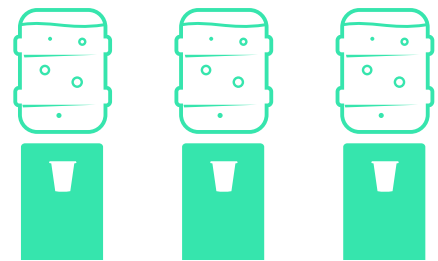
38 YEAR OLD FEMALE FROM SIBI INTERVIEWED IN SINDHI AT TALLI VAN STOP

"Sometimes, it gets crowded which can be harmful given the COVID-19 risk. The space can be enlarged given this risk."

32 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

"It is important if we have cooler arrangements in a manner where there are no queues in the sun."

55 YEAR OLD FARMER VISITING SIBI AND INTERVIEWED IN BAROCHI AT ALLAH ABAD ROAD STOP



The section on *Did you experience any of the following difficulties at the cooling station?* also suggested that some people had to wait long with 2 men and 2 women saying they had to wait for more than 10 minutes and one elderly man saying "there was too many people around".

Observations at two of the cooling facilities noted that occasionally, the tent did get overcrowded when buses arrived and many people alighted to access the cooling facilities. However, they did not have to wait long. They did hear people suggesting that the tent should be made bigger when it was busy. At the other site, the observers noted that the place was not crowded, but this was Talli which overall had less visitors (on average 10 over 30 minutes) compared to the other two sites.

"Overall, it was not overcrowded but it did get busy whenever there was a bus coming or leaving. On one occasion the arrival of a bus got delayed, so the number of people who were waiting increased and they were mostly waiting at the cooling station. It is important to note as it was very hot, people were cutting on their travel, still the number was pretty high and some people were even standing outside tents, in the shadow of the tent. ... When there were more people in the tent, people suggested a bigger tent and place to sit."


ALLAH ABAD ROAD STOP

"No, it was not overcrowded for the most part. ... No one had to wait, queue or stand as there were multiple water points so even when it was the busiest, no one waited for more than one minute or so to drink the water. Most people didn't use the chairs to rest as they were only interested in drinking the water. Many people were standing to keep an eye outside to see whether or not their bus had arrived."

QUETTA & JACOBABAD VAN STOP

"It was not overcrowded. Even at the time when some 25 or so people came at once, it wasn't overcrowded at all as there were many water coolers (8) in use. The staff also helped the people to follow discipline.people didn't have to wait or queue... anyone who wanted to sit down was able to at any given time as there were 12 chairs available."

TALLI VAN STOP

 The limited size of the tents was due to funding. The cooling fan, carpets and chairs in the cooling facility occupied space, and we could reduce the number of chairs to accommodate more coolers in the facility. Along with the water coolers, there were spare coolers containing water and ice to fulfil the additional demand and keep the water cold. This is a good suggestion to re-arrange them so that it becomes more spacious. Alternatively, we can look out for shaded places to use them as a cooling station instead without providing a tent. The money saved from not providing tents could be spent on expanding the facilities.

NASEER CHANNA, CEO BRIGHT STAR

04 PROVIDE FEMALE FRIENDLY SPACES

Many respondents noted that women were not using the facility or felt uncomfortable because there was not a separate section for women nor a female staff member available just for them. There were suggestions that this could be a family area – also for children – and could be created quite simply by a small partition.

22 (1 female and 21 men, 22/99, 24% of people) specifically mentioned that the space could be made more female-friendly with a separate area for females and female staff to assist them when responding to the question: *What aspects of the cooling station could be improved?* It is interesting that the other two female respondents who answered this question both focused on ensuring there was more space between people, and this could have been linked to them not feeling comfortable being so close to men that were using this facility who were not family members. In addition, one woman (different from the one who raised concerns in the question above) specifically noted that she did not “*feel comfortable as there were only men around in the station*” when asked, *Did you experience any of the following difficulties at the cooling station?*

“I would recommend that a female should have separate facilities inside the cooling station. For instance, there can be a single hall, but it can be partitioned into two.”

35 YEAR OLD FEMALE VISITING SIBI FOR A WEDDING INTERVIEWED IN SINDHI AT TALLI VAN STOP

“I would recommend that a female staff member should be appointed at the cooling station so that females feel more comfortable and relaxed at the station.”

35 YEAR OLD FARMER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

“I observed that females were hesitating to use the cooling station.”

40 YEAR OLD FARMER INTERVIEWED IN SINDHI AT TALLI VAN STOP

“The place has so many males most of the time that it becomes uneasy for women to use the station. It should be resolved.”

55 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN PASHTU AT TALLI VAN STOP



This observation of primarily men using the cooling facilities was reinforced from the on-site observations which noted that it was mostly travellers and some daily wage earners using the facility and most of these are men. Some women and children did use the facility but these were fewer in number.

"The cooling station was used by men who were mostly travellers. The number of women and children were small, for two reasons. First women were few in number among the passengers and secondly they were not staying too long in the cooling areas due to presence of other men. Children were mostly joined by both their parents...there were also poor community members like street vendors or daily wage labourers."

TALLI VAN STOP

"The cooling station was used by male travellers. There were some women and children among the travellers as well, but their numbers were small... Also, they said if there is separate tent for women, it will make women more likely to use the waiting area."

ALLAH ABAD ROAD STOP

"Everyone was using the facility such as men, women, children and travellers. However, it was mostly used by travellers as the cooling station was located at a bus station. As the travellers were mostly men, so it was mostly men. Further daily wage labourers and those who were working at the bus station were also using the cooling station."

QUETTA & JACOBABAD VAN STOP

Even though women travellers were generally few in number, they were present and there is evidence from other sources that they did not feel comfortable using the facility. For example, they stayed at the facility for a shorter period than the men (none of the 22 females interviewed stayed at the facility longer than 10 minutes) and one of the in-depth interviews with a housewife from Sibi town indicated that she did not enter the facility herself but her husband brought water to her.

Very few of the females surveyed provided narratives on their experience; as indicated above only 3 of the 22 interviewed answered the question on *What aspects of the cooling station could be improved?* The female interviewer noted that the women were not comfortable speaking with her for too long so many of the open-ended questions were not answered. To understand more the situation for the women at the cooling facilities we spoke in-depth with the female interviewer who shared some of her thoughts, observations and notes from informal chats that she had with the women.

FEMALE INTERVIEWER THOUGHTS, OBSERVATIONS AND NOTES FROM INFORMAL CHATS WITH THE WOMEN



Women were hesitant to freely use the cooling station as the place was full of men. They have a set of blanket instructions, given by the male members of the family or elderly women, which should be followed in every situation and at each place. Women are afraid to go against the male members of the family who do not allow their females to interact and act freely. Women were not even willing to speak freely with female researchers because they had not been given permission by the male family members that were accompanying them.

At one point, one of the female respondents asked the female interviewer:

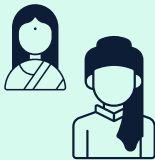


Baji ap ye copy neechay karao aur kuch na liko
– Sister, lower your copy and don't write anything.

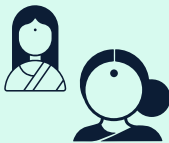
FROM THE INFORMAL CHATS THE FEMALE INTERVIEWER NOTED DOWN THE FOLLOWING STORIES



We liked your water place, but as there were so many men at the cooling station, we nor our men were comfortable for us to go and stay inside. If you made a separate door for women to enter or just put a piece of cloth to separate our place from the other men, our men would allow us to sit inside and relax during the hot days of Sibi. It is not comfortable for the women to relax and wait for a bus when they are sitting in the proximity of other men. Even other men do not sit with us. This cooling place should be here throughout the year as it is always hot in Sibi. The cooling station is equipped with all the necessities such as a tent to provide shade, ice cold drinking water, chairs, and fan. If one has access to such facilities in the hot weather of Sibi, it would play quite important role in avoiding heatstroke.



The people have a tradition here that women shouldn't be allowed to move around alone or allowed to talk to men, let alone sit close to men. Females have comprehensive instructions about their dress code and sitting or standing gestures when they are outside home. Firstly, females are always accompanied by their male guardians on public transport. There is always a gap between women and other men, even with own family members like brother and husband as it is not good if their bodies are touching other men, even our husband, in the presence of other men. Although it may be costly to always travel with another male member, this is practiced by all the families regardless of their financial status.



If a male member is not present in the house, an elderly woman joins younger women. This is mostly the case when women are traveling close to their homes such as hospitals. This is needed especially when men are out at work and the area is known to elderly women. If an elderly woman is not available, we ask a child to join us. However, for long distances, men always join. This all is done to ensure the safety of the females. If a woman tries to travel without men, the men don't feel comfortable.



We are not allowed to talk to or mingle with men. There are strict cultural norms in Sibi, just as in other parts of Balochistan. The strictness increases when we travel or move to urban areas. In the villages, we are able to move outside our homes without full burqa as most men are part of the extended family. But even there we are not supposed to talk to men who are not our immediate family members. However, when we travel, we wear full burqa. It is very hot, and even becomes unbearable in summer.



The cooling facilities generally targeted all the people including old, young, children, women, and specifically travellers (both males and females). Yes, this is a good idea, and female friendly spaces, within the cooling facilities, can be created. We are already considering the idea of deploying a female staff member next time to ensure that women coming to cooling facilities don't face any problems. The cooling facilities can be divided into two with a separator to have a separate facility for women and men. This will also ensure that women have a separate waiting area at the bus stop. Fewer chairs can be placed in both the cooling stations to make it more spacious for the people who leave after drinking water. Due to limited funding, these things were not implemented this year.

NASEER CHANNA, CEO BRIGHT STAR

05 PROVIDE STAFF TO HELP SUPERVISE

A few respondents specifically brought up the importance of having staff present at the facility to supervise its operation and resolve any issues. This is in addition to the requests made previously that one of the staff should be female to enable a female-friendly space. One respondent also suggested there could be instructions provided on how people should conduct themselves at the facilities.

"The availability of staff members are important as they will look after so many things like the supply of water and cleanliness of utensils"

22 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN BALUCHI AT TALLI VAN STOP

"The presence of a staff member is important in this station so that any unwanted incident can be avoided."

32 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

"There can be banners on the manners to use at the cooling stations. It can be hung in the centre and may provide various instructions to people using it."

30 YEAR OLD DAILY WAGE EARNER INTERVIEWED IN SINDHI AT TALLI VAN STOP



The on-site observations noted that staff were around explaining how to use the facility, but it is not clear whether there was always someone available during the time it was open.

"There were four Bright Star staff manning the cooling station at the Van Stop in the morning but one left after some time."

QUETTA & JACOBABAD VAN STOP

"There are different staff available at the facility. These staff were replenishing the water, telling people how to use the cooling facility as well as manning the facility."

TALLI VAN STOP

"At the time of our visit, there were two staff members from Bright Star who were manning the facility."

ALLAH ABAD ROAD STOP



The public is very respectful of our work and there were no unfortunate incidents during the course of the project. It was a civil arrangement and a team was always present there to assist the people coming to the facility. Queues were properly maintained at the cooling stations to ensure discipline and peace. The team also made efforts to ensure that elders, women, children and transgender people are prioritized at the cooling facilities. It is a good idea to display instructions of conduct at the cooling facilities. It can be implemented in future similar projects.

NASEER CHANNA, CEO BRIGHT STAR

06 MODIFY THE FORM OF THE MESSAGING

Respondents noted that some of the banners at the cooling facilities had been in English not Urdu, and that it is important to have these in the local language. For those that cannot read, people suggested that audio messages could be given, for example using a loudspeaker at the cooling facility to share important messages. People noted that the use of pictures was helpful for some who could not read though it also seemed to confuse others, suggesting more work could be done developing and testing the pictorial messages with the community beforehand.

"I can see from here the different messages as to how to protect against heat. I can read Urdu, others can't. But you have put pictures there, which is good."

HOUSEWIFE LIVING IN SIBI TOWN INTERVIEWED IN BALOCHI

"I would like to mention that most of the community in Sibi is illiterate and therefore direct face to face mobilisation would have been more beneficial as compared to written messages."

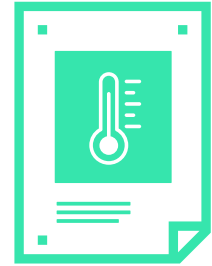
MALE RESIDENT OF SIBI WORKING AT CARITAS PAKISTAN AND INTERVIEWED IN URDU

"I have seen their posters and banners with quality messages for the public and their safety. The good thing about the posters is the use of multiple languages to convey the messages across the boundaries of the language. Also, the pictorial description on the banners is helpful for people to understand more easily..."

LOCAL ADMINISTRATION, FEMALE INTERVIEWED IN URDU

"When I came to the water point, they gave us water to drink and a place to sit in the shade. They also gave me this paper which has pictures and I can see they are asking us to protect against the sun. They are good, but I cannot read, so I do not know what they are exactly saying. They asked me to take it home and also show it to my children."

HOUSEWIFE TRAVELLING WITH HER HUSBAND INTERVIEWED IN BALOCHI



Six of the 96 men suggested that the banners at the cooling facilities should all have been in Urdu when asked the question: *What aspects of the cooling station could be improved?*

"The place should have banners in Urdu here. Also, we may have audio recorded messages in local language which can be played repeatedly at the centre."

28 YEAR OLD BUSINESS OWNER FROM SIBI INTERVIEWED IN BALOCHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

"There are banners here containing important information. More people can benefit if they are in Urdu..."

40 YEAR OLD BUSINESS OWNER INTERVIEWED IN SINDHI AT QUETTA & JACOBABAD VAN STOP AT NASHTAR ROAD

When asked *Can you briefly describe some of the messages you heard?*, half of the 20 women who had seen the messages explicitly mentioned that they had problems understanding the information as many could not read or found the pictures confusing. One example given was the picture of a horse-rider. In contrast, none of the men who had received the messages offered up issues related to understanding of the messages.

"I saw a poster but couldn't read it completely. I could understand a few things like taking a shower with cold water and using an umbrella in the heat. The poster also displayed some pictures of a small child and horse rider but I don't know the purpose of those pictures."

48 YEAR OLD FEMALE IN TRANSIT INTERVIEWED IN SINDHI AT TALLI VAN STOP

"I am not a literate person, but I saw messages on the banner. A person was falling down on the ground while the other one was vomiting as shown in the banner. I was told upon asking that these are the symptoms of the impacts of heat on a person i.e. you may fall ill on the ground due to extreme hot weather."

48 YEAR OLD FEMALE VISITING SIBI FOR MEDICAL TREATMENT INTERVIEWED IN SINDHI AT TALLI VAN STOP




"As I told you I can't read, but the poster was important and carried information about heatwave. The poster showed the picture of the doctor who was wearing his stethoscope. I can guess it meant that we should visit doctor if we don't feel well."

52 YEAR OLD FEMALE VISITING HER DAUGHTER IN SIBI INTERVIEWED IN SINDHI AT TALLI VAN STOP

"I couldn't understand it as I couldn't read it. The poster displayed the pictures of drinking water which means that it is important to stay hydrated. I also think this is correct as for instance I start to lose energy if I don't drink water for a long time."

30 YEAR OLD FEMALE INTERVIEWED IN SINDHI AT TALLI VAN STOP

Despite many of the women saying that access to the information was difficult because they could not read or clearly understand the pictures, most of those interviewed had received the messages compared to less than half of the men interviewed. Given the positive behaviour changes that the men demonstrated following the messaging, it would be important to understand why so few of the men noted that they had seen or heard the messages, and what can be done to improve this.

 As there are passengers in the areas where the cooling facilities were established, the information was disseminated in a bilingual mode (English and Urdu). Languages like Balochi and Barochi aren't written, making it unfeasible to disseminate the information in these languages. Some leaflets also contained information in the form of graphics. I think this is a good idea to convey audio messages using loudspeakers. Religious leaders can be engaged in the project activities to use the loudspeakers to convey ICE to public. I don't see any challenges in engaging the religious leaders. Similarly, pretesting of the pictures is a good idea and can be helpful.

NASEER CHANNA, CEO BRIGHT STAR

IN CONCLUSION

The provision of cooling facilities alongside behaviour messaging related to heatwave was well appreciated by the community and led to positive health benefits, especially for those who would not normally be able to access clean cold water and a place to rest. The way that Bright Star understood community needs and worked alongside relevant administration enabled them to provide something quite unique and such a public service was seen as a model for others to replicate. The community provided useful suggestions on how these facilities could be improved to enable greater access to more people over a longer period of time. This could include pretesting of the behaviour messaging materials, use of loudspeakers and incorporating female-friendly spaces. In 2022, Bright Star will be able to put these suggestions into practice assuming that the funding is available to support any such early action this year. This evaluation was done in person, and given that many of the people we heard from did not possess telephone numbers (in particular the women), demonstrates the value of this approach over call-centre style surveys.

REFERENCES

- Ambreen R, Barr, S. (2020). Knowledge, Attitudes & Practice around heatwave in Karachi following a forecast-based heatwave messaging project. December 2020. <https://startnetwork.org/resource/pakistan-heatwave-kap-study>
- Bain, AR, Lesperance, NC and Jay O. (2012). Body heat storage during physical activity is lower with hot fluid ingestion under conditions that permit full evaporation. *Acta Physiol*, 206, 98-108.
- Farmer, B (2021). Hotter than the human body can handle: Pakistan city broils in world's highest temperatures. *The Telegraph*. 28 June 2021 <https://www.telegraph.co.uk/global-health/climate-and-people/hotter-human-body-can-handle-pakistan-city-broils-worlds-highest/>
- Intergovernment Panel on Climate Change (IPCC) (2021). *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. P. An, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekci, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. <https://www.ipcc.ch/report/ar6/wg1/>
- Matthews, TKR, Wilby, RL and Murphy, C. (2017). Communicating the deadly consequences of global warming for human heat stress, *PNAS*, 114 (15) 3861-3866. <https://www.pnas.org/content/114/15/3861>
- Rahaman, SK (2021). The Story of Heatwave Anticipatory Action in Dhaka, Bangladesh. *Anticipation Hub News & Blogs*, 8th Sep 2021. <https://www.anticipation-hub.org/news/the-story-of-heatwave-anticipatory-action-in-dhaka-bangladesh>

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گرمی کے متفرقات اور ان سے بچاؤ کیلئے چند ضروری ہدایت پر عمل کریں

- پانی اور سرد پانی استعمال کریں۔ گرمی میں شہت سے پرہیز کریں۔ شہرہ گرمی میں 10 بجے سے اجنبان باہر نکلنے سے پرہیز کریں۔
- گرمی سے بچنے کے لیے کھانسی اور گرمی میں مزاحمت کریں۔
- جموں کے درخت کو کم کرنا یا کٹنا ہونے تو لینے سے ہم کو آگے

Implemented by: Bright Star Development Society Balochistan (BDSB)
Supported by: Care International in Pakistan (CIP)
Funded by: Start Network



Rickshaws closely to Allah Abad cooling facility displaying Bright Stars behaviour messaging posters



ABOUT START NETWORK

Start Network is made up of more than 50 humanitarian agencies across five continents, ranging from large international organisations to national and local NGOs. Together, our aim is to transform humanitarian action through early action, innovation, fast funding, and locally led action.

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