

Introducing Climate Change and Scourge of Plastic Pollution into Primary Schools

A R Gatrad^{1*}, Eshal Shaukat², Lubaina Majid³ and Theron Mahoney⁴

¹Professor of Paediatrics and Child Health at Universities of Birmingham, Kentucky (USA), Wolverhampton and Lahore, Founder of WASUP

²Student at Beacon House School, Faisalabad, Chief WASUP Youth Ambassador - Pakistan, International and Pan Asia

³Student at Beaconhouse School System Mirpur (Kashmir), Chief WASUP Youth Ambassador - Kashmir and International, Pakistan

⁴Student at Rathfern Primary School London (UK), Chief Youth WASUP UK Ambassador, UK

***Corresponding Author:** A R Gatrad, Professor of Paediatrics and Child Health at Universities of Birmingham, Kentucky (USA), Wolverhampton and Lahore, Founder of WASUP.

Received: June 13, 2024; **Published:** June 21, 2024

Introduction

The basic aim of introducing this subject into schools is to 'catch' young children early and hopefully change their thinking and behaviour whilst they grow up and continue to influence others. In doing this one has to involve passionate young children and make them ambassadors to propagate the message of plastic pollution and climate change. Climate education cuts through a lot of subjects such as science, civic duties, religion, geography, literacy etc and affects most of our daily activities such as: greenhouse gas production from travelling, the food we eat (15% greenhouse gases produced from global food production, and the food waste that occurs is mostly in homes - this is 70% of all global food waste) and the clothes we wear (fabric industry produces 15% of greenhouse gases and uses up trillions of gallons of fresh water annually).

Method

WASUP was set up by Professor Gatrad in 2018. It is funded entirely by him (www.wasupme.com). No one gets paid.

WASUP has four principles:

1. Raising awareness of the dangerous impacts of burning of fossil fuels on our environment, and also the impact of plastic pollution.
2. Supporting the school curriculum through talks and small projects facilitated by a book - 'The story of three plastic bottles' and a WASUP song created by 4 Walsall schools. Appointing WASUP Ambassadors in schools.

The first thing to do was to form a steering group of teachers that were known to Professor Gatrad. This was relatively easy as many of his patients go to school and head teachers often had firsthand knowledge about him. Over six years Professor Gatrad has visited over 200 primary schools in and around the West Midlands and indeed some abroad. Every school was encouraged to have an Eco Committee or WASUP Warriors. This empowered the children who received WASUP badges. The best were made WASUP Ambassadors.

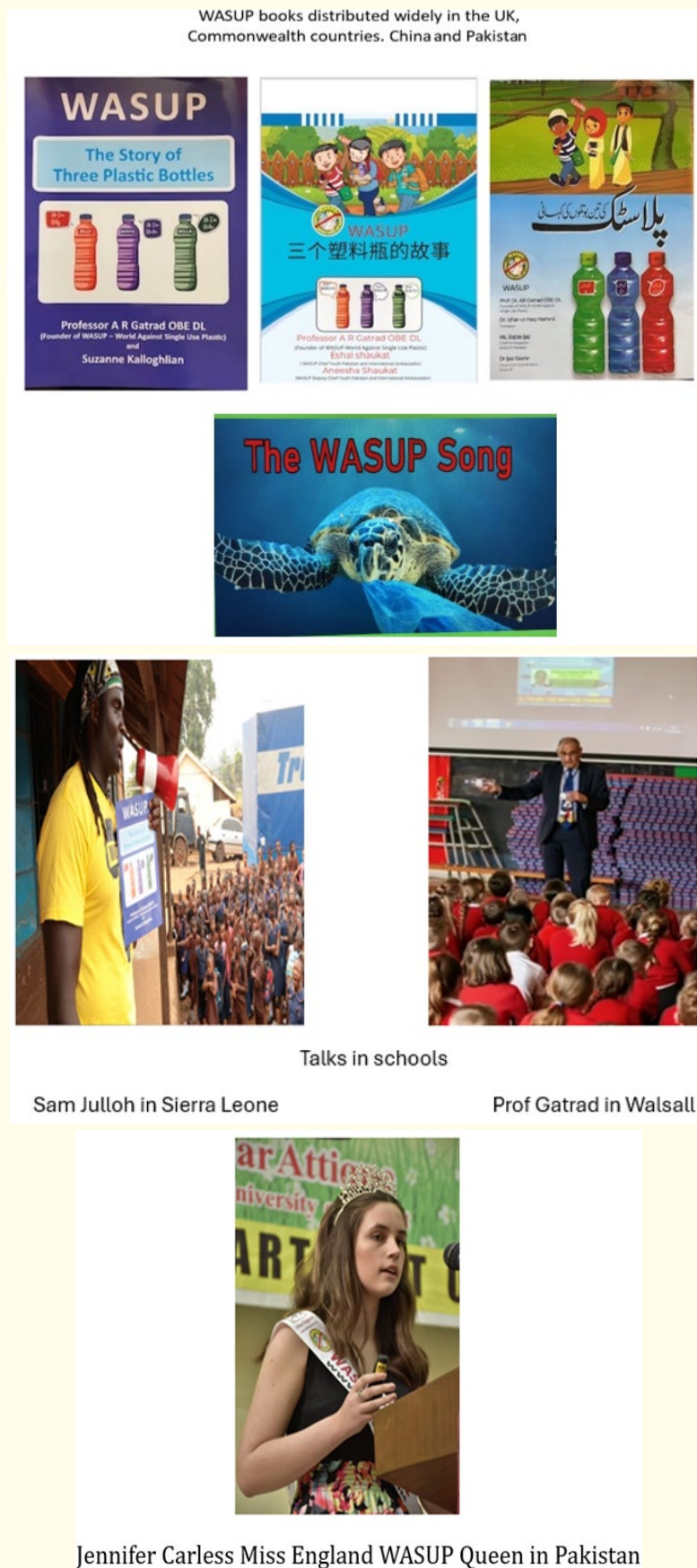


Figure 1

3. Litterpicking: A partnership with canal and river trust and the local council helped facilitate this.



Figure 2

4. Putting pressure on various authorities to decrease plastic in supply chains - such as the hospital where Professor Gatrad works.

Many of Prof Gatrad's talks are now virtual and often through a platform called Letslocalise - here at times over a thousand children from various schools have joined in. The WASUP Ambassadors give independent lectures in their countries based on the 4 principles above.

The virtual course has four modules:

1. An introduction of what has happened since the industrial revolution and how the earth is impacted through the production of greenhouse gases. The talk start with 'What do we breathe in and out, and what do plants do'? This immediately attracts the attention of the children and engages them.
2. The production of plastic and its contribution not only to 10% of green house gases but also its impact on all living things. To this end a book called 'The Story of Three Plastic Bottles' co- authored by Prof Gatrad was published and distributed free to many schools, including to many through the Commonwealth Games Birmingham 2022 in various Commonwealth countries.
3. Biodiversity - here talks about forests being the 'lungs of the world' and the importance of insects and bees in pollination are discussed with emphasis on food security. The impact of polluted water, air and soil through the impact of climate change are expounded. The fact that only 4% of the earths water can be used for human consumption is a startling fact.
4. Finally, what can we do to mitigate the impacts of climate change - such as less use of transport that uses fossil fuels, growing trees, eating local products, a more vegetarian diet with less meat (huge carbon footprint) which not only helps the environment but is healthy in helping against heart disease, obesity and diabetes.

A famous Bollywood singer Shanker Mahadevan was introduced to Professor Gatrad and produced a WASUP song in Hindi which a lot of schools use in their dance classes in India!

A play called 'The plastic migrant' produced by Professor Gatrad was staged over 3 days to packed audiences. Here school children of African origin took part and really excelled in telling the story of plastic pollution and climate change.



Figure 3

In addition, thirty-three schools took part in a 'Reusing plastics competition', and the winner made a mural of a plastic wave eating up our planet.



Figure 4

All schools were sent a wish list of what they could do as in table 1.

Form Eco committees. Each child to have a reusable water bottle. Recycle bins in classes. No contamination of packaging that is to be recycled. School registration with Terracycle for Crisp packet. Water fountains in school foyers. Adopting streets for regular litter picking. In house cooking to decrease plastic packaging of food. Changing all cutlery to non- plastic. School ties made from recycled plastic. No sachets (e.g. ketchup). Discourage sweets and chocolates (wrappers difficult to recycle).
--

Table 1: Information sent to schools to share good practice.

Results

WASUP was launched not only in Walsall with hundreds attending including many local teachers, but there were also launches in other parts of the country such as Coventry, Leicester and Worcester with their respective WASUP Ambassadors. Now there are WASUP Ambassadors in over 50 countries.



Figure 5

Although now most schoolchildren bring in ‘reusable’ plastic bottles these days, this was not the norm a few years ago. These talks encouraged the school and the children to do this. In addition, some schools have school fountains and have decreased use of plastic sachets such as tomato sauce! A towpath was built by WASUP at Millfield School in Walsall to encourage children from neighbouring schools to join in litter picking activities around the canal, under supervision. Many schools now have recycling bins. One important unexpected impact was that the children anecdotally started changing behaviour of their parents in the home.

Some schools now have WASUP Gardens. Here a small grant is made available by WASUP for children to plan, build and look after a garden.

WASUP Garden at Millfield School Walsall



Figure 6

Children with ADHD and autism benefitted a lot especially during Covid. Children in schools come to learn about biodiversity and what is needed for plants to grow, and also appreciate and respect the environment with a long-term view on understanding sustainability. They carry out nature-based activities and bring wildlife into the garden, such as hedge hogs or bees to live. Prof Gatrad’s vision is that ‘growing a garden’, with wildlife will be fun for children too, with lots of different types of minibeast and insects such as ladybirds, bees, spiders and woodlice living in bug hotels. These minibeasts can then use bug hotels as a safe space to shelter, lay their eggs, raise their young, and seek refuge from predators.

Discussion

Some observations

The children are warned at the outset of a talk that they will be quizzed. Through experience it was found that a talk for 20 - 25 should be maximum to hold the Childrens’ interest. The impact was greatest when followed by a quiz on each section Children’s enthusiasm often affects the running of the meeting and therefore teachers ask the question to the class and write the answer in ‘chat’.

If a talk has been given face to face during assembly, then this is followed by 45 minutes of litter picking - roads are generally avoided for obvious reasons, but parks and nearby green spaces do lend themselves to litterpicking. Many schools have been provided by litter picks, bags and gloves by the founder. Some schools visited have adopted an area, and keep it litter free.

Conclusion

Although there is a recognition that children should be taught about the sustainability of our planet it is very patchy. In our experience - the teachers, although encouraged to include this subject into the curriculum, most don't have the knowledge, inclination or the time.

As for the children it is important not to create a total picture of doom and gloom leading to climate anxiety (or solastalgia). Children often tell teachers that they are saddened by what they see and hear and therefore any talk has to be sensitive to ensure this is minimised and presented in a way that there is hope. It is emphasised to them that together with them, as they grow up, this problem will be defeated. This we know depends on our politicians and the state of the world being on the same page.

Volume 13 Issue 7 July 2024

©All rights reserved by A R Gatrad., *et al.*