1. Answer from the article *Mothers of Nepal Vanquish a Killer of Children*

a. Describe the differences between the Nepalese and Indian approaches to measles vaccination.

--In case of measles vaccination, the performance of India is far better than that of Nepal. However, though in India the deaths by measles are very heavy in India, still it is not considered as priority as it is treated in Nepal.

b. What are the strengths of the Indian approach?

--- India strictly followed accelerated measles campaigns last year. It helped the country in getting rid of most of the severe possibilities.

c. What are the strengths of the Nepalese approach?

---- Nepal's effort on measles vaccination has been much supported by volunteered mothers through highly organized network for making health oriented campaigns possible and successful.

d. What other steps are taken in Nepal to improve the health of children?

--- To improve the health of children in Nepal, mothers are highly privileged to participate in terms of all those issues that are related to the health of children. Moreover, facilities and support form government in this sector is considered as primary.

2. Each year, measles kill about 450,000 people worldwide. In order to vaccinate for measles, children need two separate vaccinations, each costing $0.15. Please show your math calculations.

a. How much per year would it have cost to prevent those deaths?

No. of people to be vaccinated= 450000.00

No. of vaccination required per person= 2.00

Total No. of vaccine required= 450000x2= **900000.00**

Cost of 1 shot of vaccine=0.15dollars

Therefore total cost involved in preventing 450000 death=450000x0.15= **135000.00dollars**

b. German GDP in 2006 was $2.6 trillion. What percentage of German GDP would be needed to inoculate 450,000 children annually?

German GDP in 2006= 2.6x 1000000000000=2600000000000.00 dollars

Amount required to inoculate= 450000 children

Annually= 135000.00dollars

% of German GDP= 135000/2600000000000x1/100= **0.000005**

c. There are approximately 3 billion people worldwide who have not been vaccinated against measles. How much would it cost to vaccinate these people?

No. of people worldwide not vaccinated= =3x1000000000=3000000000.00 individual

Cost per individual for vaccination==0.15x2= **0.30dollars**

Therefore for worldwide vaccination cost will be

=3000000000x0.30/1000000000

= **0.90 billion dollars**

3. On average, "holiday" sales in the U.S. run $42.7 billion. Estimates of the cost for vaccinating children for those most common childhood diseases vary tremendously. However, if we assume that all vaccines for the most common childhood diseases could be made available for $90 (the current U.S. estimate), how many people could have been vaccinated using the money spent on gifts during "the holidays." Please include your math calculations.

Average holidays sales in US=42.7x1000000000= 42700000000dollars

Cost per individual for all vaccination= 90dollars

No. of individual that can be vaccinated using the money spent on gifts

=42700000000/90

= 474444444 individuals

=474444444/1000000000= **0.47billion individual**

4. In addition to the cost of vaccines, other costs are incurred in vaccination programs. With those additional costs, total cost per person rises to approximately $250. Please include your math calculations

a. What kinds of additional costs beyond vaccines are incurred in vaccination programs?

Various kinds of additional costs beyond vaccines are incurred in vaccination programs. These can be commonly noted in terms of cost involved in storing and distribution of the vaccine as per prescribed norms. It also depends on cost as per managing and delivering vaccines in the selected area. The cost also gets counted for training and administering personnel; followed by creating awareness among people.

b. How many persons could be vaccinated using the money spent during "the holidays" at this new figure?

Money spent during holidays= =42.7x1000000000= 42700000000 dollars

No. of persons that can be vaccinated at $250/ individual

= 42700000000/250

=170800000.00 individual

=170800000/1000000000

=**0.17 billion individual**