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ABOUT AWARENESS OF THE POPULATION OF INDIA ABOUT THE CHERNOBYL DISASTER

Introduction. Several years after the Three Mile Island accident in the United States, the Chernobyl accident in 1986 completely changed the public's perception of nuclear risk. While the first accident provided the impetus to develop new research programs on nuclear safety, the second, with its human death toll and the dispersion of a large part of the reactor core into the environment, raised a large number of "management" problems, not only for the treatment of severely exposed persons, but also for the decisions that had to be taken in respect of the population [4].

On 26 April, 1986, the Chernobyl nuclear power station, located in Ukraine about 20 km south of the border of Belarus, suffered a major accident which was followed by a prolonged release to the atmosphere of large quantities of radioactive substances. The specific features of the release favored a widespread distribution of radioactivity throughout the northern hemisphere, mainly across Europe. A contributing factor was the variation of meteorological conditions and wind regimes during the period of release. Activity transported by the multiple plumes from Chernobyl was measured not only in Northern and in Southern Europe, but also in Canada, Japan and the United States [3]. Only the Southern hemisphere remained free of contamination. This had serious radiological, health and socio-economic consequences for the populations of Belarus, Ukraine and Russia, which still suffer from these consequences. Although the radiological impact of the accident in other countries was generally very low, and even insignificant outside Europe, this event had, however, the effect of enhancing public apprehension all over the world on the risks associated with the use of nuclear energy [2].

Most of the population of the Northern hemisphere was exposed, to various degrees, to radiation from the Chernobyl accident. After several years of accumulation of dosimetry data from all available sources and dose reconstruction calculations based on environmental contamination data and mathematical models, it is now possible to arrive at a reasonable, although not highly accurate, assessment of the ranges of doses received by the various groups of population affected by the accident [6]. The main doses of concern are those to the thyroid in the population of children and infants at the time of the accident, due to external irradiation and inhalation and ingestion of radioactive iodine isotopes (^{131}I and short-lived radionuclides), and those to the whole body due to external irradiation from and ingestion of radioactive cesium isotopes (^{134}Cs and ^{137}Cs) [5].

Aim. To find out the degree of awareness among Indian population about the incident of the Chernobyl nuclear disaster.

Material and methods. By the conduction of survey and analyzing the results given by the people.

Research result and discussion. A survey had been conducted by the means of telephonic conversation and also direct approach to Indian citizens in Belarus studying at Gomel State Medical University and citizens in India a series of sets of questions were asked to 60 people of different age groups.

If or whether they were aware of the nuclear disaster, that is the Chernobyl nuclear disaster. The sets of questions asked whether they knew about the disaster? If knew at what age? When they heard about the disaster? Whether they had been taught in the school? Or they saw it in the newspaper? Had learned by themselves? These sets of questions were asked to the different individuals of different age groups. Ranging from school going students of age 17 and above to working ageing 30 and above and also elderly aged people of age 65 and above.

So starting from the *elderly aged people* **68%** of them *didn't know* about the Chernobyl nuclear disaster. It was quite expected. As they were aged. And they are not that informed in the early period of time as there was difficult in the communication of the information throughout the world and as it being an international news. But rest **32%** *did know* as they were doing high professional jobs. Many of them replied "I was shocked when I came to know about it. I also realized how dangerous a nuclear power plant can be".

India had its difficult times in ancient period in the field of communication and coming to the *working age people* it was quite clear that they *knew* the information nearly **70%** of them. Through various newspapers and news channels at that point of time. As it was the golden age of innovation and technological communication. They are little bit more connected to the world rather than the elderly aged people. So they knew about the Chernobyl nuclear disaster through various global multimedia. And they knew what happened.

Asking the questions about the Chernobyl to the *elderly* and the *working aged people* they recollected an incident which happened in India on the night of December 2 in the year 1984, there was an incident known as the Bhopal gas tragedy. Which happened due to the leakage of methyl isocyanate in the city of Bhopal and it there was at least 30 tons of methane isocyanate gas which killed more than 15,000 people and affected more than 600,000 workers and these were the incident people recall and try to share as we were asking them the questions about the Chernobyl nuclear disaster.

Now coming to the *school* growing and the *peer group students*. Then *knew* the most out of the three groups about the Chernobyl nuclear disaster ranging to **86%**. One of them replied "yeah I do know about it rather than the school I knew more information through the TV Series Chernobyl it was quite the shock to know about the facts and its impacts the world is changing we have to be ready for anything".

As they are even more connected to the global multimedia and also had been learned in school. The *younger generation* also analyzed how the accident took place and also had being taught similar kinds of accidents that had been taken place in our world. Apart from this other major source of knowing about these accidents are the

documentaries, which the studios designed to illustrate the situation and say how the accident takes place one of the great show, the TV Series created by HBO, Chernobyl. This show which is a documentary and had won many awards. In depicting the exact situations of the accidents of the Chernobyl nuclear disaster and also this had reached very vast majority of people of India and also the World. Through this many people came to know about the Chernobyl nuclear disaster even better and even precise know how it happened.

Lessons learned: the lessons that could be learned from the Chernobyl accident were, therefore, numerous and encompassed all areas, including reactor safety and severe accident management, intervention criteria, emergency procedures, communication, medical treatment of irradiated persons, monitoring methods, radio ecological processes, land and agricultural management, public information, etc. [1].

Conclusion. The history of the modern industrial world has been affected on many occasions by catastrophes comparable or even more severe than the Chernobyl accident. Nevertheless, this accident, due not only to its severity but especially to the presence of ionizing radiation, had a significant impact on human society. Not only did it produce severe health consequences and physical, industrial and economic damage in the short term, but also its long-term consequences, in terms of socio-economic disruption, psychological stress and damage to the image of the nuclear energy, are expected to persist for some time. However, the international community has demonstrated a remarkable ability to apprehend and treasure the lessons drawn from this event, so that it will be better prepared to cope with future challenges of this or another nature in a more flexible fashion [7].

Sources of literature and information.

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