

**CREATING AWARENESS ON ORGAN AND TISSUE DONATION THROUGH AN  
INNOVATIVE WAY OF HEALTH COMMUNICATION: HEALTH TAMBOLA**

by

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**Abstract – This article introduces us to the need for creating awareness among public and professionals on organ and tissue donation keeping in view the tremendous need for organs and tissues in India. It talks about Transplantation of Human Organ Act THOA -1994 that permitted organ donation from live donors and Brain Stem Dead donors and Transplantation of Human Organs (THO) amendment Act -2011 that permitted retrieval of tissues too like skin, bones , ligaments and eyes from dead persons for therapeutic use of human beings. It emphasizes upon the role played by Central Health Education Bureau (CHEB), an apex institution in Health Education for creating awareness among masses on organ and tissue donation and transplantation from 2012 onwards at India International Trade Fair (IITF) held every year from 14<sup>th</sup> to 27<sup>th</sup> November at Pragati Maidan, New Delhi. The paper elaborates on “Health Tambola on Organ and Tissue Donation and Transplantation” an innovative way of health communication that was introduced at IITF-2013 by CHEB for creating awareness. “Health Tambola on Organ and Tissue Donation and Transplantation” is a scientific; mathematical, entertaining, interactive, incentive based health informative game used for creating awareness among public. While describing the objectives of this game, the paper talks about how this game provides a platform to get across the messages on organ and tissue donation in a simple and fun manner leaving long lasting impression on the people as well as professionals. It talks about the various items of this health informative game that comprises a Tambola Board, Tambola Tickets and Tombola Slips and describes the other requirements of this game. It talks about various phases of its preparation, implementation and evaluation. This paper concludes by giving a direction to health professionals involved in health education to create this type of game in various health education programmes as it sustains interest and involves active participation of people as well as professionals.**

**Key words- Health Tambola on Organ and Tissue Donation, Organ Donation, Tissue Donation, THOA-1994, THO amendment Act 2011.**

The need for organ donation by people for transplantation into patients requiring organ transplant is more in almost all the countries. India needs more than 2, 60,000 organs every year(1).The organ donation by a brain stem dead person and living donors was made legal in 1994, when Parliament enacted the law named as --The Transplantation of Human Organs Act (THOA) 1994 (2). This law permits removal, storage and transplantation of human organs for the treatment purposes and prohibits and penalizes commercial dealings in human organs. The law was amended in 2011 to include tissues too called THO amendment Act 2011(3) which was followed by gazette notification of Transplantation of Human Organs and Tissue (THOT) Rules in 2014(4).

The public as well as professionals are equally unaware of donation of organs after Brain Stem Death which is a new definition of death (5). Public is also not aware of various nuances of death interlinked with organ and tissue donation. After passing THOA in 1994, a major survey was conducted to find out the attitude of public towards organ donation in 1995-96. The survey,

conducted on 5008 people, displayed 72% of the populace were willing to donate eyes and carry a 'Donor Card'; less than 50% were willing to consider solid organ donation. About 74% of Hindus, 72% Christians and 58% Muslims were willing to consider organ donation; however the concept of brain death was new to most of the people surveyed (6). Another study conducted in major government and private hospitals of Delhi in 2004 revealed that the major reasons for poor performance of organ donation for transplant is lack of awareness among public (7).

Central Health Education (CHEB) Bureau is an apex institution in India for Health Education and Health Promotion that creates awareness among masses in relation to various National Health Programmes through print and electronic media. National Organ Transplant Programme launched in 2009 is one such programme where people as well as professionals lack adequate information. Creating awareness with active participation of people in different health awareness programmes is also one of the mandates of CHEB. From the year 2012 onwards CHEB has been creating awareness among masses on organ and tissue donation and transplantation at India International Trade Fair (IITF) held every year from 14<sup>th</sup> to 27<sup>th</sup> November at Pragati Maidan, New Delhi. Prior to IITF-2013, the author prepared “Health Tambola on Organ and Tissue Donation and Transplantation” that was introduced by CHEB to create awareness among public at Health Pavilion in IITF-2013(1).

### **What is “Health Tambola on Organ and Tissue Donation and Transplantation”?**

Tambola usually is a game of digits played by people in kitty parties; in social gatherings etc. Getting clues from the game “Health Tambola on Organ and Tissue Donation” was prepared by the author to create awareness among people. It was prepared with captions, stories, concepts, slogans on organ donation and transplantation based on the literature review of PhD synopsis of the author approved by Committee of Advanced Study and Research in their 369<sup>th</sup> meeting; Jawaharlal Nehru University; Centre of Social Medicine and Community Health vide, order no SSS/2007-O8 dated 25<sup>th</sup> Jan 2012. To sustain attention and interest of people along with creating awareness was the main motto of using this innovative way of health communication. Health Tambola was prepared to stimulate and sensitize people towards organ and tissue donation and provide them an opportunity not only to speak about issues concerning them but also enable them to try their luck simultaneously. It is scientific; mathematical, entertaining, interactive, incentive based health informative game that involves very active participation of people. An effective and innovative approach to health education, it provides a platform to get across the messages in a fun manner that leaves long lasting impressions on the people.

#### **OBJECTIVE OF “HEALTH TAMBOLA ON ORGAN AND TISSUE DONATION”**

- To create an innovative channel of health communication.
- To involve active participation of people.
- To give public an opportunity to speak on issues concerning them.
- To enable people and professionals to discuss many issues together.
- To give public a chance to be a part of main Tambola board through their slogans; stories; poems etc.
- It was Tambola for people with an intention to make it a Tambola by people by incorporating their stories slogans poems etc. for Tambola 2014.
- To give feedback to the National Organ Transplant Programme.

### **PREPARATORY PHASE**

Health Tambola on organ donation and transplantation was prepared keeping in view the above mentioned objectives. The game comprises of following three things.

#### **1. A FOLDABLE AND PORTABLE TOMBOLA BOARD**

The main item of this game is a foldable and portable board comprising of 90 chambers each chamber approximately of two square inch size. Each chamber contained a story, a concept, a slogan, an issue, legal options; donor issues, relatives issues, etc. (in two languages only i.e., Hindi or English) as shown below in boxes numbering 1-42(a part of Health Tambola Board) in Table 1. All these items were arranged alphabetically and placed in columns and rows as shown below in Table 1.

#### **2. TAMBOLA TICKETS**

The tickets were mathematically prepared. Each and every number from 1-90 along with designated caption was given equal opportunity to be present on the tickets. For example if digit 1 was in two tickets; all other numbers from 2-90 were also in two tickets. A total of 70 tickets were prepared, each ticket containing 8 -9 numbers along with the captions as per the assigned caption to the numbers in the Tambola Main Board as shown below in Table 2.

#### **3. TAMBOLA SLIPS**

A total of 90 separate slips containing each statement individually as present in the board were prepared and put in a box. An example of this slip is given in Table 3.

#### **4. OTHER REQUIREMENTS FOR CONDUCTING TAMBOLA SESSIONS ARE-**

- A Stage
- Public Address System
- 3-4 Portable mikes to listen from audience
- Supporting Staff
  - for distributing tickets
  - for giving portable mikes to the individual speakers among the audience
  - person to hold the bowl containing all 90 slips and pick up slips one by one
  - a moderator well versed with the topic to speak about the issue as depicted in the slips
  - a person to place slips on the Tambola board after being randomly selected and discussed with public

**Table 1:- SHOWING A PART OF TAMBOLA BOARD CARRYING VARIOUS MESSAGES, CAPTIONS, STORIES, LEGAL ISSUES, CONCEPTS ETC. IN VARIOUS CUBICLES FROM NUMBER 1 TO 42 (OUT OF TOTAL 90 CUBICLES OF THE TOMBOLA BOARD ON ORGAN AND TISSUE DONATION)**

<b>ANMOL EFFECT-2012</b> 1	<b>ABOUT 15000 KIDNEYS AND 20000 LIVERS ARE REQUIRED ANNUALLY IN INDIA</b> 2	<b>A PERSON IN COMA IS NOT ALWAYS BRAIN DEAD .COMA WHICH CANNOT BE REVERSED IS BRAIN DEAD</b> 3	<b>ALL MAJOR RELIGIONS SUPPORT ORGAN AND TISSUE DONATION</b> 4	<b>BRAIN STEM DEATH IS A NEW DEFINITION OF DEATH AND IS DIAGNOSED BY A TEAM OF 4 DOCTORS IN ICU</b> 5	<b>BESHAK MERI ZINDAGI KISI KE KAAM NA AAYI.....PAR MERI MAUT NE KAYEE BUJHTE HUYEN DEEPAK JALA DIYE</b> 6
<b>BRAIN STEM DEATH CANNOT BE DIAGNOSED AT HOME</b> 7	<b>BRAIN STEM DEAD PERSON APPEARS TO BE ALIVE BECAUSE HE IS WARM TO TOUCH</b> 8	<b>BUJHTE HUYEY AAPNEY EK CHIRAG KO DOOSREY 7-8 CHERAGO KO BUJNE SE BACCHAO</b> 9	<b>BONE TRANSPLANTATION IS USED TO CURE PATIENTS SUFFERING FROM BONE DEFORMITY DUE TO AGEING OR OTHER BIRTH DEFECTS</b> 10	<b>CHIRAG KE BUJHNE SE PEHLE .....JYOT SE JYOT JALATE CHALO</b> 11	<b>CARE FOR OTHERS AND SHARE YOUR BIOLOGICAL ASSETS BEFORE LEAVING THIS WORLD</b> 12
<b>CASTE IS NOT A BARRIER FOR ORGAN DONATION AND TRANSPLANTATION HAS BEEN PROVED SCIENTIFICALLY</b> 13	<b>CLASS IS NOT A BARRIER IN ORGAN DONATION AND TRANSPLANTATION HAS BEEN PROVED SCIENTIFICALLY</b> 14	<b>DUAL TRANSPLANT</b> 15	<b>DONOR RECIPIENT IDENTITY IN CASE OF BRAIN STEM DEAD DONATION IS NOT DISCLOSED GLOBALLY</b> 16	<b>DEMAND FOR ORGAN TRANSPLANT FAR EXCEEDS THE SUPPLY OF ORGANS EVERYWHERE</b> 17	<b>DO NOT LET YOUR ORGANS AND TISSUES PERISH WITH YOUR DEATH ; LET THEM BE ADOPTED BY NEEDY PEOPLE</b> 18
<b>DOMINO TRANSPLANT</b> 19	<b>DO NOT CONSUME ALCOHOL AND END UP BEING IN NEED OF LIVER TRANSPLANT</b> 20	<b>EVERYONE OF US CAN IMPROVE THE QUALITY OF LIFE OF MANY PEOPLE BY DONATING TISSUES AFTER DEATH</b> 21	<b>EXPRESS YOUR WISH TO YOUR FAMILY REGARDING BODY /ORGAN DONATION</b> 22	<b>EYE DONATION - MAKE IT A FAMILY TRADITION</b> 23	<b>FELICITATION OF DONOR FAMILIES IS DONE ON MANY OCCASIONS INCLUDING NATIONAL ORGAN DONATION DAY</b> 24
<b>FAMILIES HAVE REASONS TO ACCEPT DONATING ORGANS OF THEIR RELATIVES</b> 25	<b>FAMILY INFLUENCES DAMAND AND SUPPLY OF ORGAN DONATION AND TRANSPLANT</b> 26	<b>FEMALE LIVE DONORS MOSTLY COME FORWARD TO DONATE ORGANS TO THEIR FAMILY MEMBERS GLOBALLY</b> 27	<b>FOLLOW SAFETY RULES TO PREVENT HEAD INJURIES</b> 28	<b>FROM 2010 ONWARDS INDIA HAS BEEN OBSERVING NATIONAL ORGAN DONATION DAY EVERY YEAR IN THE MONTH OF NOVEMBER</b> 29	<b>FAMILIES ALSO REFUSE TO DONATE ORGANS AND TISSUES</b> 30
<b>GREG GREEN CREATED HISTORY BY DONATING HIS SONS ORGANS IN 1999</b> 31	<b>GREEN CORRIDOR PROVES EFFECTIVE IN CHENNAI FOR ORGAN TRANSPORTATION</b> 32	<b>HEART DONATION AND TRANSPLANT (HAVE HEART TO GIVE HEART)</b> 33	<b>HEAD INJURY PATIENTS MOSTLY END UP WITH BRAIN STEM DEATH IN ICU'</b> 34	<b>HEAL THE WOUNDS OF PEOPLE THROUGH SKIN TRANSPLANT</b> 35	<b>HITENDRAN EFFECT CREATED RIPPLES IN ORGAN DONATION AND TRANSPLANT IN 2008</b> 36
<b>ISCHEMIC TIME VARIES FROM ORGAN TO ORGAN</b> 37	<b>IMMUNOSUPPRESSANTS ARE REQUIRED FOR LIFE FOR PREVENTING REJECTION OF TRANSPLANTED ORGAN</b> 38	<b>INDIA NEEDS MORE THAN 200000 ORGANS EVERY YEAR</b> 39	<b>INDIA HAS STARTED A NEW NATIONAL PROGRAMME IN 2008 CALLED NATIONAL ORGAN TRANSPLANT PROGRAMME</b> 40	<b>INCENTIVES ?</b> 41	<b>IDENTICAL TWINS</b> 42

**Table 2. SHOWING SAMPLE OF ONE OF THE TAMBOLA TICKETS PREPARED FOR PARTICIPANTS OF THE GAME**

NAME-	MOBILE NO.-	
DOMINO TRANSPLANT  <b>19</b>	"NATIONAL BIOMATERIAL CENTRE" IS BEING ESTABLISHED AT NOTTO.  <b>58</b>	A PERSON IN COMA IS NOT ALWAYS BRAIN DEAD .COMA WHICH CANNOTBE REVERSED IS BRAIN DEAD.  <b>3</b>
INDIA NEEDS MORE THAN 200000 ORGANS EVERY YEAR  <b>39</b>	CARE FOR OTHERS AND SHARE YOUR BIOLOGICAL ASSETS BEFORE LEAVING THIS WORLD  <b>12</b>	SWAP TRANSPLANT HAS RECENTLY UNITED HINDU AND MUSLIM FAMILY  <b>75</b>
IMMUNOSUPRESSANTS ARE REQUIRED FOR LIFE FOR PREVENTING REJECTION OF DONATEDORGANS  <b>38</b>	DO NOT CONSUME ALCOHOL AND END UP BEING IN NEED OF LIVER TRANSPLANT  <b>20</b>	

**TABLE 3: SHOWING SAMPLE OF ONE OF THE TAMBOLA SLIPS SELECTED RANDOMLY FROM A BOX CONTAINING ALL THE NUMBERS AND CAPTIONS AS PER THE TAMBOLA BOARD.**

<p><b>7</b></p> <p><b>BRAIN                      STEM</b></p> <p><b>DEATH CANNOT BE</b></p> <p><b>DIAGNOSED              IN</b></p> <p><b>HOME</b></p>
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## **CONTENT VALIDITY**

It was given to public health and social sciences experts for content validity which included Nodal Officer National Organ Transplant Programme; my PhD guides, Public Health Specialist of the year 2013 and Director CHEB. The suggestions given were incorporated.

The nodal officer of National Organ Transplant Programme, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of India revealed about this innovative approach to health communication in Lok Sabha Television Channel one day prior to its use at Health Pavilion in IITF-2013.

## **IMPLEMENTATION PHASE**

A notice board mentioning the time of Tambola game was put up every day in the morning for active participation of the people visiting IITF-2013 and IITF-2014. The people were made to sit on chairs at the scheduled time. Tickets were distributed on first cum first serve basis. Preference was given to female members. At the stage all the 90 slips of Tambola game that were present in the container were randomly selected one after another and people were instructed to cut the number along with the caption if the random selected number was in their ticket. The content of the ticket was read, explained in an entertaining manner using Bollywood songs, inspiring public to speak on issues by creating an aura of education with entertainment. The person who would get all the 8 captions cut in his ticket first was announced the first winner of the game and was given small prizes. The game was continued picking other slips from the container and allowing people to cut the numbers in their tickets. The winners were given prizes after verifying the numbers are complete as arranged in the main Tambola board. The game was continued for one hour and a number of 10 -15 winners were given prizes by CHEB. People were then asked to ask question regarding any caption on the board which has not been understood by them. All the winners' were photographed together. The incomplete tickets were collected from the non - winners and put in a box and three lucky winners were chosen from and given prizes.

## **EVALUATION PHASE**

This health awareness programme made open some important facts about discussing organ donation with family members. People said that family does not want to discuss death. According to them, it is considered bad omen to talk about death. Some of the people especially youth found the word death annoying to family members no matter whether it is talked about in the morning ,in the evening or at night. If you discuss death in morning family suspects some mishap during the day and if you talk about death in the evening or night family feels something may happen to the individual during sleep. We need to address this issue with rigorous IEC activities concentrating on this aspect through print and electronic media.

People found it very interesting, entertaining and very informative and educative. Some people wrote nice slogans, other wrote poems while a few people expressed their own stories related to organ donation and transplantation which have become a part of Tambola 2014. They were of the opinion that time slot of one hour is too small for such an interactive session. They asked for

increasing the time to two hours. It was highly motivating to know that Health Pavilion got 2<sup>ND</sup> Prize during IITF-2013 and credit was given to this innovative approach of Health Tambola on organ donation too(8).The fruitful results during IITF-2013helped in carrying out this activity in IITF-2014 too along with National Organ and Tissue Transplant Organization (NOTTO), DGHS and MOHAN Foundation(9). The game was also used to create awareness among students in Indian Organ Donation Day at NOTTO in 2013.

This use of this Tambola was discussed in a lecture in Organ Transplant Coordinators course and the game was played with these students at Fortis Memorial Research Institute, Gurgaon in April 2015 .The prizes included toffees for the participants of the game. The participants were motivated to prepare such games for creating awareness among public.

Its use is explained to about 1500 nursing and medical students who visit CHEB from all over the country throughout the year for orientation training programmes. Everyone appreciates the innovative creation of this Health Tambola.

Recently health awareness session on organ and tissue donation through this Health Tambola was requested by Anatomy department of Lady Harding Medical College in 2015which was highly appreciated by faculty as well as the students. The prizes this time included clapping from the audience in this programme, pat at the back by senior faculty members' etc. Having mesmerizing effects on them, they invited the author for its use among students from various schools of Delhi in mass awareness programme themed "Dialogue with Organs" at Centenary Celebrations of Lady Harding Medical College. Each and every person appreciated this innovative approach to health education and invited author for similar sessions in future too.

**Conclusion:** -The "Health Tambola on Organ and Tissue Donation" an innovative way of health communication has been highly appreciated by people and professionals alike for creating awareness with entertainment. Professionals interested in creating awareness among public on various health programmes can develop such kind of games to sustain interest of the people and leave long lasting effect.

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