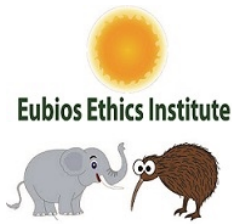


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Editorial: Gender Equality

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A world free of harmful discrimination is one which all ethical people ascribe to. There are several papers in this issue which examine problems created by imbalances in the power of male and female persons, and the stereotyping of gender roles. The ways that our expected roles have developed is complex and has emerged through the development of our societies.

In their paper *Nursing and #MeToo*, a group of nurses in Pakistan explore the issues of gender discrimination faced by male nurses as they attempt to serve their patients. In some conservative societies patients are particularly sensitive to having persons of the other gender look after them. Yet professionals are trained to work with vulnerable persons of all ages and genders.

To be a mother is one of the great human joys, responsibilities and opportunities. The research of Feby Basco Lunag explores the growing problem of teenage pregnancy in the Philippines. Interviews with mothers about their experiences should be required reading for all teenagers who are at risk of becoming pregnant. Men also need education, as do families.

The research of Naznin Pervin et al., found that infant malnutrition still exists in Bangladesh, and there are recommendations made for mothers, and the service providers so that practical improvement can be made. The results have implications for many countries, and even in rich countries those living in poverty face malnutrition.

Ketan Mor discusses the roles of Indian traditions in developing and defining what an ethical human being is. Bibek Adhikari presents results of interviews and focus group discussions among youth in Nepal regarding their experiences of being volunteers in Disaster Management. One of the programmes of Eubios Ethics Institute is Youth Looking Beyond Disaster (LBD) Training programmes, and our key partner in Nepal is Youth's UNESCO Club. The LBD program enhanced their effectiveness and more training programs should be held when the LBD program receives the necessary support.

Nursing and #MeToo

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Abstract

The year 2018 revealed a number of sexual harassment stories into public conversation as part of the #MeToo movement. The campaign has relatively spread across all professions and work industries. Today, the society is already hypersensitive towards sexual talks, and the campaigns such as #MeeToo make it even more difficult to overlook these stories; it has challenged the demarcation of important and superfluous accusations which gives rise to various ethical dilemmas. Therefore, the #MeToo movement becomes significant to evaluate both sides of a coin, and assess a situation from various ethical paradigms in order to reach an ethically acceptable solution.

Key Words: #MeeToo, Sexual molestation, Psychosis, Utilitarianism, Justice, Theory of care, Liberalism, Kantianism, Sexual harassment

Description of the Issue

The year 2018 saw many headlines reporting the distressing sexual molestations in under the tagline #MeToo. New revelations break regularly in answer to these viral posts in relatively every industry. In this #MeToo era, where everybody is hypersensitive, it has become difficult to demarcate the necessary accusations from unnecessary ones which ascend various ethical dilemmas. Enduring to the bystander effects, nursing is also facing troubles from these arising ethical allegations. This paper discusses an ethical dilemma in line with the slogan #MeToo.

A 25 year old female patient in the immediate post-extubation period complained of being sexually molested by a senior male nurse while positioning during a night shift. She was suffering from ICU psychosis, and also stated that I never wanted a male nurse. The case was investigated and no evidence was found against the nurse; yet, the nurse was terminated after a joint decision made by the departmental management, hospital ethics committee (HEC) and human resource

(HR) department. A week later, a similar incident occurred again during a night shift with consistent decision.

The scenario ascends various questions under the umbrella of ethics.

1. Should a patient be always trusted right even if he or she is in psychosis?
2. Is opposite gender care ethically justified in gender stereotyped countries?
3. Does simultaneous occurrence of two similar events suggest a system or an individual error?
4. Can justice and advance directives with regards to gender based care be justified by the scenario?

The paper aims to identify and reflect the case under multiple ethical paradigms and find ethically sound justifications for the decision.

Our Position

We believe that in the abovementioned and other similar dissensions the termination of the nurses is ethically indecorous. In any circumstance, the management has no right to punish any individual without evidences of the alleged offense.

Theory of Care versus Justice

The theory of care emphasizes to respect patients' dignity, practice benevolence and empathize with people in needs (Reddy, Meyer, Shefer & Meyiwa, 2014). The managements' decision to terminate the nurses safeguarded the dignity of the mentally undermined individuals under the umbrella of ethics of care. However, justice refers to a fair and impartial treatment of individuals, and making a decision which is unbiased and acceptable to everyone (Sheldon, 2016). The termination of the staff in justification to protect a psychotic patient's dignity obscured justice. It is because psychosis impairs reality; and patients may talk suspicious, unauthentic and vain phrases (Fusar-Poli et al., 2014). Hence, trusting to the statement of a mentally undermined person, valuing his possession and making important decisions on its basis may create questions on justice and the strength of the decision.

Consequence of our position. If the argument of justice successfully saves the case against the mentally undermined patients, it may also risk the dignity of these patients and violate the theory of care. The UN Declaration of Rights of Mentally Retarded People (1971) also claims that mentally disabled people have the right to be protected from exploitation and undignified treatment (Flynn, 2016), and it can be demonstrated by respecting their possessions and personal space (Poreddi et al., 2013).

Counter-argument for justification. It is right that mentally incapacitated people are more prone to sexual humiliations, and their expressions must be respected and heard. However, if this is right then they should be heard in all decision making processes, and their words should be legally considered capacitated every time which appears to violate the Pakistan mental health ordinance (Tareen & Tareen, 2016).

Utilitarian versus Liberalism Theory

The utilitarian theory ropes the idea of maximal good even if it disappoints some individuals (Beauchamp &

Childress, 2013). The consecutive punishment to the nurses created examples to decrease the future risks of sexual molestations among all mentally undermined patients and benefit the entire mentally incapacitated population. However, the liberal theory contradicts and combats against individual rights (Beauchamp & Childress, 2013). Every individual should get his right and the safeguard of others' rights should not compromise the individual's rights. Termination without any evidence violated the individual nurses' right to respect, justice, and work with dignity.

Consequence of our position. Saving the case on the basis of liberal arguments will further increase the future risks of these incidences among the incapacitated population, decreasing the quality of care. Moreover, devaluing patients' words will not only decrease the delivery of quality care but also dwindle the hospital's overall rapport in the healthcare market. This will further reduce the hospital admissions and shrink its business which will negatively influence the entire organisation and its workers. What use is it to prioritize a nurse which will only provide individualized satisfaction?

Counter-argument for justification. The simultaneous occurrence of two similar events does not justify the individual error, but rather can suggest institutional faults. If it was an individual error it would not have been repeated within a week, particularly after witnessing the unpleasant consequences. Or else there would have been some history of harassment or related nuisances during his career. However, there was no evidence of such history too. Also, nursing is falsely considered as a female profession, and females outnumber males. This not only makes men a vulnerable group; but it also decreases their interest in the profession persistently contributing to a statistically imbalanced male-female ratio in nursing (Holden & Littlewood, 2015). Certainly, if the institutions will still consider these incidents as individuals' mistakes, the incidences of such events will continue to rise even more, and the institutions will further lose their "men" power.

Kantianism versus Kantianism

Deontology endorses duty holding which upholds moral obligations and affirms that characteristics of actions rather the consequences make the actions morally good or bad (Beauchamp & Childress, 2013). The management gave its decision with the duty to do justice with the patients and avoid future risks of maleficence in care. However, Kant also claims that justice is a supreme and generalized ethical compulsion which should be received by every autonomous individual (Burkhardt & Nathaniel, 2013). The termination of nurses' employment without any evidence of delinquency does not weigh independently in morality which violates the individuals' negative rights i.e., to be free from others' wrong actions.

Consequence of our position. The code of medical ethics sanctions that institutions are responsible to uphold patients' right to privacy and every health care worker is obligated to respect their dignity throughout the course of treatment (Epstein, & Turner, 2015). It the nurses violated the code; but were not punished they will be more fearless to repeat the offense.

Counter-argument for justification. However, the offense was not proved. If today the nurses were punished by the management personals based on a mere allegations and without the offense being proven, tomorrow the management should expect and accept the same decision for themselves in case of the unproven liabilities of any misconduct.

Autonomy versus Paternalism

In countries with strong gender stereotyping, delivery of care by opposite gender persons is usually accompanied with ethical allegations and not preferred by patients (Holden & Littlewood, 2015). Autonomy means self-rule (Beauchamp & Childress, 2013). After being extubated, the patient also stated that she never wanted to be cared for by a male nurse. It is important to know that every individual is autonomous and this autonomy should also be respected in hospitals to deliver a culturally appropriate care. Yet, abiding to patients' assertions and substantiating the status of their needs is not possible in every case which may lead to the abuse of medical power with intent to benefit patients, such as paternalism (Cooley, 2015). Senior nurses, regardless of their gender and due to their rich experience and clinical expertise, are intentionally assigned on the sickest patients for patients' benefit (Rankin, et al., 2015). Since the patient was in her immediate post-extubation period and on risk of re-intubation, she also needed to be cared for by a senior staff. Besides, the male nurse was assigned to the female patient by the departmental management only. Therefore, the management should not have terminated him.

Consequence of our position. Gender is a traditional, cultural and religious construct which impacts the caring relation between patients and health care workers (Wilson, 2017). Pakistan, being a Muslim country, believes in *pardah* of women (Ali & Syed, 2018) which restricts women's modesty to their limited interactions with males (Walter, 2016). This is also expected to be applied whilst in hospital care which stereotypes the role of males in nursing female patients (Younas & Sundus, 2018), making both the nurse and the patient apprehensive about being accused of physical touching which can negatively affect the delivery of quality care (Whiteside & Butcher, 2015). Hence, in a society like Pakistan, patient gender preference should be valued, particularly, if it is already declared and known.

Counter-argument for justification. The patient gender preference was declared after the occurrence of the incident. No such choice was avowed earlier either by the patient or her family. Hence, the nurses should not be made guilty. Moreover, if the choice of similar gender staff to uphold patients' autonomy is claimed right then paternalistic assignment of a male senior staff on a female patient for her beneficence should not be dubious too. The nursing code of ethics also states that nurses practice clinical judgments grounded on experience, skills and knowledge and allocates care responsibility to other nurses who exhibit these requisite competencies regardless of gender or race (Winland-Brown, Lachman, & Swanson, 2015).

Recommendations

All health care providers (HCPs), particularly male colleagues, encountering such problems should step into the role of whistle blowers. Being directly involved in patients' care, all male HCPs including doctors, nurses, nurse assistants, and so on, are at risk of these unjust events.

Employees usually listen to the stories of ethical traumas and injustices and wait for some authorities to address these accounts. They themselves need to be a change agent to answer these "#MeToo" problems. Both employee and the organization expect honesty from each other. Whistle blowing also encourages staff with the right to speak up against organisations. Organizations should introduce and implement it in their policies and protocols to give it a written legal base to help employees challenge injustices and harassments. Authorities should ensure complete and thorough investigations once the event is reported, and they should also ensure that both the confronting parties should get a chance to speak in order to promote safety and prevent biases in the decision.

In addition, organizations should modify their policies according to the patients' gender preferences regardless of the advance directives because the concept of advance directives is still vague and unclear in many countries like Pakistan (Badruddin, 2016). If possible it will lessen problems if a male nurse is assigned to a male patient, and a female nurse to a female patient, irrespective of the informed gender-choice. More nurses should be hired, and departments should ensure a better balance of male and female nurse ratio per shift.

Hospitals' initial assessment forms should be modified and patient gender preference should be added to uphold patient's autonomy and maintain dignity of care. Also, patients and families, in case of unconscious patients, should be specifically asked that in case of life threatening situations can the hospital opt for an opposite gender staff to the patient or it is strictly proscribed. Nonetheless, a prior consent form must be signed by the family in case of the agreement.

Hospitals should strengthen their security and investigation systems in order to facilitate and justify the decision making process. Further, different motivational talks should be organised by the hospitals to remind nurses' and other HCPs about their oath of being loyal and sincere with their patients and profession. These reminders would motivate them to deliver care with more compassion and discourage them from misconduct.

Likewise, all HCPs should also ensure their sincerity towards the profession and honesty towards patient care. They should practice self-reflection for their doings and abstain themselves from any deleterious conduct.

Conclusion

Various ethical and legal concerns affect any conclusion while dealing with mentally undermined people. At times, society becomes over-conscious towards vulnerable groups which has increased the magnitude of the problems. Thus, it has trouble at times in making the distinction between important and frivolous allegations, resulting in several ethical dilemmas. Hence, it is important to weigh the consequences on both sides of a coin. This can be done

by looking at the picture as a whole rather just a small or incomplete part of an event. Authorities must understand the real nature of the problem to strengthen the environmental safety for both the employees and the patients and combat this trending #MeToo events in nursing.

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Ethical Analysis and the Situation of Teenage Pregnancy in Irisan Baguio City, the Philippines

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Abstract

The Philippines has a young population with an estimated median age of 22.9 years in 2010. About 19.8 million or (21% of the total population of 95.8 million Filipinos) are 15–24 years old. About 48% of these young people are adolescents aged 15–19. Studies in local settings provide varied information on the prevalence of adolescent pregnancy in the Philippines, depending on source and time of survey as well as age of respondents. The Cordillera Administrative Region has the highest teen pregnancy rate based on the 2013 Young Adult Fertility and Sexuality (YAFS) Study. In the YAFS survey, the region registered 18.4% for teen fertility, making the Cordillera top all other regions. Likewise, a dramatic increase of teenage pregnancy is also evident in Barangay Irisan, Baguio City. Barangay Irisan is the biggest and most populated barangay in Baguio City. It had a population of 28,357 as of the 2010 Census, which accounts for about seven percent of the city's total populace. The barangay is located at the northwestern tip of the city, and is primarily accessible via the Naguilian Road. It is widely known for the dumpsite in the area.

The Philippines is a signatory to numerous international agreements related to women in general, with implications for teenage pregnancy. These include the International Conference on Population and Development (ICPD) Programme of Action signed in Cairo, Egypt, in 1994; the Beijing Declaration and Platform for Action, developed during the Fourth World Conference on Women in Beijing, China, in September 1995; the Fourth World Summit on Social Development (WSSD), the World Conference on Human Rights Programme of Action; and the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW). The country is not lacking in laws nor policies and programs that could protect and empower women of all ages. Political bickering, religious interference, and the population's ambivalent attitudes toward sex and reproductive health have, however, negatively affected the effective implementation of adolescent reproductive health programs in the Philippines. Adolescents having unprotected heterosexual intercourse are at risk of both HIV infection and unwanted pregnancy.

1. Teenage Pregnancy is a Public Health Concern

Teenage pregnancy is not only a health issue but is related to development. It is deeply rooted in poverty, violence, child and forced marriage, power imbalances between adolescent girls and their male

partners, lack of education, and the failure of systems and institutions to protect their rights.¹

Cases of live births among teenage mothers in the Philippines increased by more than 60% according to the records of the National Statistics Office (NSO) between the year 2000 to 2010. With this trend, it is noted that Philippines has the third highest teenage pregnancy rate in the ASEAN region and is actually the only country in the ASEAN region where the rate is significantly increasing, as admitted by the National Youth Commission office.

Complications from pregnancy and childbirth can cause grave disabilities, and are the leading cause of death for young women.² Adolescent girls also face high levels of illness, injury and death due to unsafe abortions that are conducted because of a prohibitive policy against providing regular abortion services. Apart from the immediate physical risks, early pregnancy also jeopardizes the rights, health, education and potential of many adolescent girls, robbing them of a better future.³

Teen pregnancy also contributes to the country's high population growth rate and more young people needing more resources for health, education and food. A high rate of teen pregnancy also means a high risk for maternal deaths among our young girls. The latest data from the NSO also noted the increase in maternal deaths among female teenagers.

One of the current rising issues in the Philippine government is the debate on the Reproductive Health Bill that has been ratified in 2012. There is an emergent trend to pay paramount attention to government, communities and individuals to work together to provide the girls with age-appropriate comprehensive education on sexuality and morality to develop the knowledge and skills they need to protect their health. This is especially important for empowering young women to decide when and if they wish to become mothers.

2. Premarital Sex is a Global Issue

Premarital sex is a crucial issue that does not only affect the developing countries but in developed countries as well. There is a need to revisit the past and examine recent data to update our knowledge and improve our understanding of the marriage institution in the Philippines and of the way it is influenced by socioeconomic and ideational changes (Abalos, 2014).

Unwanted early pregnancies are likely to impact more upon females than males, causing life-long problems such as poverty, limited employment and education, and even physical or developmental problems for mother and their children. When young females give birth to children out of wedlock, they are not only more likely than older, married females to have children with health problems. They are also more likely to be unable to

¹ <http://www.unfpa.org/press/world-population-day-2013-focuses-adolescent-pregnancy>

² <http://unama.unmissions.org/world-population-day-un-chief-draws-global-attention-adolescent-pregnancy>

³ <http://beta.philstar.com/headlines/2013/07/12/964481/16-m-teens-give-birth-every-year-un>

achieve academically to the degree desirable, or to move forward in a career or work role due to family responsibilities. They are likely to be poor and to be unable to provide adequately for their children. There, early pregnancies due to premarital sexual activity are associated with multiple negative consequences for mothers and their offspring.

Teen pregnancy is an adult problem, linked to how sexuality is dealt with in our culture. We tend to think of teen pregnancy as an individual responsibility, that if teenagers would just not have sex or use birth control, then we wouldn't have teen pregnancy. This isn't enough. We need to provide a whole society of support in which young people make and are supported for making good decisions and don't get mixed messages from adults about sex (Abalos, 2014),

When young females give birth to children out of wedlock, they are not only more likely than older, married females to have children with health problems. They are also more likely to be unable to achieve academically to the degree desirable, or to move forward in a career or work role due to family responsibilities. They are likely to be poor and to be unable to provide adequately for their children. There, early pregnancies due to premarital sexual activity are associated with multiple negative consequences for mothers and their offspring.

3. Sexuality Education

In spite of interest by feminist scholars, actual discourse around sexual desire and bodily pleasure associated with female sexuality appears to be lacking for the majority of adolescent girls. In Filipino culture females are the objects of male desire, hence the focus on attractiveness. Little attention has been paid to their embodiment, the inner sense of their own sexual desire. Sexual desire has traditionally been accepted as part of male sexual development and is associated with positive sexual identity for men. Researchers stress the importance of increasing sex-positive attitudes towards female sexual desire, in order to counter much of the shame and confusion experienced by females, especially during adolescence. The double standard is still being conveyed to young women through popular culture, parents, peers, and schools.

Sex education primarily emphasizes the dangers of sex. The media stresses the importance of attractiveness and women as sex objects rather than as agents of their own sexual desires. Researchers suggest that a young woman's ability to be conscientious about and fully present in her sexual experiences is correlated with her ability to act as an agent. The ability to make responsible and self-affirming sexual decisions is a crucial act of agency. Taken together, studies suggest the need to reduce teens' exposure to sexual content on television and to explore greater use of entertainment shows to inform teens about risk. Reducing the amount of sexual talk and behavior on television, or the amount of time that adolescents are exposed to them, could appreciably delay the onset of sexual activity. At the same time, increasing the percentage of portrayals of sexual risk and safety relative to other sexual content might also inhibit early sexual activity, increase knowledge of

sexual risks and how to be safe, and stimulate dialogue with parents.

Studies report that men involved in teenage pregnancies typically have lower levels of education, have a greater age difference between themselves and the adolescent mother, have higher rates of unemployment, are more financially dependent, lower in socioeconomic status, have more behavioral problems such as smoking, drinking, and illicit drug use, have more simultaneous sexual partners and sexual transmitted infections, engage in more aggressive behavior, and adopt poorer attitudes toward their partner's pregnancy by being less involved in the postpartum care of the mother and infant (Dunkle, et al., 2006; Gavin, et al., 2002; Singh & Darroch, 1999; Wang & Chou, 2001). There is little research that has investigated whether violence perpetration by a male partner is associated with fathering an unintended pregnancy, but documented association between perpetration of violence and high risk sexual behavior suggest that an association is likely.

4. Sex as a Restricted Topic (Taboo) among Families

Sex is something that parents don't talk about in Filipino families. The lack of awareness is partly due to a reluctance to vocalize problems (Magat, 2001). Open communication with children with topics related to sex should start during the early years of a child so that when she reach adolescents, they can still openly discuss their feelings in relation to sex.

Reducing teens' exposure to portrayals of sex on television poses challenges. An alternative approach that has worked with violent content may also work with sexual content: having parents view programs with their children and discuss their own beliefs regarding the behavior depicted. Doing so can reinforce the benefits of accurate risk information and positive messages and may help to limit the negative effects of sexual portrayals that do not contain risk information.⁴

Sister Teresa Dagdag in her book entitled, *"May Nangyari Na"* reports that important individuals plays a crucial role in the lives of young girls. She shares the following: *"Wisdom guides who accompany an adolescent and help her need understand critical events in her life are her most powerful allies in decision making. These are the adolescent's parents, teachers, mentors, agency counselors, religious educators or others who offer a way for the adolescent to reflect on her options in life. They enable the female adolescent to recognize the power in herself to make life giving decisions. These wisdom figures help pave the way for her to acquire a broader and freer perspective that would help her develop a viable and sustainable value system. This value system would no longer be based on kaugalian. Instead, reflection can empower a female adolescent to recognize the value of a strong sense of taking a life direction or agency in life. The female adolescent acquires clarity and becomes a better integrated person."*

The importance of marriage as an institution both for the individual and for the society at large cannot be overemphasized. For the individual, it is an important

⁴ <https://www.slideshare.net/guestd5f3a9/se-xand-media>

event characterized by a flurry of multiple transitions—from child to adult, from mere member of a natal family to main actor in the formation of a new family (Durbrow, et al, 2001).

5. Teenage Pregnancy and HIV

Having unprotected heterosexual intercourse risk both HIV infection and unwanted pregnancy, and nearly one-third of women have a teenage pregnancy. Understanding the interface of gender inequity and violence, HIV and unplanned and unwanted adolescent pregnancies is important.

Much has been written about the adverse, short-term health outcomes of teenage pregnancy for women and their infants. Teenage mothers have been found to be at increased risk for anemia, urinary tract infection and pregnancy-induced hypertension. Infants are more likely to suffer infant and neonatal death, accidents, infections and sudden infant death syndrome

There is also a body of literature that has explored the longer term social and mental health consequences of teenage pregnancy. These consequences include depression and substance use, increased sexual risk behavior, as well as lower educational attainment and socio-economic status.

Most of this literature emanates from developed countries in North America, Europe, and Australia. Studies from South Africa have described the relationship between teen pregnancies and poorer educational outcomes.

Adolescents having unprotected heterosexual intercourse are not only at risk of unintended pregnancy but also HIV infection. Several observational studies from South Africa have reported that the incidence of HIV is higher among pregnant women than among the general population.

Few studies investigating the risk factors for teenage pregnancies differentiate between desired, unwanted and unplanned pregnancies. In the South African context, some teenage pregnancies are desired, but most are unplanned or unwanted. The adverse consequences for unwanted pregnancies tend to be more severe than those for unplanned pregnancies.

Some studies that differentiate between unplanned and unwanted pregnancies has focused on women of all age groups and not on teenage girls in particular. Differentiating between unplanned and unwanted pregnancies may allow for a more nuanced understanding of the risk factors of teenage pregnancy, and may allow for the development of more closely targeted and more effective prevention strategies.

6. Objectives and Methodology

The issue of teenage pregnancy is recently evident in Irisan Barangay. It is observed that a number of young girls aged 13 and above are becoming pregnant in the community, and this paper examines the situation. The objectives of this research were:

- 1) To describe the occurrence of teenage pregnancy in Irisan, Baguio City.
- a) To identify the social norms of the teenage mothers and their families
- b) To describe the effect of teenage pregnancy to the mother, partner/spouse, family, and society.

7. Respondents and Interviews

Using purposive sampling, the following respondents participated in this study. Ten teen age mothers aged between 13 and 20 years of age. Ten family members of teenage mothers

The study was approved by the AUSN Institutional Review Board. Verbal informed consent was granted by the respondents, who employed a case-study method by utilizing interviews, focus group meetings and observations to explore the issues raised in the literature review.

Guide questions were used in the interview so as not to limit the data flow and process itself; follow-up questions were given by the researcher and with consideration for additional inputs of the respondents.

Observations included non-verbal communication during the interview such as body and facial expressions and projective sentences and statements. It also included social and environmental environments. A focus group discussion was held with twelve women and some infants present, to further explore the issues.

The interviews were transcribed. From the data gathered from the interviews, we used key word analysis, and formed clusters or types to give classification of the different cases.

This study is limited to a small number of respondents of teen age mothers from Purok 14 B, Irisan, Baguio City, in order to help design a more comprehensive research method and interview instruments for further research (See Table).

Name (Not real)	Age /Age at the time of giving birth	Number of Children	Age of Child	Status
Karen	17/16	1	1 year	Single Mother
Roselle	25/16	2	4 and 2	Married
Grace	17/13	1	5	Single Mother
Fiona	18/16	2	1 year old and 1 month old	Live-in
Jenny	17/16	1	1 year old	Single mother
Nalyn	19/15	1	5	Single mother
Maria	15/13	1	2	Live-in
Britanny	18/16	1	2	Live-in
Amy	18/17	1	1	Single mother
Dina	24/16	1	8	Single mother

8. Results

The stories of the 10 young mothers and their families discussed in this research is a common scenario in many villages and rural communities in the Philippines. Several factors have led to teenage

pregnancies, such as poverty and lack of awareness on the impact of early marriage.

The recent Young Adult Fertility and Sexuality Study (YAFS) reports that in the Philippines, the number of teenage girls who have become pregnant across the nation has more than doubled in ten years. Around 14% of girls aged 15 to 19 are either pregnant for the first time or are already mothers. That is up from about 6% recorded by an earlier YAFS study in 2002. Furthermore, the study revealed that one in three young teenagers between the ages of 15 and 24 are sexually active.

The YAFS study coordinator and director of the University of the Philippines Population Institute, Josefina Natividad says that a lack of awareness of the consequences of risky sexual behavior is contributing to the rising rates of teenage pregnancies.⁵ The study titled, "*Predictions and Timing of Early Childbearing in the Cordillera*", reveals that the Cordillera Administrative Region in the Philippines has the highest proportion of young women aged 15-19 who had begun child bearing at 18.4%, higher than the national rate of 13.6%. Child bearing is defined as having given birth before reaching the age of 20. Results of the study indicate that the proportion that had a birth before the age of 24 years is higher among non-Cordillerans, rural residents and young women who were not raised by both parents compared with their respective counterparts.⁶

Furthermore, the National Economic and Development Authority-Cordillera Administrative Region elaborates in their article entitled, "*Clear Set Standards at Home Reduces Early Teenage Pregnancy Risks*" that in terms of exposure to the risk associated with early childbearing before 20 is higher among non-Cordillerans with a sudden increase at age 19 and it is mostly accounted for by births at ages 18 and 19. However, in terms of exposure to the risk associated with early childbearing, the Cordillera women may be more at risk because they started childbearing earlier having recorded the youngest to be 13 years old. The study summarized that among 20-24 year old women in Cordillera Administrative Region, 25% or one in four had a birth before the age 20 or were teenage mothers. The risk of early childbearing is not affected by urban-rural residence, poverty status, ethnicity or being raised by both parents. All are equally at risk. Having a college education significantly decreases the risk of early childbearing. The timing of early childbearing shows that most teenage births happen in the late teen years at ages of 17, 18 and 19. The research also recommended that interventions should be age and gender specific noting that the reaction of a 13 years old varies from the reaction of a 19 years old.

There are significant circumstances that affect young women's decision to engage to teenage sex. How they respond to various issues in their lives are usually based on their acquired and learned behaviors from their parents, and the community where they are raised. With the alarming increase of young women becoming mothers at an early age, it is crucial to discuss factors and influences for premarital/teen age sex as these may

lead us to answers on the increasing rate of teen age motherhood.

9. Relationship of Parents with Adolescent Children

The way that parents relate or connect to their daughters plays a huge role to young girls. It is evident in this research that there is lack of parental openness to topics related to sex.

It is observed among Cordilleran parents that they are not comfortable in discussing about sexual intercourse, masturbation, STD, pubic hair, and so on. For example, when a child asks his/her parents about sexual intercourse, the common response among parents is to tell the child that she/he will understand it when she comes to that age. For some parents, they scold their children for asking a question which they believe is promiscuous. Sol Gordon discussed in his book titled, "*Raising a Child Responsible in a Sexually Permissive World*" says that parents need to provide moral guidelines. Given the fact that many adolescents engage in sex without their parents' consent, adults can try to ensure that these encounters are not disastrous. Standards of behavior are good for adolescents, as well as for adults. Adolescents want and need sensible guidelines from their parents. Hence, it is important for parents to learn to develop healthy attitudes about sex. Well informed and confident parents who openly discuss this topic to their children, may lead to sexually healthy lives of their daughters and may even help in preventing teenage sex.

The values, ethics and principles of a child are developed in the family. Parental connectivity is important because the parents are the main actors in every family, the guardian and enforcers of family values. The parent's role in guiding and advising female adolescents in making important decisions may be a strong influence for either teenage marriage or another alternative. The adolescent also needs to anchor her life on her family, particularly her parents (Sr. Teresa Dagdag, 2012).

The mother-daughter relationship in the family plays a key role for the daughter in making crucial decisions in her sexual life. It is therefore important for mothers to communicate significant feelings and thoughts about teenage sex.

Karen shares that her father is a small scale miner who is frequently away from home. When she introduced her boyfriend to her family, her father invited her boyfriend to drink. Jean claims she never knew what they talked about until today.

Maria, on the other hand describes her dad as irresponsible and a womanizer. While her mother is working in Singapore as a domestic helper, her father is also busy having an affair with another woman. This had pushed Maria to run away from home and stay with her friends instead. Maria's mother decided to take them out from their family home and let her live with her aunt and grandmother when her father brought home his mistress.

Parents have different ways of bringing up children. Too little discipline is not desirable, and neither is too much. Karen describes her parents as supportive, *hindi namamalo* (they never hit), *hindi naninigaw* (they don't shout) and they did their best to give her everything she wanted in spite of not having enough money. Her mother

⁵ abc.net.au

⁶ <http://car.neda.gov.ph/clear-set-standards-home-reduces-early-teenage-pregnancy-risks-study/>

is a Barangay Health Volunteer while her dad is a small scale miner.

Fiona also describes her mother as super strict while her dad as *walang paki-alam* (he doesn't care at all).

Grace, being the second child from among 8 children says that her parents are very loving and caring. They never failed to give her advice and they pushed her to go to school. However, Grace admits that she is really hard headed. She just followed her own desires. Poverty is also one of the main reasons why Grace was not serious on her schooling as she claims she goes to school without pocket money and cannot submit school projects due to lack of money.

10. Sexuality as Taboo among Cordilleran Families

Parent-adolescent sharing about sexual matters remains a taboo for most and to talk about it is an exception at best. Adolescents tend to feel more comfortable about sharing their sexual relationships with their peer group and close friends rather than with their parents. While a good number of mothers are able to listen to the young female adolescents, most of the young women do not even attempt to share intimate concerns about woman-man relationships with their parents (Dagdag, 2012). In the Cordillera Culture, there is an awkwardness in revealing and discussing sexuality with parents.

Karen reveals that she has a close relationship with her mother while Fiona describes her mother as strict and someone who would hit you instantly for your small mistakes. Fiona shares that she did not really have a close relationship with either her mother or father. Furthermore, Karen claims that her mother is loving, supportive and lenient. Although she gives advice regularly when it comes to education, they never really discussed about premarital sex or sexual relationships. When she introduced her boyfriend to her parents, Karen was given abundant advice about the consequences of marrying early but they did not discuss anything about sex.

When Karen got pregnant, she did not have the courage to tell her parents. She hid the pregnancy for three months. However, since she was graduating from high school already, she decided to disclose the pregnancy at her high school graduation. Karen claims that at least she could compensate the shock of pregnancy with her high school diploma. When her mother learned about the pregnancy, she just cried and committed to support her all the way. Her mother even told her that she would adopt her baby like her own child so that Karen could still live a normal life.

It is evident from the stories of the young mothers that some of them may have close relationship with their mothers however the issue on sexuality remains a taboo. The parents appears to be embarrassed in discussing sexual life of their teenage daughters.

While examining the profile of the respondents, there are also home situations that affects the mother-daughter relationship. For example, Maria's mother is working abroad and it is her aunt who served as her guardian. Grace on the other hand shares that her mother is preoccupied with her work and in taking good care of her other seven younger siblings.

The lack of quality time or complete absence of mothers while they are growing up has a negative effect as children needs guidance and monitoring.

11. Sexual Culture

Today's television portrays heavy doses of sexual content, ranging from touching, kissing, and conversations about sexual activity to portrayals of sexual intercourse. Sex is often presented as a casual activity without risk or consequences. Conventional wisdom holds that the messages young viewers absorb from television promote sexual activity in this group. Yet, despite the prevalence of this view, there has been little empirical study to date of how watching sex on television influences teenagers' sexual behavior (Collins, et al 2004).

"No influence in your teenager's life is as powerful as peer pressure" says Neil Bernstein in his article entitled Sex and Peer Pressure. Truly, peers can mobilize a teenager's energy, motivate him or her to strive for success, and encourage him or her to conform to a healthy group norm. For young people, having peers helps in founding their identity. However, peer pressure can impair good judgment and fuel risk-taking behavior, drawing a child away from the family and positive influences and luring them into dangerous activities such as premarital sex.

Karen shares that when she entered into premarital sex for the first time, her friends congratulated her for the new milestone. Losing one's virginity is a well celebrated event among her peers. However this was not mentioned by other persons.

Likewise, Mina was highly advised by her single mother about the difficulties of being a single mother. She experienced the difficulties of teenage marriage herself as she is an illegitimate child raised by a single mom. However, because of peers she still got pregnant and repeated the past mistake of her mother.

Young people are likely to have unprotected sex when drunk. Karen shares that she was drunk during her first sexual intercourse. Alcohol is associated with having sex at a young age, having unplanned sex and having unprotected sex. Certainly, when drinking gets out of hand, inhibitions are lowered and anything can happen--and that includes an unplanned sex and unwanted pregnancy.

The birth of social media has also opened doors to limitless access to sex culture. Music videos, movies, reality shows, beer ads, and online pornography. Sex is everywhere. The more sexual content kids watch and listen to, the earlier they're likely to have sex themselves. Certainly, it is alarming that social media has a free source of information about sex, dating and sexual health.

12. Young Women's Reproductive Health as a Development Issue

Women's reproductive choices include the number of children they want, and when they want them. It is not only a women's right but is also empowering, helping women out of the cycle of poverty and hunger. Having fewer children (or smaller families) has many benefits. It makes it easier for women to participate in economic and political work. Life can become less of a struggle amid the soaring prices of food, high costs of social

services and continued erosion in the real value of money. The inability to make these critical life choices is a major obstacle for poverty reduction, food security and wellbeing for all, and especially for women.

Nevertheless, it is critical to see that women's reproductive choices are not happening in isolation. Discriminatory laws continue to limit women's rights to land and other productive resources; they suffer higher unemployment than men and are relegated to jobs that are lowly paid, exploitative and leave them vulnerable to various forms of sexual violence; and they continue to be eased out of participation in public and political life.

Neoliberal reforms, such as the removal of price controls and subsidies on food and basic commodities, and the withdrawal of public spending on healthcare (including reproductive healthcare services), child care and education, have increased the burden on poor women to put food on the table and take care of their children.

The importance of a study of adolescent sexuality is seen in light of the youth bulge that we experience in the Philippines today. We are in the midst of a youth bulge wherein the youth population ages 15-24 years old reached 15.1 million in 2000 and is projected to be 30 million in 2030. According to Corazon Raymundo, the figures for prevalence of premarital sex, being 1 out of 5, having had sexual intercourse before marriage is high by comparison with other Asian Countries (YAFS 3:93). This study also responds to the recommendation of the Economic and Social Commission for Asia and the Pacific (ESCAP) on the need to examine the socio-cultural context (including social structure, behavior, and gender) to develop active advocacy programs with a view to promoting positive societal attitudes towards adolescent issues (ESCAP, 1997:4).

Furthermore, in the interests of national economic development, Gilda Salvacion Diaz highlights the implications of high adolescent fertility for national economy, "*The consequence of high adolescent fertility not only threatens the health of young girls but also the country and its economy as well.*" (Diaz, 1999:1).

Given the importance of the study on adolescent sexuality for our nation, there is a need for new understandings of sexuality by our youth today so that they are not drawn helplessly into situations for which they are not unprepared. Reexamining values such as social acceptance, *hiya* "shame", *pakikisama* (getting along) as well as learning perspectives on other values named by Filipino psychologist Virgilio Enriquez based on the Philippine Context are helpful in understanding the decisions for present day teenage marriages. Furthermore, developing a keen sense of agency in the adolescent would be a significant contribution towards deepening awareness of what strengthening their active participation in these decisions would mean in terms of their future roles as parents guiding their own adolescent children.

13. Discussion

There are several research findings on adolescent sexuality based on the stories gathered in the research (See also respondents' comments in the Appendix). These findings suggest the influences that drives women

to teen age sex and the impact of teenage motherhood and teenage marriage.

Poverty is a reality in the lives of the young women respondents in the study. Baguio City is a highly urbanized community that makes them more vulnerable to community pressure. One of the respondents said that she was discouraged to go to school due to lack of daily pocket money and failure to submit projects in school due to lack of enough resources to sustain her education. The respondents are lured into the idea that marriage is the answer to escape poverty at home, however, the situation led them more into the vicious cycle of poverty. Two of the respondents are on their own building their own family and rearing their children without support from their parents.

To save the young woman's honor, marriage offers a way out of the "kahihiyang" (embarrassment) of being a non-wed pregnant young woman. Two of the respondents were married by their parents following a traditional practice although they were not of their legal age yet. Marriage law in the Philippines is governed by Executive Order 209, The Family Code of the Philippines. Legal capacity of the contracting parties who must be a male and a female, aged 18 years or above. However, the traditional practice which was agreed by both families of the young couple has become their permit to live together as husband and wife. Culture prescribes the practice when certain values become so deeply entrenched becoming the basis for a community response. The community pressure to act in a certain way may be expressed as an approval or censure of teenage and pregnancy.

Today's modern age has opened limitless access to sex culture. Everyone (young and old) has access to the internet which provide a rich source of information. Music videos, movies, reality shows, beer ads, and online pornography. Sex is everywhere. The more sexual content kids watch and listen to, the earlier they're likely to have sex themselves.

Young people are likely to have unprotected sex when drunk. Alcohol is associated with having sex at a young age, having unplanned sex and having unprotected sex. Certainly, when drinking gets out of hand, inhibitions are lowered and anything can happen--and that includes an unplanned sex and unwanted pregnancy.

14. Recommendations

With the surging hormones and emotional changes that frame adolescence can feel like a roller coaster ride. There should be an improvement on sexuality education for young people and providing them with the services that they need in order to protect themselves from unwanted consequences of sexual behavior

From the results gathered from this study, the following are the recommendations:

1) *Strengthening their morality/Spiritual Upliftment*

This concern is both appropriate to the single members and the teen mothers. Since the singles are also vulnerable to bad influences or temptation, and the teen mothers for further pregnancy, they need to be reminded of making moral decisions, self-restraint, self-preservation and other good manners and conduct.

2) Teenage Motherhood

Young as they are, the teen mothers are not yet fully capable of mothering a child. They have concerns on how they should take care of, and rear their children. Of course, they get help from their mothers, but eventually, they need to stand on their own.

3) Acceptance of their fate and ability to move on

Some are still bitter and low-spirited about their fate and failed to move on. Some had stopped dreaming of going back to school. Some are regretful of the decisions they made. With these, they need a "little push/boosting" to accept whatever situation they are in and lead life as normal as possible.

4) Family planning

Since some of the teen mothers are already cohabiting with their boyfriends, most likely they will get pregnant again. Thus, they need to listen to lectures on family planning to space out their pregnancy for their welfare.

5) Research on men and boys

Most studies of unintended pregnancy have focused on women rather than men. Given gender roles and norms, especially around sexual decision-making, where men may have more power and control over initiating sexual encounters, it makes sense that men should also be a focus of research and potential intervention.

6) Instill a strong sense of self.

Talk about activities your children can do that don't involve alcohol. Engage them in sports, volunteer activities, etc., and talk about the inevitable peer pressures that will crop up in the teen years and how to handle them, say no, and still feel self-confident.

7) Sex education should start at home.

Parents should not depend on school health programs to do all the educating. True, they offer sex education classes, but it's ultimately up to you to give your teen the education he or she deserves. And the one you want them to have.

8) Discuss alcohol use and abuse.

Talk about the effects alcohol has on the body and the mind, both long-term and short-term.

9) Talk openly about sex.

Let your teen know that no topic they want to bring to the table with you is too embarrassing or off-limits. The only way to know what they're thinking is to talk to them.

10) Get stats

Numbers are scary. The number of teen pregnancies alone is scary. You may also offer the statistics listed above regarding pregnancies that occur while drinking. Here is a good breakdown of the cost of having a child. The cost alone of raising a child is, in some cases, enough to deter a teen from having unprotected sex or from putting themselves in a situation where their inhibitions may be lowered.

No single or simple approach has successfully reduced the teen pregnancy rate sufficiently; much more study and efforts are required. Other industrialized countries have much lower teen pregnancy and abortion rates than some other

countries such as the USA. This social problem has a great impact on us. It will take the involvement and efforts on the part of families, society and government to negotiate a change in the right direction.

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16. Appendix

a) Structured Interview Guide

1. How old are you?
2. When did you give birth to your first child?
3. Do you have more children?
4. Who do you live with?
5. How are you coping?
6. Who is supporting you financially?
7. How much emotion, moral and other support did your mother and father give you?
8. What happened with your school, and schooling?
9. Do other family members or friends support you?
10. What is the relationship with the father of your child?
11. What plans do you have for the future?
12. What advice can you give to other young girls?
13. When you look back would you have done anything different?
14. What is your ethnic background?

b) Interview Results: Grace 17/13

1. How old are you? 17
2. Age of your partner 27
2. When did you give birth to your first child? 13

3. Do you have more children? none

4. Who do you live with? parents

5. How are you coping? Okay lang

6. Who is supporting you financially?

Parents, siblings, in-laws

7. How much emotion, moral and other support did your mother and father give you?

Full support

8. What happened with your school, and schooling?

I got pregnant when I was in Second year high school (Grade 8). After giving birth, I continued my studies through the Alternative Learning System. I had graduated high school through this program.

9. Do other family members or friends support you?

Yes, the sister of the father of my child.

10. What is the relationship with the father of your child?

Separated. When I got pregnant, our parents decided to get us married following our ethic tradition. "Namanhikan" ung boyfriend ko. Our parents decided our wedding day. We had a simple celebration at home, after that I went to my boyfriend's home where we lived as husband and wife for two years. Living with him was difficult. He would come home drunk and hit me. He would slap me and accuse me of having an affair. If I talk to any man, he would hit me because he was jealous.

I sacrificed for two years and had faith that someday he would change. However, he continued to verbally and physically abuse me.

I was 15 when I decided to go back home and live with my parents again.

Because we were culturally married, my parents and his parents talked again to discuss our separation. They had asked for my decision but I was already firm to that I would break up with the father of my daughter.

Our parents respected my decision and agreed that we separate. With regards to my daughter, we have agreed that we would take turns in taking good care of her. There are times that my daughter lives with her father in a week, and then, I take her for a week. We take turns.

To date, we have been separated for five years already. I heard he is dating somebody else. We are civil to each other for the sake of our daughter.

I don't have any plans to enter into another relationship now. My priority is my daughter and I want to give her the best.

I work as a "kasambay" and I earn five thousand monthly. It is difficult but I have to do it.

11. What plans do you have for the future?

I still look forward to going back to school.

12. What advice can you give to other young girls?

Listen to your parents.

13. When you look back would you have done anything different?

Yes but I don't regret anything about my daughter. I regret that I did not listen to my parents.

14. What is your ethnic background?

Ifugao

15. What is the ethnic background of the father of your child?

Mountain Province

b) Interview Results: Fiona 18/16

1. How old are you? 18

2. Age of your partner 18

3. When did you give birth to your first child? 16

4. Do you have more children? Yes, 1 month old

5. How are you coping? Narigat

6. Who is supporting you financially?

Parents, in-laws

7. How much emotion, moral and other support did your mother and father give you?

I am on my own

8. What happened with your school, and schooling?

I got pregnant when I was in Third year high school (Grade 9). After giving birth, I continued my studies through the Alternative Learning System. I had graduated high school through this program.

9. Do other family members or friends support you?

Friends who are young mothers like myself

10. What is the relationship with the father of your child?

Cohabiting (Live-in)

Our parents agreed that we live together as husband and wife although we cannot get out marriage license yet because we are both 16 years old at the time I got pregnant.

My husband's family provided us with a separate room so we can start on our own. My husband works on various jobs such as construction work and other odd jobs. For me I just stay at home and take good care of our children.

11. What plans do you have for the future?

I want to continue my college education.

12. What advice can you give to other young girls?

Young girls should take as a mirror. They should look at our situation. They don't need to experience that we experience now. Their only job now is to study hard, hence they should really work hard on it.

13. When you look back would you have done anything different?

I should have studied very hard.

14. What is your ethnic background?

Mountain Province

15. What is the ethnic background of the father of your child?

Kalinga Province

b) Interview Results: Karen 16/15

1. How old are you? 18

2. Age of your partner 18

3. When did you give birth to your first child? 16

4. Do you have more children? Yes, 1 month old

5. How are you coping? Narigat

6. Who is supporting you financially?

Parents, in-laws

7. How much emotion, moral and other support did your mother and father give you?

I am on my own

8. What happened with your school, and schooling?

I got pregnant when I was in Third year high school (Grade 9). After giving birth, I continued my studies through the Alternative Learning System. I had graduated high school through this program.

9. Do other family members or friends support you?

Friends who are young mothers like myself

10. What is the relationship with the father of your child?

Cohabiting (Live-in)

Our parents agreed that we live together as husband and wife although we cannot get out marriage license yet because we are both 16 years old at the time I got pregnant.

My husband's family provided us with a separate room so we can start on our own. My husband works on various jobs such as construction work and other odd jobs. For me I just stay at home and take good care of our children.

11. What plans do you have for the future?

I want to continue my college education.

12. What advice can you give to other young girls?

Young girls should take as a mirror. They should look at our situation. They don't need to experience that we experience now. Their only job now is to study hard, hence they should really work hard on it.

13. When you look back would you have done anything different?

I should have studied very hard.

14. What is your ethnic background?

Mountain Province

15. What is the ethnic background of the father of your child?

Kalinga Province

b) Interview Results: Maria 15/13

1. How old are you? 15

2. Age of your partner/father of your child 15

2. When did you give birth to your first child? 13

3. Do you have more children? none

4. Who do you live with? Parents of my live-in partner

5. How are you coping? Difficult

6. Who is supporting you financially?

Parents

7. How much emotion, moral and other support did your mother and father give you?

little

8. What happened with your school, and schooling?

9. Do other family members or friends support you?

Grandmother and aunt

10. What is the relationship with the father of your child?

good

11. What plans do you have for the future?

I want to continue my high school through Alternative Learning System.

12. What advice can you give to other young girls?

Do not do what we did.

13. When you look back would you have done anything different?

I should have taken my broken family as a challenge to make my life better.

14. What is your ethnic background?

Mountain Province

15. What is the ethnic background of the father of your child?

Kalinga Pangasinan

Ancient Indian Gurukul System: Developing an Ethical Human Being

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What is Indigenous Knowledge?

As Harvard University defined traditional knowledge (TK) is generally understood to encompass four types of creative works: verbal expressions (stories, epics, legends, folk tales, poetry, riddles, etc.), musical expressions (folk songs and instrumental music), expressions by action (dances, plays, ceremonies, rituals and other performances) and tangible expressions that must be fixed on a permanent material (drawings, designs, paintings (including body-paintings), carvings, sculptures, pottery, mosaics, jewellery, basket work, textiles, carpets, costumes, musical instruments, and so on. Creative works are integral to the cultural and social identities of indigenous and local communities. They embody knowledge and skills, and they transmit core values and beliefs.

The Oxford Dictionary defines Indigenous Knowledge (IK) by describing its most usual traditional characteristics, such as experiential knowledge of living on a particular land or the holistic nature of much indigenous knowledge, such that dividing science, religion, and the arts into separate areas. But when we

understand IK in an Indian context then first we have to understand, "What is Knowledge?" Knowledge is not just knowing something. It is beyond knowing, namely it is from knowing to understanding. The distance which we travel from knowing to understanding is called Indigenous Knowledge. IK is devoid of anything which is inversely proportional to sustainable development. Knowledge in the current scenario may be such which can damage the current sustainable goals as direct example is global warming. But when we speak of IK we believe in a cosmic balance in every perspective.

Indigenous knowledge with respect to India in particular

The main purpose of education is to achieve three things and those are Knowledge, Skills and Behaviour. All three are interrelated and helping each other to achieve an ideal Human being which is devoted to the society. Humans should have sensitivity to three things – first, his emotion should be wide. He should have availability to express himself freely through his senses. Second is respect for his hard work. From growing the crops in cultivation and finally consuming it as a food. We must have respect for it. The last one is Collectivism. All our activities should have participation of people. Our works is for the community. In India there is little place for individuality in one's life. Every country has one Destiny, one message and one mission. Education should makes clear all these things in country's population and especially youth and children. Education system should teach them to work under the principle of धर्म (Duty), अर्थ (Money), काम (Pleasure), मोक्ष (emancipation) – these are four pillar of Indian indigenous knowledge. Arth and Kaam should be according to Dharma for finally achieving the Moksh. Our system should teach these values to our children and youth. Moksh in a spiritual sense may seem to be a concept out of order of day to day routine but when that blissfulness and that feeling of satisfaction is observed in every sphere of life it becomes the solace to oneself, and resultantly to the people around you at large. Anything that is earned from rightful means necessarily will go into rightful deeds and shall benefit the society at large and not only to an individual aspiration.

To understand an Indian perspective of knowledge what is required is understanding the word "DHARMA", which has no real English equivalent. The understanding is required since in every aspect of human life and not only humans, every aspect of life which has an element of nature in it, India believes in an aspect of Dharma working.

The root of the word *dharma* is "dhri", which means "to support, hold, or bear". Like Dharma of Fire is to ignite and when it is moved in the right direction it may propel a rocket and advance a human from the earth to the moon and when it acts against the Dharma it may act as a nuclear bomb explosion resulting in mass deaths. So anything which is to support, hold or bear and is for upliftment of a person or nature is Dharma.

One of our great leaders, Shri Golvarkar said about Dharma in day to day life. He explained Dharma as without the interference of external punishment system, controlling the selfishness, lighting of moral ethical

values among us, and accepting the diversity in nature including the way of living. Dharma is above god. Even gods are regulated by it. So this is above religion, and above all guiding principle of once life. The Hindu way of life is not just to see black or white - it looks between the large grey area of both. We have accepted everything as true. We say a person always moves from minimum truth to maximum truth.

While the root of indigenous knowledge was to liberate a soul for the larger interest of society and mother earth the present education system is making people dependent on state. People ask the government for jobs. The present system makes people surrender in front of you. You can rule for centuries. An example is the world recession in 2008, but India remains generally safe due to its non-dependence on government and because of its personal saving values. Thus our knowledge system is eternal in nature.

The main idea behind life is that a person comes and goes from this world with an empty hand, but still in the present time people are fighting for land, property, money and so on. But India's knowledge system taught us to sacrifice material things for the community. Who will sacrifice more contrary to the present day world where everybody is fighting for their own share? Nobody wishes to give up their share for larger goods. We are told stories of our leader's sacrifices from childhood. That is why, Ambani a big industrialist is not an inspiration for us but Swami Vivekananda, Netaji Subhash Chandra Bose, Veer Savarkar, Sardar Patel, and at the present time our Hon'ble Prime Minister is a hero for us because they have made sacrifices in their life for the welfare of communities.

The present education system is creating an illusion in front of our Indigenous knowledge system. The system is trying to change the very basic definition of enjoyment, affecting the types of sacrifices which people had been told they should make in the indigenous knowledge system. This very illusion forces our families to focus more on individual goods rather than the extended family and society at large. If they succeed in making this illusion then we will laugh at those who will talk about duties, responsibilities, love and emotion. Their soul will be dead and thus will always remain subordinate to their boss.

Differences between the Present system and Our Indigenous System

The present system looks at the world as a market. Philosophies like Globalization, Liberalization and Privatization have led to the destruction of our families. Individuals are separated from the Family. Everything is a market and people became commodities for the markets. The meaning of "development" and ways for prosperity are totally different for them. They want to sell more TVs and build more houses, for example. But our indigenous knowledge never taught this.

We believe in the principle of Vashudev Kutumbkam thereby the world is our family. We used to live together, eat together, watch TV together, and sleep together in that same house. No matter how big your family is, you will find community more important than individuals even in today's life. The present system changed the very definition of rich and poor, development and growth.

Present definitions are entirely contrary to our indigenous knowledge systems (IKS). One who spends more, or lives a luxury life is not a rich person according to our IKS. We are taught to live with bare minimum needs. Mahatma Gandhi had lived his life with minimum needs. He is the great example before us. Gandhi said we are stewards of nature or managers of this wealth.

Every knowledge system has its own roots and sources from where it derives its force. Indian Indigenous knowledge systems find its roots from below systems. Therefore, there are many aspect of India's Indigenous Knowledge system such as

- A) Vedas, Purana and Upanishad Texts, Other Reference books such as Ramayama, Mahabharat, Bhagavat Gita etc. These all are reservoirs of our Knowledge system.
- B) Ancient Gurukul System for Education and Learning
- C) System for Democracy and Governance - Famous Book by Chanakya: Arthashastra.
- D) System for Nature and Health- Yoga is accepted worldwide in International Yoga Day on 21st June. From basic moves to attaining spirituality, Yoga has different forms. Maharishi Patanjali greatest promoter of Yoga in this world.
- E) System for Medicine- Ayurveda, is accepted by many as an alternative for Western Medicine. Sushruta is known as Father of Surgery in our Vedas.
- F) Vedic Mathematics and Sanskrit is scientific knowledge for the world. Aryabhata, Indian founded Zero on this earth. Bhaskarachaarya was a profound leader of Vedic Mathematics.

But I will focus only on the Ancient Indian Gurukul system.

Ancient Gurukul System

I am the product of the current education system. I think that the current system is entirely contrary to 'Indianness' and we need to develop a system anchored in the ancient philosophical and culture traditions of our country. This system is the Gurukul Education system and this system worked for centuries in India and still hasn't lost its value.

Human life in ancient India was scientifically divided into four Ashrams. The very first ashram has a life span up to the age of 25 years, and is known as **ब्रह्मचर्य आश्रम**, a period of learning, acquiring knowledge and skills in varied fields developing moral and ethical values related to not only one's personal development but also with concern for the development of all humans. In addition they had respect for nature and lived in harmony with all creations of God. The emphasis was not on the individual but developing the individual as per once capabilities for the benefit of whole society.

The other ashrams were the **ग्रहस्त आश्रम**, up to the age of 50 years where one would perform duties towards the family and society followed by **वानप्रस्थ आश्रम**, up to the age of 75 years where one prepares to withdraw from the worldly life and ultimately the **सन्यास आश्रम**, up to the age of 100 years where one aims for attaining spirituality and serving the people.

For developing a holistic human being the process started with Gurukul meaning a teacher and his family. Gurukul itself means a home of a teacher who is called

गुरु (Guru). The word *guru* is made of Gu and Ru. Gu means metal of darkness and Ru means light. That means a teacher who helps you or brings you out from darkness to light. The teacher's relationship with people was that to be of a family rather than the commercialized education which we enter today where education is treated as a commodity for sale.

The Guru was one who had mastered different forms of knowledge, skill and ethical values. The students came from all classes of life, i.e., from the royal children and children of common persons. All were termed as शिष्या (disciples). Generally the Gurukul was established outside the urban centres away from a life of luxury. Both the guru and shishya led a life of atonement in spite of their different social and economic categories in order to understand and grasp the harassed reality and mysteries of life which they were trained to master. Take for example, social relationships which master the shishyas for their relationships, duties, obligations and responsibility to their parents, brothers and sisters, relatives, neighbours and so on. Thus, this individual was trained from the childhood that he is for the society as a whole and that is why concepts like पितृ धर्म (duty of father), पत्नी धर्म (duty of wife), पुत्र धर्म (duty of child), राज धर्म (duty of king), were developed and preached defining individual rule in terms of social position, and responsibility which the individual holds towards other. Thus if the individual shishya was learning weaponry and art of war, he was not only supposed to master those skills but also to understand the ethical aspects linked to that. For example, there will be no war after sunset, unarmed persons will not be attacked, one should fight for right, and hence learnt what is described as Dharma Udhya (धर्म युद्ध). The art of governance was learnt through concept of Raj Dharma, which determined not only the duty of king but also the morality related to the position like being just to all, and working for the welfare of citizen.

Shishyas are taught about nature, for example, what is the minimum uses of resources for the life. We are trustees or managers of this mother earth. We should leave this earth in a better form to our new generation than the one we were born into. Shishya are taught to worship nature. They were asked not to cut those plants which are essential for the existence of both humans and animals. The same things were taught about animals. As a cow is treated as a mother in our country. Not only plants but even rivers are treated as a mother in India. That's why for us Ganga is not just a river, it's a mother. We worship rivers. And with these values we try to respect and conserve nature.

Many times people argue from the West, that Indians worship everything. They laugh at us. But now they are realising the hard effects on nature due to exploitation. Due to global warming our glaciers are melting. Now some people have woken up, and try to teach us the philosophy to conserve nature. For them, we just want to say that this country has conserved nature for centuries and still we do. We don't need lectures from the so-called "developed" nations who are responsible for more than 80% of the carbon emissions in the name of development. We have formed the International Solar

Alliance and acted together with the Paris Climate Change Agreement

More than 80 countries are geographically surrounded purely or half of are in immediate danger due to rising sea level. At that moment we need to act as a team, as a family work for the betterment of this world. This earth is not the property of any one person or country but we all equal trustees and managers of this beautiful creation of god. वसुधैव कुटुम्बकम् all the world is a family and when we look at this broad perspective, our children and youth start respecting it.

Today we talk of bioethics. These are the values which a child gets from his home. If we have to teach our children and youth about ethics and values, then in some sense it is a failure of our education system. Gurukul teachings from beginning to end is taught over Dharma that you can even call ethics. From discipline, to going out in search of food, even the children of royal family go out to search and gather food. From doing war to governance to business they are taught ethical values and their activity is valued on the scale of what we called Dharma or ethics.

Also there is a system of punishment. If someone violated it at an earlier time there is no such system called Police. But persons have the fear of punishment. For example if I put water to तुलसी Ocimum sanctum plant in night. Nobody will punish me for doing that but I will never do it because there is a stick of Dharma which constantly checks my action. As scientifically we know we should not pour water at night as it is harmful for some plants. Looking at the level of ethics this society has in their life style can be disturbing. That why we say India has shown the way to the world with itself living that life.

This present system led us to such conditions where we have taught our generation about these ethical values because the Western system left no stone unturned to debunk ancient system as orthodox and even the Karl Marx called the Indian society as stagnant, oppressive and one who worshipped donkey and cow (Marx, 1853). For almost last three centuries, the world has faced colonialism, imperialism, industrial revolution, IT revolution and today we stand in a knowledge society. Two things are particularly important here, one is that IT is a tool, is information, is data but not Knowledge. Secondly, why have ancient Indian practices, be it Yoga, Ayurvedas or even Sanskrit. the mother of languages, are been looked upon by the whole world not only for knowledge but also for the wellbeing and continuity of human values. One should remember here that the concept of वसुधैव कुटुम्बकम्- the whole world, a family emerged and thought of the ancient Indian philosophy taught through Gurukul. Even then there was no UN.

Reasons behind our present condition

The main reason behind it is that we started looking at the West. In everything we started following them blindly. Each person may say, "My system is best. You must follow it." This propaganda is seen throughout the present system. Our indigenous system did not teach this. Every country and within country every region can have its own model to be adoptive for their development, but

the purpose of all systems is the same to have moral ethical values in our life.

Conflicts

Due to conflicts between their system and our indigenous system, this system of Gurukul came under attack through the earlier Muslim invasion, and yet it could not be uprooted. Though disruptions were there it could not be disrupted. Even the invent of British rule in India in spite of the introduction of the Western education system created to develop loyal citizens of the empire, and the missionaries zealous efforts of conversion and for here what they faced was deep rooted in culture, and tradition in the form of a living culture that had been there for thousands of years.

There have been long series of attacks over our IK systems which have spread knowledge across boundaries and are world famous by invaders. These include, for example,

1. Vikramashila University established in 730 AD destroyed in 12th century;
2. Somapura University established in 8th century destroyed in 11th century;
3. Odantapuri University established in 8th century and destroyed in 12th century;
4. Nalanda university established in 5th century and destroyed in 11th century. The most horrific episode was the destruction of the gigantic library of Nalanda which housed more than 9 million invaluable collections of scripts, literary works of great scholars collected for over seven centuries.
5. Takshashila University established in 5th century BCE and destroyed in 499 AD

Lord Macaulay in his speech to British Parliament 1835 said, I have travelled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief. Such wealth I have seen in the country, such high moral values, people of such calibre, that I do not think we would conquer this country, unless we break the very backbone of this nation, which is her spiritual and cultural heritage.

All their theories and efforts failed. Earlier theories focused on IQ, which says when you are in danger save yourself first, but now they talk about EQ, called emotional quotient because when a car with a father, mother, and disabled daughter falls in water what makes the father to save his daughter, and later he died due to saving her.

There are differences between humans and animals. Animal live to eat, sleep and give birth. I think nothing more is their purpose of life. One of the great scholars of western thought, Aristotle said, "Man is a social animal". He has compared humans with animals, but humans should think beyond simply eating and giving birth to a child. He has a mind which must be used for establishing the power of Dharma in whole universe.

Education for accepting diversity

Samuel Huntington, an American scholar, wrote in his book "*Who are We*", that with this coming of immigrants in America, America has lost its identity. Samuel P. Huntington writing about who we are in this word, said that "we" has to be understood clearly. Here "We" signifies IK, for sustainable development.

IK totally opposes to the present day focus on Intellectual Property Rights (IPRs). We are not opposing to those people who got so many patents to their name because of honest inventions. But what we really have to think about is the process which makes that person able to register a patent in his name. When a child grew from their beginning to the final achievement in their life, that doesn't belong to them totally. There are many factors by which that person becomes capable to attain that success. From your home to your office, so many persons help your life to make you successful. Every single person should be complimented with your success. But we have seen every concept of IPR makes every success story be confined to individuals. He didn't realized his responsibility towards the society which contributed to his success. Thus IK is always against such concepts, in my opinion.

Multiculturalism has been seen as a bone in the neck in western world. It looks like it promotes separatism but if this will not be there then how will a free market, and liberal politics work? Multiculturalism has also created difficulty in front of UN about its identity. The Theory of Hedonism says people do everything for pleasure, is being rejected by our IK system. The Utilitarian theory given by Jeremy Bentham argued that we should focus on the greatest happiness for greatest number of people, but it is rejected by most IKs. The Survival of the fittest theory has also been rejected.

We can accept multiculturalism when we can think we are one. This earth should not be a war zone. With knowledge and wisdom this world can resolve all its issues and lead a sacrificial life. Gandhian theory can guide us in our life. The Indian theory of Antyodaya (अन्त्योदय) given by Pandit Deen Dyal Upadhyay which talks about the welfare and wellbeing of last man in the row is being accepted by this nation. Our Vedas, *Isha-Upnishad* can show us the way to live with diversity.

There is a phenomena and trend generally among students to identify and belong to some fraternity. The intermixing of people in Colleges can break down barriers.

Importance of Mother tongue in Education

New research has shown that chanting of Sanskrit mantra increases the size of mind and is helpful in memorising more information. Language is just a medium to communicate. We must learn as many languages as we can. India has recognised 22 official languages despite the fact that more than 70% people speak Hindi. There are almost 150 similar languages prevalent in our society. We have accepted the beauty of languages. We are taught to dream in our own languages.

I don't speak good English. When I asked my professor to correct my language he told me that if I want to speak good English then start thinking in English. But when I started thinking in English all my thoughts and all my creativity ended. Because as I said about the nation it is the same as about one person. Every person on this planet is unique. He has his own ways of learning reading, writing and it is our duty to promote it. Once you accept that language is just a way of communication,

and focus on your indigenous way of thinking and learning, you can do wonders in this world.

How India can guide the world

These principles which originate in India centuries ago, can be given to the world. They are universal in nature and can be applied in any place, time and space. Ultimately first to our youth and children we are remembering our glorious past and then I believe these youth and children from India will go across the boundaries and spread them in the world with the help of others. Some key phrases are:

Truth Alone Triumphs

Non-violence is the topmost Dharma

God seen even in Plants

Let good thoughts come from everywhere - from all the world

All Spiritual Paths are treated Equally

The whole World is one single Family

May all be prosperous and happy

May all be free from illness

May we all be protected

May we all be nourished

May we work together with great energy

May our intellect be sharpened - and not give rise to

Hostility

Happiness lies not in the desire for state, or material, nor the desire for Heaven, nor reincarnation

Happiness lies in dousing the pain and suffering of all living beings

One who is a true devotee of God - Feels the pain of others

Service of the poor is equivalent in importance and piety to the service of God

If a human being Acts - He can become god

Woman you are a veritable Goddess

Where Women are honoured - There Divinity blossoms

Where They Are dishonoured - All Action Remains

Unfruitful

Mother and Motherland are superior to Heaven

Conclusion

In conclusion of the above discussion I may say in humbleness by borrowing again the words from ever eternal Vedas and ancient Indian text and those are “**(नेति नेति)**” which stands for “neither this, nor that”. It stands in my opinion that all education systems, knowledge courses, discourses are made with an intention pure and honest to serve humankind.

The only thing that indigenous knowledge can be adapted for is that none is wrong and all paths are for the betterment of human life by balancing it with mother nature and following the fundamental principle of the “greatest good of all”, and negating the path of “greater good of greater number”, so as to make obsolete the very thought of exploitation of even one soul on this earth.

The very idea of Indian ancient knowledge system is “माता भूमिः पुत्रोहं पृथिव्याः”, I am son of this mother earth. The very thought of humans and live relationships with nature makes you aware of your surroundings, be it nature or its dwellers. It makes you kind, receptive, humble and adaptive towards the other existences of mother nature and you tend to have a sense of belonging,

and when that better sense prevails one may consume as per our need, but never exploit, be it for natural resources, animal kingdom or the ever evolving human life.

Levels and Determinants of Complementary Feeding Pattern Exclusive of Minimum Meal Frequency and Dietary Diversity among Children of 6 to 23 Months in Bangladesh

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Abstract

Objective: To estimate the level of complementary feeding pattern (CFP) among children aged between 6 to 23 months and to identify the determinants in individual, household and community level in Bangladesh.

Methods: From secondary data of Bangladesh Demographic Health Survey (BDHS) 2011 was used in this study. A total of 2,373 children aged between 6 to 23 months were selected. To estimate the level of CFP “dimension index” was used and the score of the index was used as dependent variables. Statistical analyses and tests were guided by the nature of the variables. Multivariable logistic regression analyses were performed to identify the significant determinants of CFP.

Results: The overall level of CFP among children aged between 6 to 23 months was low.

More than 95% of the children experienced either no (2.9%) or inadequate CFP (92.7%). The mean levels of CFP as well as percentages of no or inadequate CFP were significantly lower among children of the youngest age group, uneducated parents, unemployed/laborer fathers, socio-economically poor families, food insecure families and rural areas. No weekly exposure to mass media also revealed significant associations with CFP. However, only few variables remained significant for adequate CFP in the multivariable logistic regression analysis. Adequate CFP was significantly lower among the children aged between 6 to 23 months (OR: 0.22, 95% CI: 0.10-0.47), children of illiterate fathers (OR: 0.32, 95% CI: 0.11-0.95) and socio-economically middle-class families (OR: 0.28, 95% CI: 0.09-0.86) as compared to their reference categories.

Conclusion: Inappropriate and inadequate CFP may cause serious health hazards among children of 6 to 23

months in Bangladesh. It is ethical to take effective interventions and strategies by the government and other concerned stakeholders to improve the overall situation of CFP in Bangladesh.

Key words: CFP, children, individual, household, community, Bangladesh, Complementary Feeding, Minimum Meal Frequency, Dietary Diversity.

1. Infant Malnutrition

Malnutrition is the largest risk factor in the world for disability and premature mortality among young children, especially in developing countries (1, 2) (Muller and Krawinkel 2005, FAO/WHO 1992). Although the condition is entirely preventable, malnutrition is a significant underlying factor in more than half of the deaths of young children in these countries (Muller and Krawinkel 2005, Pelletier 1994). Recent analyses have found a decrease in child deaths under 5 years of age worldwide to 8.795 million in 2008 (Black *et al.* 2010) and 7.7 million in 2010 (Rajaratnam *et al.* 2010), yet malnutrition remains one of the key factors associated with global loss of life in young children (Black *et al.* 2003, 2010; Jones *et al.* 2003; UNICEF 2009; Rajaratnam *et al.* 2010).

The objective of millennium development goals (MDGs) of United Nations (UN) focused on reducing poverty, and extreme hunger, and improving education by 2015 (UN 2000). An objective of the first MDG was to decrease the prevalence of underweight children under 5 years of age (under-5 children) as the primary measure of malnutrition by 2015 (UN 2000).

In Ethiopia, 47%, 11% and 38% of children under five years of age were stunted, wasted and underweight, respectively (Central Statistical Authority 2006). An Ethiopian child is 30 times more likely to die by his or her fifth birthday than a child in Western Europe and the most common cause of child death is the interacting combination of malnutrition and infection (Joan and Mesfin 2008).

Proper feeding practices during infancy and early childhood are fundamental for normal growth, development, and survival of infants and children, particularly in developing countries (Senarath and Dibley 2012, Saha *et al.* 2008, Srivastava and Sandhu 2007). South Asian countries including Bangladesh reveal the highest burden of childhood undernutrition due to unimproved feeding of children that causes faltered growth and development, and illness, such as, respiratory infections, diarrheal diseases and so on (Senarath and Dibley 2012, Menon 2012). According to the various studies, 6-23 months of age of a child is a "critical window" for the transition of body and cognitive development (Senarath and Dibley 2012, WHO 2008).

After 6 months of age, children need complementary food because breast milk or infant formula alone is no longer sufficient to maintain the child's growth (Senarath and Dibley 2012, WHO 2008). At this stage, children should be fed small quantities of nutritional solid and semisolid foods in addition to breast-feeding (WHO 2008). The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) have articulated a global strategy and formulated guidelines for complementary feeding of the breastfed child (Pan American Health Organization

2001). Although appropriate complementary feeding pattern (CFP) among children aged between 6 to 23 months brings numerous health benefits (Senarath and Dibley 2012), inappropriate and inadequate introduction of CFP may increase the risk of malnutrition among under-five children (Inayati *et al.* 2012, Central Statistical Agency 2011, Kumar *et al.* 2006). The levels of CFP are affected by numerous individual, household and community level factors (Central Statistical Agency 2011, Kumar *et al.* 2006). The undernourished children are more likely to develop severe health hazards that impede body's metabolism and retard utilization of immunity resulting from deficiencies in immune competence (Mengistu *et al.* 2013, UNICEF 2010).

Although Bangladesh has made magnificent progress in health and human development since its independence in 1971 (Khan *et al.* 2011, de Onis *et al.* 2011), this country shows limited success in beating the odds of child malnutrition. For instance, the prevalence of under-five child malnutrition in Bangladesh is nearly 40%, which causes nearly 60% of under-five deaths (Islam *et al.* 2013). Inappropriate feeding practice could be one of the profound causes of high under-five mortality in this country (Mancharia *et al.* 2004).

Considering the limited number of studies in Bangladesh, this study aimed to estimate the levels of CFP among children of 6 to 23 months using composite dimension index and then to identify the determinants of CFP focusing on individual, household and community level factors. To our knowledge, none of the previous studies used composite dimension index to measure the levels of CFP in Bangladesh. Although dimension index is originally developed and used to calculate Human Development Index by the United Nations Development Programme (UNDP), it is also applied to address other issues (Mondal *et al.* 2014, Haque *et al.* 2011).

2. Ethical Implications and Objectives of the Study

Since studies based on Dimension index to interpret CFP are still scarce, further reports to provide universally accepted cut off points to define different groups of CFP would be immensely useful for the purposes of comparison, monitoring, evaluation and advocacy.

The primary causes of malnutrition include a lack of quality food, poor infant and child feeding and care practices such as suboptimal breastfeeding, deficiency of micronutrients such as vitamin A or zinc, and recurrent attack of infections, often intensified by intestinal parasites (A life free from hunger 2015, Franz 2012). In this perspective, this research is very important in this area to address the child feeding practice.

The objectives include:

- 1) To find out the levels of CFP among children aged 6 to 23 months.
- 2) To find out the prevalence of practice of CFP based on multilevel factors.
- 3) To identify the determinants of CFP

3. Data and Methodology

This retrospective study was performed by analysis of surveys conducted by Bangladesh Demographic and Health Survey (BDHS) in 2011 which was a nationally representative cross-sectional survey, during August to

November, 2015. A total of 8,761 under-five children (unweighted) born after January 2006 or later, were considered for anthropometric measurements, of which data (anthropometric and age) were completed for 7,647 children (around 88%). Among them 2,373 children aged between 6 to 23 months were considered as final sample.

To measure the level of CFP among children, 20 frequently asked questions (indicators) had been included for eligible mothers of households (Figure 2). For each question, responses were coded binary as 1= yes (practice) and 0 = no (not practice). Thereafter, the formula of "dimension index" (given below) was used in accordance with the construction method of the Human Development Index (HDI) to estimate the level of CFP (UNDP 2005). Firstly, Cronbach's alpha coefficient was used to evaluate the internal reliability of the 20 indicators. According to our analysis, the Cronbach's alpha estimate was 0.701, suggesting a high internal consistency. The index was then constructed using the sums of weighted binary input variables where maximum and minimum values were also chosen for underlying dimension. Performance of the dimension index was expressed into a unit-free index between 0 and 1 (UNDP 2005). The index is defined as:

$$\text{Dimension Index} = \frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}$$

The actual value here indicates the sum score of 20 binary indicators for each respondent and the maximum and minimum values were 20 and 0, respectively. The individual score of CFP (based on dimension index) was converted into percentage by multiplying 100. These scores were then divided into two categories, where individuals with dimension score of exactly 0 % belonged to the "no CFP" group and individuals with other scores ranging from 1-100 % belonged to the "CFP" group (20). The CFP scores were again divided into three categories: no CFP (0 %), inadequate CFP (1-49%) and adequate CFP ($\geq 50.0\%$). Both variables with two and three categories were used as dependent variables in multivariable analyses.

Covariates were classified into three level characteristics: individual, household, and community characteristics. Individual level characteristics were: age of child (6-11 months, 12-17 months, 18-23 months); sex of child (male, female); mother's education (illiterate, literate); father's education (illiterate, literate); father's employment status (currently unemployed composed of unemployed persons and students, laborers composed of farmer, agricultural worker, fisherman and rickshaw etc.; service holders composed of doctor, lawyer, accountant, teacher and so on; businessman). Household socio-economic status based on wealth index (poor, middle, rich), mass media exposure through television, radio and newspaper/magazine (yes: all medias exposed to at least once a week, no); food insecurity (yes, no) were considered as the household level characteristics. The wealth index was constructed using household asset data via principal components analysis (BDHS 2011).

Household socio-economic status was considered as the household-level characteristics. Household

socioeconomic status, namely the wealth index was constructed from data on household assets, including ownership of durable goods (such as televisions and bicycles) and dwelling characteristics (such as source of drinking water, sanitation facilities, and construction materials). Principal components analyses were used to assign individual household wealth scores. These weighted values were then summed and rescaled to range from 0-1, and each household was assigned into quintiles: the first quintile: poorest, the second quintile: poorer, the third quintile: middle class, the fourth quintile: richer and the fifth quintile: richest (BDHS 2011). Five household food security indicators were selected using the Household Food Insecurity Access Scale.

The continuous score of CFP based on dimension index were tested using ANOVA-test and t-test. These tests tested the differences of CFP among various categories of each independent variable. Contingency analysis was used to test the bivariable associations between the CFP (with three categories) and selected factors by applying the Chi-square (χ^2) test. Multivariable binary/multinomial logistic regressions (binary for CFP scores with two categories and multinomial for CFP scores with three categories) were used to examine the associations of selected factors with CFP. Statistical significance was accepted at $P < 0.05$. Statistical analyses were carried out using SPSS software (version 20.0).

This study is not free from limitations. Due to unavailability of recent data, BDHS 2011 data was used in this study that does not present the current nutritional status. The cross-sectional nature of the study limits us to assess the cause and effect relationships between selected factors and CFP. Most of the food items were given to the children in last 24-hours preceding the survey time, however, the children could occasionally receive some other foods but simply did not the previous day. All food items were treated equally may limit this study. Another limitation could be information bias, which may result from collecting information of self-reporting age, education, occupation, household assets as well as nutritional indicators.

T test is used to compare two different set of values. It is generally applied to normal distribution which has a small set of values. This test compares the mean of two samples. T test uses means and standard deviations of two samples to make a comparison.

Anova is a statistical test which analyzes variance. It is helpful in making comparison of two or more means which enables a researcher to draw various results and predictions about two or more sets of data. Anova test includes one-way anova, two-way anova or multiple anova depending upon the type and arrangement of the data.

Chi-square is an important non-parametric test and as such no rigid assumptions are necessary in respect of the type of population. It is simply a technique to test either as a test of goodness of fit or to judge the significance of association between attributes (Kothari, 2003-04).

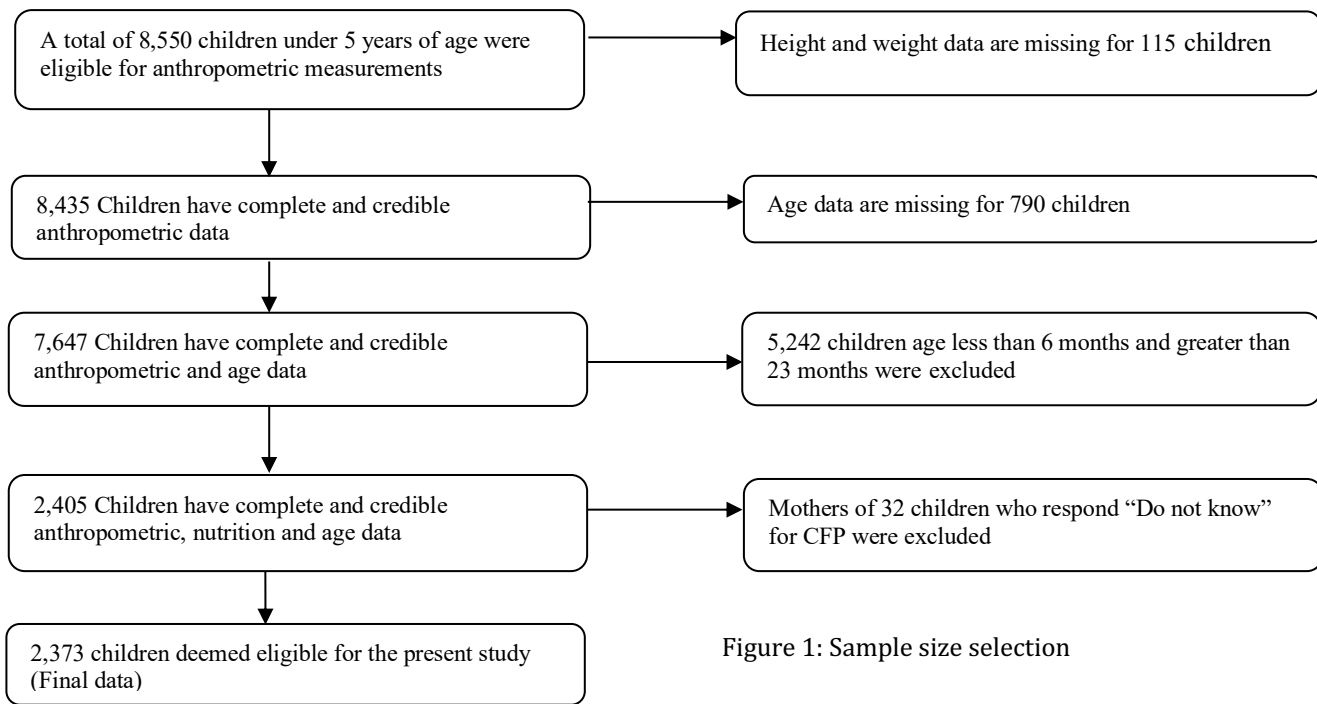


Figure 1: Sample size selection

The logistic regression model is one of the important methods for the successful application not only in demography but also all discipline of knowledge. Logistic regression can be used to predict a binary dependent variable from a set independent variables and that does not require any distributional assumptions concerning explanatory variables are normally distributed with equal variances.

4. Analysis of CFP Data

4.1. Level of Complimentary Feeding Pattern Based on Dimension Index

The level of CFP has been estimated using a dimension index. Although this dimension index is originally developed and used to calculate Human Development Index by the United Nations Development Program (UNDP), it is also applied to address other issues (Mondal *et al.* 2014, Haque *et al.* 2011).

The mean level of CFP was 24.2, which was significantly lower among the children aged 6-11 months (19.1%), illiterate mother (18.8%), illiterate father (19.8%) and children of currently unemployed families (22.6%) (Table 4.1). Children belonging to the poorest socio-economic group (19.6%), no exposure to television (20.7%) and newspapers (22.9%), food insecurity (22.2%) and rural area (20.70%) also revealed significantly lower scores of CFP. Moreover, the mean level of CFP varied significantly among various geographical regions with the lowest level in southeastern region.

The overall level of CFP experienced by children aged between 6 to 23 months in Bangladesh could be described as a catastrophe. Poor level of CFP was measured significantly using multilevel factors, such as, age, parental education, father's employment status, socio-economic status, mass media exposure, food insecurity, pace of residence and region of residence.

4.2. Univariate association of CFP with multilevel independent variables

The interclass variations of the percentages, based on multilevel factors (e. g. individual, household and community levels), of the children among the various level of CFP (e.g. no CFP, inadequate CFP and adequate CFP) were observed using Chi-square test. According to the categories of dimension index, more than 90% children received inadequate complementary food.

Children age, mother's education, father's education, father's employment status, socio-economic status, mass media exposures (television and newspaper/magazine), food insecurity and place of residence were significantly associated with CFP categories (Table 4.2). For instance, the percentage of adequate CFP was significantly lower among younger group of children (2.5%), among children of illiterate mother (1.8%), illiterate father (1.0%). Similarly, the percentage of adequate CFP was significantly lower among the children of those families, who belonged to the groups of socio-economically poor (1.6%), no mass media exposure (2.0% for television and 3.0% newspaper/magazine), food insecurity (2.6%) and rural area (3.0%).

In contrast, the percentage of inadequate CFP was significantly higher among younger the children aged 12-17 months (94.1%), among children of illiterate mother (95.3%), illiterate father (95.9%), the children of those families, who belonged to the groups of socio-economically poor (95.4%), no mass media exposure (94.6% for television and 94.0% newspaper/magazine), food insecurity (94.7%) and rural area (93.7%).

Only 4.4% children were found to receive adequate CFP. All multilevel factors other than sex of child, listening to radio and region of residence were significantly associated with CFP.

4.3. Multivariable association of CFP with multilevel independent variables

Multivariable logistic regression (binary/multinomial) analysis have been performed to identify the determinants of CFP or to observe the effects

of several socio-demographic factors based on individual, household and community level factors. The results of binary logistic regression were presented first under the dichotomous dependent variable “any CFP”. According to these results (Table 4.3.), children aged between 6 to 23 of age were less likely to receive any CFP (OR: 0.55, 95% CI: 0.32-0.96) as compared to the group of 18-23 months. In contrast, children of 12-17 months of age were more likely to receive any CFP (OR: 2.63, 95% CI: 1.14-6.07). Other variables were not significantly associated with the dependent variable “any feeding practice”.

According to the results of multinomial logistic regression analysis (presented under the categories of inadequate and adequate take ‘no CFP’ as a reference in Table 4.3), children of illiterate fathers had significantly less likelihood of having adequate CFP (OR: 0.32, 95% CI: 0.11-0.95). Children from the socioeconomically middle class families were less likely to receive adequate CFP

had somewhat significant effect ($P=0.09$) on adequate CFP.

Most of the socio-demographic variables were not significantly associated with CFP. Some factors, such as, children age, father’s education, socioeconomic status and frequency of reading newspaper/magazine had significant effects on adequate CFP.

4.4 Association between child malnutrition (underweight) and CFP

Table 4.4 highlights the association between child underweight and CFP. CFP was significantly ($p=0.005$) associated with underweight. More than 30% children received inadequate complementary foods were underweight. Other factors, such as, children age, mother’s education, father’s education, father’s occupational status, socio-economic status, watch television weekly, read newspapers/magazine weekly, food insecurity, place of residence and region of residence were significantly associated with child underweight.

Binary logistic regression analysis showed that CFP had significant effect on child underweight. Children who were fed inadequate food had more chance to be underweight than those who did not receive any complementary food. Other factors, such as, children age, socio-economic status, watch television weekly, read newspapers/magazine weekly, food insecurity, place of residence and region of residence had significant impact on child underweight.

5. Discussion

The study reveals a low level of CFP (composed of no CFP or low CFP) among children aged between 6 to 23 months in Bangladesh. The higher prevalence of under-nutritious complementary foods during the early mentioned “critical

window” period of growth for children. Our findings are consistent with the findings of a study in Bangladesh (Kabir *et al.* 2012) and other South Asian countries such as India, Pakistan, Sri Lanka and Nepal (Patel *et al.* 2012, Joshi *et al.* 2012, Senarath *et al.* 2012, Hazir *et al.* 2012). Lack of knowledge and awareness regarding appropriate CFP may influence the poor nutritional supplements among children (Wamani *et al.* 2005).

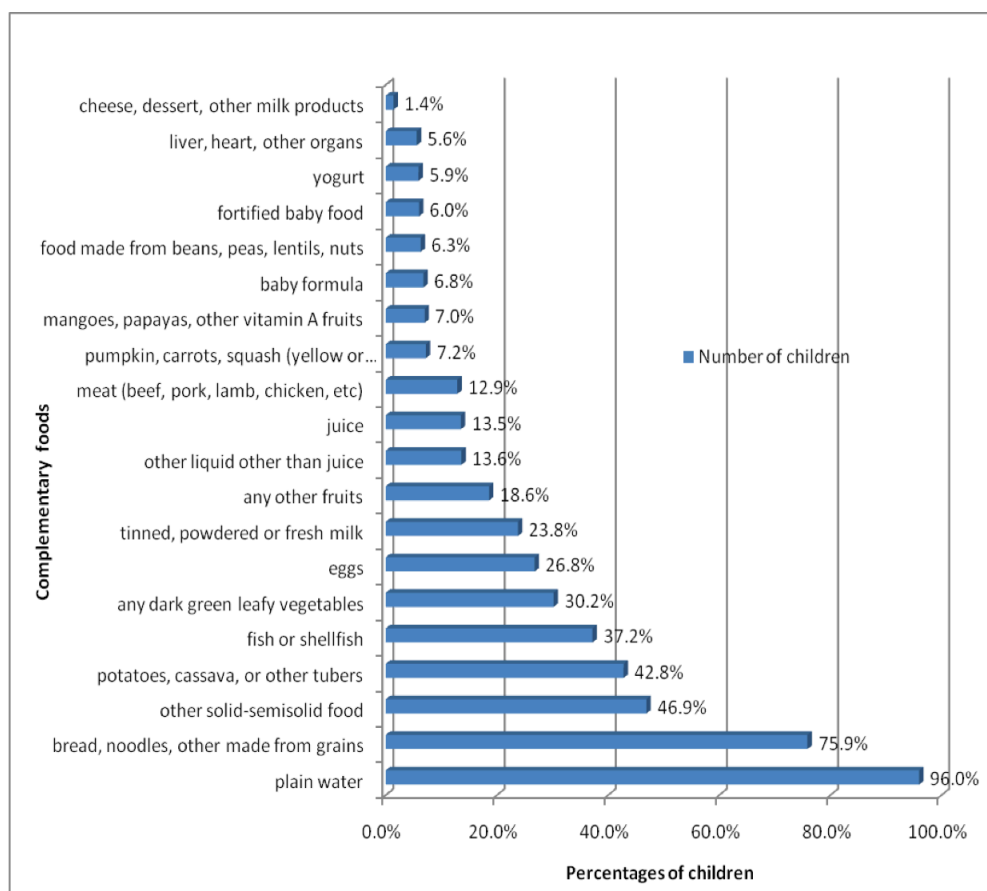


Figure 2: Percentage of complementary foods received by children (BDHS 2011)

(OR: 0.28, 95% CI: 0.09-0.86) as compared to rich children. Children of families with no exposure to newspaper/magazine also revealed significantly less likelihood of receiving adequate CFP (OR: 0.38, 95% CI: 0.16-0.92) than reference category. Place of residence

Table 4.1 Mean level of complementary feeding practice

Variables	Mean (\pm SD) (%)	Standard Error (SE) (%)	P values
Children age (months)			
6-11	19.1 (\pm 11.7)	0.40	
12-17	26.2 (\pm 11.8)	0.42	<0.001 ^a
18-23	28.0 (\pm 12.2)	0.45	
Sex of child			
Male	23.9 (\pm 12.4)	0.36	0.332 ^b
Female	24.5 (\pm 12.5)	0.36	
Mother's education			
Illiterate	18.8 (\pm 9.97)	0.51	<0.001 ^b
Literate	25.2 (\pm 12.7)	0.28	
Father's education			
Illiterate	19.8 (\pm 10.7)	0.43	<0.001 ^b
Literate	25.7 (\pm 12.7)	0.30	
Father's employment status			
Currently unemployed	22.6 (\pm 13.9)	1.91	
Labours	23.3 (\pm 11.8)	0.29	<0.001 ^a
Service holders	26.1 (\pm 13.2)	0.59	
Businessmen	28.8 (\pm 14.5)	1.20	
Socioeconomic status			
Poor	19.6 (\pm 10.6)	0.47	<0.001 ^a
Middle	21.4 (\pm 11.1)	0.52	
Rich	26.7 (\pm 12.8)	0.34	
Watch television weekly			
No	20.7 (\pm 11.1)	0.36	<0.001 ^b
Yes	26.5 (\pm 12.8)	0.34	
Listen to radio weekly			
No	24.1 (\pm 12.5)	0.27	0.179
Yes	25.3 (\pm 12.8)	0.89	
Read newspapers/magazine weekly			
No	22.9 (\pm 11.8)	0.27	<0.001 ^b
Yes	30.4 (\pm 13.7)	0.68	
Food insecurity			
No	25.3 (\pm 12.9)	0.33	<0.001 ^b
Yes	22.2 (\pm 11.3)	0.40	
Place of residence			
Urban	27.4 (\pm 13.4)	0.49	<0.001 ^b
Rural	22.8 (\pm 11.8)	0.29	
Region of residence			
Southern	23.7 (\pm 12.5)	0.76	
Southeastern	22.3 (\pm 12.9)	0.58	
Central	23.6 (\pm 12.7)	0.66	
Western	28.8 (\pm 11.4)	0.69	<0.001 ^a
Mid-western	26.2 (\pm 11.8)	0.67	
Northwestern	25.9 (\pm 11.2)	0.65	
Eastern	21.1 (\pm 12.6)	0.67	
Total	24.2 (\pm 12.5)	0.26	

SD, Standard deviation; SE, Standard error;

a = ANOVA test; b = T-test

According to our knowledge, no previous studies have addressed the level of CFP through dimension index based on 20 complementary food items. We found significant interclass variations of CFP for different individual, household and community level variables. For instance, receiving complementary foods were significantly lower among children of the younger age group (6-11 months) than among those in the older age group (18-23 months). Several studies reported that percentages of infants receiving complementary foods increases with age but did not show any significant variations (Patel *et al.* 2012, Charmaine *et al.* 2011, Khanal *et al.* 2013). CFP was also found significantly lower among children of illiterate parents, children of fathers who were labourers, socioeconomically poor families, children of families never exposed to mass media, food insecure families and rural settlement. These findings were consistent with another study conducted in Nepal (Khanal *et al.* 2013).

The United Nations Children's Fund (UNICEF) reported that in Bangladesh over 33 million children under 18 years of old, which accounts for around 56% of the child population, are currently living below the international poverty line and around 57% are deprived of adequate nutrition (Bangladesh 2015). Bangladesh is one of the South Asian countries where female children experience higher mortality than males (Sharma and Kader 2013). In this country, more attention is paid to male children in intra-family food distribution and healthcare. Such kinds of discrimination against female children can aggravate the situation of under-nutrition and other health hazards among female children compared to male (Henry *et al.* 1993). Regional variation also has been observed in terms of CFP. Variations in CFP may conceal important intra-regional differences due to diverse cultural norms and needs more investigation.

Table 4.2 Associations between multilevel factors and complementary feeding pattern

Variables	Complementary feeding pattern			P values
	No	Inadequate CFP	Adequate CFP	
Children age (months)				
6-11	41 (4.8%)	791 (92.7%)	21 (2.5%)	<0.001
12-17	8 (1.0%)	753 (94.1%)	39 (4.9%)	
18-23	19 (2.6%)	656 (91.1%)	45 (6.2%)	
Sex of child				
Male	36 (3.0%)	1109 (92.5%)	54 (4.5%)	0.903
Female	32 (2.7%)	1091 (92.9%)	51 (4.3%)	
Mother's education				
Illiterate	11 (2.9%)	362 (95.3%)	7 (1.8%)	0.028
Literate	57 (2.9%)	1838 (92.2%)	98 (4.9%)	
Father's education				
Illiterate	19 (3.1%)	580 (95.9%)	6 (1.0%)	<0.001
Literate	49 (2.8%)	1620 (91.6%)	99 (5.6%)	
Father's employment status				
Currently unemployed	3 (5.7%)	48 (90.6%)	2 (3.8%)	<0.001
Labours	45 (2.7%)	1568 (94.2%)	52 (3.1%)	
Service holders	17 (3.3%)	457 (89.8%)	35 (6.9%)	
Businessmen	3 (2.1%)	127 (87.0%)	16 (11.0%)	
Socioeconomic status				
Poor	15 (3.0%)	474 (95.4%)	8 (1.6%)	<0.001
Middle	17 (3.7%)	433 (95.0%)	6 (1.3%)	
Rich	36 (2.5%)	1293 (91.1%)	91 (6.4%)	
Watch Television weekly				
No	31 (3.3%)	880 (94.6%)	19 (2.0%)	<0.001
Yes	37 (2.6%)	1320 (91.5%)	86 (6.0%)	
Listen radio weekly				
No	61 (2.8%)	2013 (92.9%)	94 (4.3%)	0.691
Yes	7 (3.4%)	187 (91.2%)	11 (5.4%)	
Read newspapers/magazine weekly				
No	59 (3.0%)	1850 (94.0%)	60 (3.0%)	<0.001
Yes	9 (2.2%)	350 (86.6%)	45 (11.1%)	
Food insecurity				
No	45 (2.9%)	1421 (91.7%)	84 (5.4%)	0.005
Yes	23 (2.8%)	779 (94.7%)	21 (2.6%)	
Place of residence				
Urban	14 (1.9%)	660 (90.5%)	55 (7.5%)	<0.001
Rural	54 (3.3%)	1540 (93.7%)	50 (3.0%)	
Region of residence				
Southern	4 (1.5%)	252 (94.7%)	10 (3.8%)	0.398
Southeastern	22 (4.4%)	451 (90.4%)	26 (5.2%)	
Central	7 (1.9%)	354 (93.7%)	17 (4.5%)	
Western	6 (2.2%)	248 (92.2%)	15 (5.6%)	
Mid-western	8 (2.6%)	285 (92.5%)	15 (4.9%)	
Northwestern	9 (3.0%)	278 (93.0%)	12 (4.0%)	
Eastern	12 (3.4%)	332 (93.8%)	10 (2.8%)	
Total	68 (2.9%)	2200 (92.7%)	105 (4.4%)	

6. Recommendations

Although numerous policies and strategies have been issued in Bangladesh to improve the IYCF, some challenges such as insufficient resources and lack of coordination among stakeholders are impeding their implementation and enforcement.

1. Strengthening of the existing strategies such as eradication of poverty through marginalized and vulnerable group development, empowering women to practice decision making autonomy and minimizing rural urban differential through planning and providing modern facilities are urgently necessary to improve the situation of CFP in Bangladesh.
2. Proper CFP can also be ensured by undertaking social safety net program and community-based nutritional interventions, for example, food for education, food for work for slum dwellers and so on (Kabir *et al.* 2012).
3. The feeding practice of home-based foods with various textures should be encouraged (Liubai *et al.* 2011).
4. Health promotion program through cross-collaboration among various organizations are needed to ensure proper CFP.
5. Behavioral change communication through nutritional education, particularly in slum and rural areas, which support and educate mothers, need to be developed for improving appropriate feeding practice to children (Garg *et al.* 2009, McNukty 2013, Faber and Benade 1998). In addition, more efforts should be given to review existing nutritional interventions that target the IYCF in Bangladesh.
6. Longitudinal studies are recommended to determine the cause-effect relationships between plausible factors and CFP in Bangladesh.

7. Conclusion

The overall level of CFP among children is still low in Bangladesh and needs further improvement. The levels of CFP are found to be strongly associated with several individual, household and community factors. Some of these factors namely children's age, father's education, socioeconomic status, mass media exposure and place of residence are justified to be

considered while developing strategies or interventions to address the issue of child CFP in Bangladesh. More studies are needed to assess the level of CFP in Bangladesh.

Table 4.3 Results of multivariable logistic regression analysis

Variables	Complementary feeding pattern					
	Any CFP (yes/no)		Inadequate CFP		Adequate CFP	
	Adjusted OR (95% CI)	P values	Adjusted OR (95% CI)	P values	Adjusted OR (95% CI)	P values
Children age (months)						
6-11	0.55 (0.32-0.96)	<0.001	0.57 (0.33-1.00)	0.050	0.22 (0.10-0.47)	<0.001
12-17	2.63 (1.14-6.07)	0.037	2.68 (1.16-6.19)	0.021	1.84 (0.72-4.71)	0.206
18-23 (ref.)	1.00		1.00		1.00	
Sex of child						
Male	0.92 (0.56-1.49)	0.725	0.91 (0.56-1.50)	0.719	1.01 (0.54-1.89)	0.978
Female (ref.)	1.00		1.00		1.00	
Mother's education						
Illiterate	1.11 (0.52-2.37)	0.779	1.11 (0.52-2.35)	0.792	1.48 (0.46-4.69)	0.509
Literate (ref.)	1.00		1.00		1.00	
Father's education						
Illiterate	1.01 (0.54-1.89)	0.981	1.03 (0.55-1.92)	0.934	0.32 (0.11-0.95)	0.040
Literate (ref.)	1.00		1.00		1.00	
Father's employment status						
Currently unemployed	0.42 (0.08-2.25)	0.313	0.44 (0.08-2.36)	0.341	0.23 (0.02-2.12)	0.193
Labours	0.94 (0.28-3.20)	0.918	0.98 (0.29-3.35)	0.976	0.49 (0.13-1.89)	0.297
Service holders	0.68 (0.19-2.40)	0.551	0.70 (0.20-2.48)	0.584	0.50 (0.13-2.01)	0.330
Businessman (ref.)	1.00		1.00		1.00	
Socioeconomic status						
Poor	0.85 (0.39-1.84)	0.539	0.86 (0.40-1.86)	0.704	0.55 (0.18-1.70)	0.299
Middle	0.69 (0.35-1.34)	0.687	0.70 (0.36-1.37)	0.297	0.28 (0.09-0.86)	0.025
Rich (ref.)	1.00		1.00		1.00	
Watch Television weekly						
No	0.89 (0.51-1.57)	0.695	0.90 (0.51-1.58)	0.712	0.68 (0.31-1.49)	0.336
Yes (ref.)	1.00		1.00		1.00	
Listen radio weekly						
No	1.24 (0.55-2.81)	0.607	1.24 (0.55-2.81)	0.608	1.21 (0.42-3.44)	0.722
Yes (ref.)	1.00		1.00		1.00	
Read newspapers/magazine weekly						
No	0.82 (0.38-1.77)	0.602	0.86 (0.40-1.85)	0.702	0.38 (0.16-0.92)	0.032
Yes (ref.)	1.00		1.00		1.00	
Food insecurity						
No	0.83 (0.47-1.46)	0.526	0.83 (0.47-1.46)	0.518	0.90 (0.42-1.95)	0.796
Yes (ref.)	1.00		1.00		1.00	
Place of residence						
Urban	1.43 (0.75-2.70)	0.275	1.40 (0.74-2.65)	0.300	1.93 (0.90-4.13)	0.090
Rural (ref.)	1.00		1.00		1.00	
Region of residence						
Southern	2.40 (0.75-7.70)	0.276	2.40 (0.75-7.68)	0.141	2.84 (0.65-12.38)	0.164
Southeastern	0.72 (0.34-1.49)	0.140	0.71 (0.34-1.47)	0.357	1.26 (0.44-3.58)	0.663
Central	1.67 (0.64-4.34)	0.380	1.65 (0.65-4.30)	0.304	2.42 (0.69-8.45)	0.165
Western	1.34 (0.49-3.73)	0.294	1.32 (0.48-3.66)	0.592	2.44 (0.66-9.01)	0.182
Mid-western	1.19 (0.47-3.01)	0.570	1.17 (0.47-2.97)	0.735	2.03 (0.59-6.99)	0.263
Northwestern	1.19 (0.48-2.92)	0.711	1.17 (0.48-2.88)	0.733	2.04 (0.58-7.13)	0.263
Eastern (ref.)	1.00		1.00		1.00	

CI, 95% confidence interval

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Table 4.4 Association between underweight and child feeding practice

Variables	Under Weight (n=2227)		Underweight (No/Yes) (Binary logistic regression results)					
	Prevalence	P values (Chi square)	B	S.E.	P values	ORs	95.0% C.I.	
							Lower	Upper
Child feeding pattern								
No (ref)	13 (20.6%)					1.00		
Inadequate	675 (32.6%)	0.005	0.60	0.33	0.041	1.82	0.95	3.48
Adequate	18 (19.6%)		0.23	0.49	0.585	1.26	0.54	2.93
Children age (months)								
6-11 (ref)	197 (24.6%)					1.00		
12-17	246 (32.5%)	<0.001	0.50	0.11	<0.001	1.65	1.31	2.09
18-23	263 (39.4%)		0.76	0.12	<0.001	2.13	1.68	2.70
Sex of child								
Male (ref)	357 (31.8%)	0.905				1.00		
Female	349 (31.6%)		-0.01	0.09	0.900	0.98	0.81	1.19
Mother's education								
Illiterate (ref)	160 (45.8%)	<0.001				1.00		
Literate	546 (29.1%)		-0.08	0.14	0.573	0.92	0.69	1.22
Father's education								
Illiterate (ref)	239 (42.4%)	<0.001				1.00		
Literate	467 (28.1%)		-0.10	0.12	0.392	0.90	0.70	1.14
Father's employment status								
Currently unemployed (ref)	11 (22.9%)				0.444	1.00		
Labours	546 (34.9%)	<0.001	0.53	0.36	0.142	1.70	0.83	3.47
Service holders	119 (24.9%)		0.43	0.37	0.250	1.53	0.73	3.20
Businessmen	30 (21.9%)		0.43	0.41	0.296	1.54	0.68	3.50
Socioeconomic status								
Poor (ref)	225 (49.1%)					1.00		
Middle	167 (38.7%)	<0.001	-0.32	0.14	0.023	0.72	0.54	0.95
Rich	314 (23.5%)		-0.76	0.14	<0.001	0.46	0.35	0.61
Watch Television weekly								
No (ref)	365 (41.9%)	<0.001				1.00		
Yes	341 (25.1%)		-0.28	0.11	0.010	0.75	0.60	0.93
Listen radio weekly								
No (ref)	649 (31.9%)	0.498				1.00		
Yes	57 (29.5%)		-0.01	0.17	0.975	0.99	0.70	1.40
Read newspapers/magazine weekly								
No (ref)	632 (34.1%)	<0.001				1.00		
Yes	74 (19.7%)		-0.25	0.15	0.090	0.77	0.57	1.04
Food insecurity								
No (ref)	394 (27.0%)	<0.001				1.00		
Yes	312 (40.5%)		0.28	0.10	0.007	1.33	1.08	1.64
Place of residence								
Urban (ref)	167 (24.1%)	<0.001				1.00		
Rural	539 (35.1%)		0.14	0.11	0.229	1.15	0.91	1.44
Region of residence								
Southern (ref)	84 (33.3%)					1.00		
Southeastern	152 (32.8%)		0.09	0.17	0.580	1.10	0.78	1.55
Central	110 (30.7%)		-0.11	0.18	0.534	0.89	0.61	1.28
Western	57 (22.1%)	<0.001	-0.46	0.21	0.027	0.62	0.41	0.94
Mid-western	80 (28.1%)		-0.26	0.19	0.184	0.76	0.52	1.13
Northwestern	85 (30.6%)		-0.28	0.19	0.151	0.75	0.51	1.10
Eastern	138 (41.6%)		0.35	0.18	0.061	1.42	0.98	2.05

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Youth Volunteers in Post-Disaster Rehabilitation and Reconstruction in Nepal

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Abstract

Youth constitute one third of total population in Nepal. This paper looks at the work and motivation of youth volunteers in disaster management in Nepal in order to evaluate how these ideas and values among the youth played roles in the re-construction of the Nation from the 2015 Earthquake. The study used primary data through group interviews with volunteers of Youth's UNESCO Club in Kathmandu city who were actively involved in disaster-relief programs at Sindhupalchowk, Kathmandu, Bhaktapur and Ramechhap districts, together with key informant interviews and case studies. Findings from the study shows most youth joined in the volunteer program on their own initiative.

They are concerned about issues including personal safety, quality and appropriate training, coordination, wrong attitudes, gender inequality and media coverage. People engaging in similar acts may have different underlying motivations for doing so. Findings from the

study shows that mostly, the volunteers are motivated based on their values which are welfare of others or unselfishness. Other underlying motives include opportunity to learn, career prospects, social pressure, to reduce feelings of guilt and enhance one's self-esteem. Activities for taking forward their work includes ensuring quality and appropriate training and appropriate gears and tools for search and rescue work, awareness raising, recognition and visibility of their work. Psychosocial counseling is important after rescue operations, as it is important to heal the psychological wounds after an emergency or a critical event. The study suggests involving volunteers in all stages of disaster management planning process. It is a matter of combined responsibility that volunteers are recognized for the contributions and their needs are ensured for them to accomplish their efforts successfully.

1. 2015 Earthquake

On April 25, 2015, an earthquake registering 7.8 on the Richter scale struck Nepal's with epicenter Sindhupalchowk and Gorkha, which is less than 50 miles northwest of Kathmandu, the Capital of Nepal, directly affecting the lives of 2.8 million people (approximately a third of the national population), and causing the deaths of an estimated 8700 people including the 150 people killed in major aftershock of May 12. The data (MOHP, 2015) shows around 22,200 people were injured in the earthquake. 40% of Nepal, 39 out of 75 districts reported damage. More than 505,000 houses were reported to be destroyed and 279,000 damaged. Deaths were also reported in neighboring Tibet and India.

During the first year, youth involvement in order to support the Government of Nepal to meet the immediate needs of the affected population in early recovery. Youth are also supported by the Government of Nepal in leading and promoting coordinated resource mobilization and planning among multiple government and non-government partners for immediate, medium and longer-term recovery. In the immediate aftermath of the earthquake, Youth also coordinated various Clubs, NGOs and INGOs to deliver the set of relief materials (e.g. tarpaulins, blankets and mattresses) for earthquake affected families of Sindhupalchowk, Dolakha, Bhaktapur, Lalitpur, Gorkha, Dhading and other highly affected districts in coordination with District Disaster Relief Committee (DDRCs).

This paper explores the role of youth as volunteer of peace-builders, illustrating their unique potential to affect social change through a number of examples. The purpose of this research was to understand the motivations and barriers for youth volunteers so that the real world volunteer management practitioners have a better understanding on the motivating factors as well as the barrier for volunteers. It was also to identify the role of youth involvement in relief program, the strengths and weaknesses of youth volunteer activities, and key challenges and critical success factors those support the implementation and delivery.

2. Definition of Youth and Youth Policy

A core challenge for youth is that the concept of youth is itself debated and it is difficult to define the term "youth". Youth is "an important period of physical, mental and social maturation, where young people are

actively forming identities and determining acceptable roles for themselves within their community and society as a whole. They are increasingly capable of abstract thought and decision-making in new ways (Wisler, 2007). *"Some favor biological markers, in which youth is the period between puberty and parenthood, while others define youth in terms of cultural markers—a distinct social status with specific roles, rituals, and relationships"* (USAID/CMM 2005). Definitions of youth by age vary drastically across different institutions; the UN has defined youth as person from 15 to 24 years of age, whereas the National Youth Policy of Nepal defines youth as persons from 16 to 40 years of age. Donors and INGOs often bring in their own definitions of youth which are not always adapted to the country they work in. It is argued that the age based definition of the youth is a Western product and writers such as Durham state that youth is a social construct and has more to do with status and behavior and less to do with age (USAID, 2005).

There is a lot of cross cultural variation on when an individual becomes youth and a generally accepted concept is that youth is a transitional phase from childhood to adulthood. It is even more difficult to define female youth. In developing countries such as Nepal, where societies are influenced predominantly by patriarchal values, females generally have to accept more responsibilities at an early age. Motherhood tends to change the social status of female youth far more than fatherhood alters male youth lives.

The Nepalese National Youth Policy defines youth as persons from 16-40 years of age. However, individuals having a "youth mindset" are also considered youth in Nepal. In these situations, individuals even aged 60 were sometimes considered "youth". This is particularly evident in the field of politics where there is a lack of opportunity for those in the second generation of leaders who are waiting for their turn in the political leadership, and who remain 'youth leaders' until that happens. The quota system in the CA encourages the inclusion of youth. However, the youth who are included generally fall near the maximum age which causes under representation of youth who are under the maximum age. Among the donor community and international organizations, there is no conformity about the age of youth. They select their age group often according to the definitions they have from their home countries. Nepali culture often understands youth to be those individuals who are not yet married and, more often than not, are irresponsible.

The main objective of the present national Youth Policy is to develop and expand the role and potentiality of the youths in the nation building and national development, to create disciplined and efficient work force having responsibility of good citizen and creative mentality with a view of involving the youth in the national development stream as well as having respect towards national heritage and culture through a planned process. To ensure favorable environment towards productive practical education, training and self-employment for the youth and bringing out all dormant potentialities including their leadership quality aiming at national progress. This was also to develop the youths as the basic energy of development by developing creativeness, entrepreneurship and innovative aptitude

on the youths, and bring out the capacity inherent in them (Nepal Youth Policy, 2010).

3. Disaster Management

In recent decades, government agencies, non-governmental organizations (NGOs) and local communities in Nepal have undertaken various measures to mitigate the impacts of natural disasters, including floods and landslides, on the people, economy and society. It was also strongly felt by the public institutions that if disaster preparedness could be integrated in the socio-economic development process at household, community, regional and national levels, it would build the long-term capacity of the community to mitigate risk and vulnerability to disasters.

Government has a well-established disaster management system. The government, led by the Ministry of Home Affairs, Disaster Relief Section has undertaken various steps in the form of policy, strategy and programs considering the concept of disaster management through mitigation, preparedness, recovery and rehabilitation. The government established the Nepal Center for Disaster Management (NCDM) under the Ministry of Home Affairs, Disaster Relief Section in Feb 2002 to promote disaster prevention, mitigation and preparedness; to provide guidelines; and to organize training and awareness for the concerned people and stakeholders to mitigate the impacts of disasters. Alongside the development thinkers, international development partners such as UNDP, DFID, Oxfam GB, USAID, Care International, Caritas, United Nations, UNICEF, WFP, World Vision, Plan Nepal are some involved in NCDM. Among national Youth UNESCO Club Nepal and Engineering Adda Nepal, are some involved with relief and rehabilitation activities and local NGOs those are concerned with, and are experienced in disaster management in Nepal after the Earthquake 2015, and some that have been trained as Youth Looking Beyond Disaster Ambassadors.⁷

3. Volunteerism and Youth Volunteers

A volunteer is any individual who offers him/herself to a service without an expectation of monetary compensation (Shin and Kleiner 2003). Volunteer management research has been an important topic in the social sciences. The different areas that have been researched include the motives for volunteering, i.e., the reasons why people volunteer (Bussell et al 2002 and Canaan and Goldberg 1991). Opportunities for personal growth, recognition, achievement, and a desire to contribute to the community are some of the incentives for volunteering cited by past research. Another topic that has been studied in the past involves the demographic characteristics of volunteers, such as education and gender, and their relationship to present and future commitment levels (Vianen 2008 and Slammers 1991).

The area of volunteer retention and the analysis of what practices encourage renewed volunteerism and why people continue to volunteer is also an important topic (Hager 2004 and Gidron 1984). Some of the

management practices that positively influence the retention of volunteers include recognition activities and matching volunteers to appropriate tasks (Gidron 1984) for example, cites task achievement and the quality of the work itself as some of the variables that could better predict volunteer retention. Each of these areas of research reinforces the observation that volunteers play a vital role in the provision of assistance in humanitarian relief situations. The manner in which they do so, and the specific characteristics of their participation in relief efforts play an important role in the development.

The willingness of community members to volunteer is critical for the success of community-based Disaster Risk Reduction projects. While much literature documents the challenges of participation in community-based projects, very little has been written on the motivations of those who volunteer, and even less on the incentives and barriers to youth volunteers in less developed countries.

Volunteerism is critical and increasingly popular, for young people to bring about positive change in society, and it is becoming more and more relevant as a mechanism to engage young people in global peace and sustainable human development. For instance, as governments, United Nations entities and civil society organizations debate and articulate the post - 2015 development agenda, there is a strong call for a bottom-up process in which young people's voices are included and youth are actively engaged in the process, and volunteering is a viable mechanism for this (UNV 2014).

Youth volunteers around the world are involved in hundreds of different types of activities which mainly involved are collecting, preparing, distributing, or serving food; fundraising; tutoring; coach, referee, or supervise sports teams, elderly care, education, healthcare, social mobilization and advocacy programs and many other issues including disaster risk reduction and response. Youth volunteers do community development work in their local communities and communities outside their countries. It is a fact that when a disaster strikes, local people are the first to respond, before any other outside agencies arrives to assist in recovery efforts. Many of these first responders who struggle to save lives with limited resources and skills at their disposal are energetic young people. Young people must therefore be included, trained and empowered to carryout disaster prevention, preparation, and planning and response efforts.

In the past few years, however, some students and faculty have begun to show interest in questions related to the field of volunteerism. They are finding it difficult (if not impossible) to locate data with which to work and are beginning to recognize that information of the most elemental sort must first be uncovered for centralization of existing research, or--at a minimum--agreed-upon taxonomies for indexing/abstracting purposes. There are many unpublished masters and doctoral-level theses on university library shelves that are not being disseminated to serious volunteerism researchers. We need to bring this basic research out into the volunteerism forums (Ellis 1985).

The willingness of community members to volunteer is critical for the success of community-based DRR projects. While much literature documents the challenges of

⁷ www.eubios.info

participation in community-based projects, very little has been written on the motivations of those who volunteer (Cumming 2012.) and even less on the incentives and barriers to youth volunteers in less developed countries.

Despite the challenges and threats that millions of people face, we must recognize that people, including young people, in hazard-prone communities are themselves agents of change. Helping communities to reach their potential requires new models of working together to address the barriers to resilience. It is now a matter of collective responsibility, collective action and collective accountability. While we cannot prevent another tsunami, we can build better safeguards that will offer greater protection for future generations. (Konoé 2015). There is indeed huge potential in youth volunteers and it is critical that the challenges they face in their efforts are minimized and enhance their capacities to be effective contributors in their endeavors.

4. Disaster management

Traditionally disaster management has been dominated by top-down relief efforts assuming children and youth are passive victims with no role in disaster preparedness and response. Involving youth in disaster preparedness process not only benefits them, their families, and communities, but also contributes to grassroots empowerment, which boosts levels of ownership within their overall disaster preparedness plan (Omoto & Snyder 1990). Research has indicated that when young people receive preparedness training they are more likely to act wisely and protect themselves against abuse; exploitation and illegal drug trafficking (UNICEF 2011).

Though disasters are a local phenomenon, in these modern days their devastating impact can be felt beyond borders of impacted nations in terms of human, material losses or the flow of refugees. It is therefore, important that the disaster reduction efforts be addressed in a multilateral and comprehensive way. These unforeseen disasters require immediate, coordinated and effective response by multiple government agencies, volunteers, relief agencies and private sector in order to meet human needs and speed recovery efforts. Comprehensive disaster management and emergency preparedness should be based on the concept of active young people's participation in all phases of the disaster cycle. Rather than seeing disaster-affected youth as victims or passive recipients of outside assistance good disaster management must recognize the value of including them in the planning process. There is no better resource in a community than young people. It may be easier to obtain funding for projects and related disaster preparedness programs, but without sufficient community resources in place, disaster preparedness and risk reduction are not possible. Resource building enhances community capability and provides positive response to various emergencies; reduce disaster risks, and helps foster confidence, dignity, and resilience (DAPOTA 2015).

5. Group Discussions and Interviews

Primary data were gained through conducting two group discussion programs with youth volunteers from

Youth's UNESCO Club, Nepal and Engineering Adda Nepal who were engaged in disaster programs. Two key informant interviews were held with the President of Youth's UNESCO Club, Nepal, and the head of the Disaster Response Department, Ministry of Health and Population. Information collected for case story was done through in-depth interviews with youth volunteers.

The data of both discussion and Interviews were collected and documented in Nepali Language in a standard form and were translated in to English. The area sselected for the study were in Kathmandu city, Bhaktapur city, Sindupalchowk and Ramechhap district. The selected participants for meetings and other activities are active volunteers of emergency relief and some are still working for the rehabilitation and reconstruction. One group discussion was conducted when volunteers were attending an award giving ceremony at the city office and one when volunteers attending a meeting at the headquarter. The second group discussion was conducted at a school in Sindhupalchowk with volunteers of that area. Some of the interviewees also did relief work across Nepal.

Zhang and Macer (2013) surveyed opinions of what volunteers in two programmes, YPA and LBD, thought about volunteerism. The area of volunteer retention and the analysis of what practices encourage renewed volunteerism and why people continue to volunteer is also an important topic (Hager 2004 and Gidron 1984). Some of the management practices that positively influence the retention of volunteers include recognition activities and matching volunteers to appropriate tasks. (Gidron 1984), for example, cites task achievement and the quality of the work itself as some of the variables that could better predict volunteer retention.

Each of these areas of research reinforces the observation that volunteers play a vital role in the provision of assistance in humanitarian relief situations. The manner in which they do so, and the specific characteristics of their participation in relief efforts play an important role in the development. Young people and children must therefore be prepared and trained in all matters pertaining to disaster response. They can use this knowledge to save their own lives and even defend their communities' livelihood (DAPOTA 2015).

6. Summary of Group Discussions

A total of 38 youth volunteers participated in the group discussion. The age of the volunteers ranged between 16 to 32 years. There were twenty volunteer's age between 20 to 32 years and 18 in the age range of 16 to 19 years.

The volunteers in their twenties were mostly involved in search and rescue work and the rest are new volunteers among them few participated in search and rescue work. Most of them are students of undergraduate programmes in different areas. Four had already graduated a few years ago. No one among the volunteers was below school level. Eight female volunteers participated in the group discussion session. None of the female participated in search and rescue work rather they preferred the post disaster relief programs. Figure 6 shows the data showing the number of participants.

Most youth joined Youth's UNESCO Club, Nepal volunteer programs because of their own interest. They were motivated to become volunteers to serve humanity and vulnerable people. Some were motivated through learning and seeing various Youth's UNESCO Club, Nepal volunteer activities i.e. Education Material Distribution programs, blood donation programs, volunteer work at schools, and disaster responses. Some came to know of it from friends and family members and from the different media.

Most expressed that they liked search and rescue work in disaster response. Some expressed that helping disaster-affected people is rewarding and gives them inspiration to serve people in crisis. They shared that after rescuing or providing service to see the relief in the person or the people is highly rewarding. Also through these sort of work they develop friendships among fellow volunteers. To work together side by side without race and class is rewarding. They feel, as they are unable to help people financially but being a member of Youth's UNESCO Club, Nepal they can provide relief goods and help people. They feel that with their support lives can be saved and bring a smile on someone's face. To be able to work selflessly for the vulnerable because it brings out the humanity in them and they feel it is their duty and responsibility, were also mentioned.

According to them it is a special feeling that cannot be expressed in words. Not everybody gets the opportunity. Being a volunteer they are able to work directly with the affected people. All expressed that it is highly rewarding when the support saves ones life or change someone's life for the better. They feel service is human religion.

Discussing about the constraints some mentioned there is lack of quality, appropriate and international level training. Not getting adequate Personal Protection Equipment (PPE), logistics and safety security for the work did occur. There is risk of life, physical injury and psychological problems. Some are concerned that they do not have life insurance when they do it.

There is also sometimes a lack of coordination, nepotism, wrong attitude, and inequality in the work. Some expressed that they do not like to do something unnecessary against their will e.g. when law enforcement authorities and others order them to do things for them. They expressed it is difficult to work independently.

They mentioned about inequality between male and female volunteers. Opportunity, permission from families, social stigma/ status and time varies between male and females in Nepalese culture. This is not fully understood and addressed properly by the organization. Also, sometimes it is difficult to work independently. Sometimes, it is difficult to manage time when work opportunity comes.

They are concerned that many people do not know about volunteers and their work. As people do not know much about the role of the volunteers different people react differently towards them. This creates problem for them, especially during emergency disaster response. There is a lack of media coverage.

They feel proper training including practical training is crucial for volunteers to do their jobs properly. They feel it is important to get advanced training in life saving techniques. They suggested developing volunteers at all levels and provide appropriate training. Separate

training for natural disasters, accidents and during normal situations, should be conducted. Training for Law enforcing authorities to be respectful towards volunteers is also important. They also mentioned about skill development training and creating employment opportunities for them. Personal Protection Equipment (PPE) should be ensured for all volunteers. Proper transport, other logistics and food are important factors for the work needs to be ensured as well.

The groups felt that the authorities in the organization should be involved in explaining to families of volunteers about their work risks and opportunities. Social awareness activities should be undertaken to convince families of volunteers about their work and their contribution. The authorities in the organization should know the problems faced by them. They expect a pleasant attitude towards volunteers from the organization and from their peers.

They also feel that there should be life insurance for volunteers. Safety should be ensured for volunteers so that when they go for work they do not become victims. There should be more motivation and development of their confidence and other skills at work.

It is important to receive of recognition and respect. There should be more awareness raising activities about humanitarian volunteers. Through raising awareness people will understand the importance of their work. There should be more media coverage to let people know about volunteer's contribution in the communities and for the country.

One female volunteer expressed to perform her duties sincerely it is important that the Club should be more sensitive towards female volunteers. Being a woman volunteer she has to go through many restrictions. Especially over her mobility and work hours. Another female volunteer expressed that volunteers needs to be more motivated and inspired. There should respect for women's dignity.

While doing voluntary work they face many problems. These problems need to be informed to all concerned. There should be recreational arrangements for volunteers.

For a few new volunteers blood donation work is memorable. Many of volunteers stated the education material and temporary school construction part was the most enjoyable and memorable part of the Volunteering.

Several mentioned the the Earthquake incident was the most haunting life experience they had ever experienced. They expressed rescuing the buried people inside the destroyed houses was very hard when the aftershocks were still present. They expressed that they couldn't stand the smell of cadavers in the destroyed zone. The smell reminds them of dead bodies. Some volunteers expressed that the incident still haunts them.

There were a few differences between Youth's UNESCO Club, Nepal volunteers and other volunteers. All volunteers feel that they are independent and organized, and time to time they receive training. Their relationship with seniors is less formal compared to other agencies, which is a point valued by them. They are proud of their logo, uniform and ID, these help them to work easily. They consider they can work more actively and with courage compared to other volunteers. They have good relationship with other volunteers.

As a result of training they feel their attitude, behavior and service make them different from others. Compared to other organizations they consider that they are better in managing dead bodies. They feel others are not friendly, but they are friendly and disciplined. The major difference is that only they can provide immediate response to work with the government national fire service.

7. Summary of Interviews

Interviews with Mr. Nirmal Karki, Secretary of Youth's UNESCO Club, Nepal and chief of the Volunteer Department, and Mr. Dipesh Pandey, Technical Director, Engineering Adda Nepal, Kathmandu, revealed that they are moved to see the motivational level and spirit of the volunteers. In many cases, the volunteers work in adverse situations but they normally do not complain unless there is serious problem. They feel that by getting involved in volunteer activities creates a positive attitude towards life. The volunteers tend to be more disciplined and have increased sense of responsibilities than non-volunteer youth. Through the work they are positively engaged and their time is well spent. As they are busy working as volunteers, it prevents them from getting involved in different types of crime and delinquency including getting drug addiction and drug abuse. These youth tend to be confident and motivated to make a positive change in their communities and for the nation. Their work marks a positive impact throughout their life.

Discussing the constraints, Mr. Karki mentioned that keeping the volunteers occupied throughout the year is a difficult. Although there are various activities undertaken by the volunteers, keeping them involved throughout the year is still a challenge. Especially, volunteers who are specialized in DRR because disasters are not something that they want to occur. Unavailability of work can be demotivating factor for the volunteers who are very much eager to work.

Both are working on improving training and capacity building of the volunteers. They also mentioned the shortages of PPE, proper transport, other logistics and food are other important factors for the work. Monitoring routine work of volunteers is difficult due to shortage of monitoring staff. The purpose of the monitoring is not policing but to facilitate to find out how the volunteers are working, what problems they are facing and how they can be improved.

8. Reasons to Become Volunteers

Most youth joined the volunteer programs because of their own interest. Doing something meaningful and helpful is a key motivator and the opportunity to gain skills and work experiences are important as well. It was observed that they wanted to use their free time to do something meaningful and contribute their efforts to serve humanity. They believe that doing volunteer work has a positive impact on one's personal development. They also feel that this practice will enhance their personal skills, i.e. confidence, courage and create employment opportunities. According to the respondents the most important reasons for volunteering were to help humanity and their

community. In addition, to learn new skills and to gain experience to benefit their future career.

There are multiple benefits from volunteering (Hall et al., 2008). A national study of university students in England found that respondents gave both altruistic and instrumental reasons for volunteering (Holdsworth, 2010). Research in US found that volunteering could enhance students 'academic development, personal skills development, and sense of civic responsibility. Benefits were also associated with career choice and employability after graduation (Astin and Sax, 1998).

The U.K.'s Russell Commission 2005 highlighted the importance of an employability agenda for young people. Instrumental motives and benefits—such as those relating to career development—dominate the volunteering discourse as students recognize the need to build their personal capital (Holdsworth & Quinn, 2010). However, these career-related factors exist alongside a variety of other motivations and benefits.

Globally most volunteers are motivated on their own. Findings through discussions and interviews it appears that there is an inner curiosity and interest among youth that motivated them to become volunteers. They are eager to be engaged in something meaningful at the same time to develop their confidence and other skills. The high spirit of the youth is imperative for a community and a nation. It is critical that the youth power is positively nurtured and developed for them to become excellent human beings, responsible citizens and brilliant future leaders. The potentiality is there and an opportunity to enhance their capacity is crucial for any country.

According to the study "A Functional Approach to Volunteerism: Do Volunteer Motives Predict Task Preference?", a central premise of the functional approach is that the same behavior may serve different functions for different individuals. Results suggested that people idiosyncratically differentiate tasks based on the motives they satisfy. Furthermore, when given a choice, individuals prefer tasks with benefits that match their personally relevant motives.

The Value Function refers to concerns for the welfare of others, and contributions to society. This function has been likened to altruism (Clary & Miller, 1986), the value-expressive attitude function (Katz 1960), and the quality of expressiveness (Smith et al., 1956). A study by Anderson and Moore (1978) provided empirical evidence for the values function. Over 70% of the respondents endorsed —to help others as a reason for volunteering. Findings from the FGDs shows most preferred search and rescue work in disaster response. The respondents feel this work is rewarding and highly satisfying which cannot be expressed in words. This relates to the above study. According to the groups not everybody can do what he or she are able to do. All expressed that it is highly rewarding when their support saves one's life or change someone's life for the better.

The functional approach, volunteerism may serve more than one motive for an individual and likewise, more than one motivation may be served within a group of volunteers who are performing the same activity. Past research has found that people do differ on their motives for volunteering (Omoto & Snyder, 1990). Findings from the study suggest that, where possible, more freedom

should be given to volunteers in choosing specific tasks. People prefer tasks they think will satisfy causes important to them. Thus, letting volunteers perform tasks with benefits that match their primary motives should result in a positive volunteer experience, an outcome favorable to all involved. I echo with the statement of the study. "Thus, letting volunteers perform tasks with benefits that match their primary motives should result in a positive volunteer experience, an outcome favorable to all involved." (Hoyle et al., 2005).

The Understanding Function in which volunteerism gives an opportunity to learn, understand, practice, and apply skills and abilities. This function is related to Katz's 1960 knowledge function and (Smith 1956) object appraisal function. In support of this function, (Gidron 1978) found that young volunteers (high school and college students) tended to view their volunteer work as a learning and a self-development experience. Findings showed that by getting involved in volunteer activities it creates a positive attitude towards life. These youth tend to be confident and motivated to make a positive change in their communities and for the nation. Their work marks a positive impact throughout their life.

The Protective Function refers as volunteers to reduce feelings of guilt about being more fortunate than others, or to escape from one's own problems. This function could be likened to (Katz 1960) ego-defensive function, (Smith 1956) externalization function, and (Francies 1983) need to express feelings of social responsibility (SR). Schwartz (1970) found support for the protective function in his study of volunteering to be a bone marrow donor. It was observed that the respondents feel they are fortunate than others and feel responsible to contribute in helping the less fortunate or people in crisis. The feeling is more of social responsibility rather than guilt feeling or escaping from their own problem. The great personal responsibility was apparent among the volunteers.

The Career Function may serve to increase one's job prospects and enhance one's career. For example, Beale (1984) suggested encouraging students to volunteer as the experiences may serve as stepping stones to employment. Findings from the group discussion and Interviews show that the youth group considers volunteer work enhances multiples skills for their future careers.

The Esteem or Enhancement Function serves to enhance one's self-esteem, self-confidence, and self-improvement. Results of studies have found support for the esteem function. For example, volunteers working in mental hospitals showed an increase in self-acceptance as a consequence of their volunteer participation (Holzberg et al 1970). My observation is that there is a distinct difference between the volunteers and non-volunteers of the similar age and social groups. The volunteers are clearly more confident, disciplined and have increased self-esteem. The groups and Interview stated how the volunteer work enhanced their confidence level, self-esteem and self-improvement.

A Psychological Strategy for understanding the motivational underpinnings of volunteerism is also involved (Clary et al., 2006). The aspects of a task that would match the volunteer's motive may not always be immediately evident. Where realistic, such

motivationally relevant benefits could be identified for volunteers. If the targeted tasks do not address the salient motives of volunteers, some attention can be given to incorporating those benefits into the task if not initially present. The investment of a relatively small amount of time and effort at the beginning of the volunteer process could return many dividends in terms of the satisfaction and commitment of the eventual volunteers.

Motivators are often categorized as either intrinsic or extrinsic. Intrinsic motivators exist without regard to external rewards and align with personal motives and values. These motivators include empathy, altruism, pride, and a desire for self fulfillment. Extrinsic motivators are generated from external rewards and include money and opportunities for employment, non-monetary material rewards (such as bicycles and uniforms), and non-material rewards, such as heightened social status and increased knowledge. (Bhattacharyya et al 2001).

9. Constraints

The respondents feel that there is a need for adequate, proper, practical, international level and advanced training including life saving techniques. There should be separate training on natural disaster, accident and normal situation. There is also inadequate equipment and logistics support for some of the work. The organization must ensure proper gear and required logistics for the volunteers especially in the case of emergency response.

The respondents feel that authorities need to be oriented or trained to be respectful towards volunteers. In this regard, since 2010 the training department, in collaboration with the International Committee of the Red Cross (ICRC), has been conducting First Aid and Search Rescue training for the members of Nepal Police to enable them for providing first aid and emergency humanitarian services during their duty and as when as necessary. Youth's UNESCO Club training department can take this opportunity by incorporating sessions on volunteer's work to sensitize the target trainees.

The respondents feel they do not have the freedom to work independently. Sometimes, however, such flexibility is not possible; organizations may have a limited number of activities available for volunteers. In most cases volunteers working with any organization are bound by the policies/regulations to work according to the organization requirements.

The lack of work freedom meaning it is difficult to work independently and express one's opinion. My understanding is that work freedom for volunteers is something that may not always be ensured by the organizations. The organization has to follow through the rules of business, polices and that is how things work. These need to be clearly communicated to the new recruits during their induction so that they a have clear understanding of what is expected from them; to what extend their work independence will be allowed and how they will work. In regards to freedom of expressing opinions it was clearly evident that the senior leaders dominated the juniors, however many new recruits had very clear understanding of their work and expressed their opinions about inequality openly in front of their

seniors. However, there is clear distinction of hierarchy in power relation. Most of the respondents expressed the presence of nepotism and wrong attitude from senior and fellow volunteers. Some expressed they are looked down upon (*heo chocke dekha*). However, when asked what type of nepotism and wrong attitude they meant, it seems they did not want to talk about it further. These sensitive issues need to be addressed with the concerned officials and come to agreed solutions through dialogue and consultations.

In many cases work assigned to volunteers may not match with their skills, experience and expertise, this needs to be carefully considered by the organization authority. In such instances, it is suggested volunteers be given the similar tools to determine which motive functions are relevant to the volunteers. This needs to be clarified to the volunteers by the senior authorities as to why they are particularly assigned for particular work. What the organization is able to provide them and if new volunteers are interested to work in the proposed areas. The clarification must be there from the beginning. However, in relation to disaster response if the organization does not have structured rosters for duties/responsibilities there is every possibility of confusion and chaos during response, which can lead to low and dissatisfactory performance.

The respondents expressed that the Club authorities should be involved in explaining to families of volunteers about their work, safety and time. Families are concerned about their wellbeing when they go to emergency response work. Families worry about the physical and emotional risks that may affect them. Also, the timing, usually emergency response work requires long hours much beyond normal work hours. A process is being further identified through workshops and other modes by involving family representatives, volunteers and senior officials.

A number of studies have found evidence of poor information sharing and coordination in inter-agency disaster response situations (Dawes et al. 2004). In regards to coordination information technology is essential to improving information sharing and decision-making for emergency responders as it has already drastically reshaped the way organizations interact with each other (Yang and Maxwell 2011). Technological aspects of Inter Organizational Information-Sharing Systems (IOISS) can enable or impede the coordination and sharing of disaster-related information. High levels of integration and use of technology are likely to result in high levels of information sharing. On the other hand, forwarding all the available information to every individual involved in the disaster response effort will result in a serious information overload. IT can be used appropriately to make sure that everyone receives the relevant information at the right time.

Currently, for emergency response SMS/text message has been the main mode of communication for the Youth's UNESCO Club volunteers. This is highly useful, user friendly and most available communication tool for disaster risk reduction volunteers in Nepal.

Informal education involves disseminating standard messaging but with the flexibility to accommodate the needs and concerns of specific local audiences. This is particularly effective because peer information, social

proof and social support are vital to shifting human behavior. Volunteers are leaders and role models that offer powerful examples as they engage the wider public. Tools focused on stimulating discovery and problem solving allows scope for endless creative activities and materials to appeal to various target-audience segments. There are many facilitation tools from the IFRC's Community Based Health and First Aid in Action initiative are familiar models, including the facilitator's guide. Other examples include the Caribbean Red Cross Societies' Better Be Ready campaign kit and expect the Unexpected: Facilitator's guide by the Canadian Red Cross.

The group is concerned that many people are not much aware about volunteers and their work. As a result different people react differently towards them creating problem for them at work. Lack of media coverage is a concern. In early 2015 Ministry of Education of the Government of Nepal has introduced the Red Cross Movement in all secondary and higher secondary level institutions (6th to 12th grade) as co-curriculum. This is remarkable to reach children, youth and families to learn about the Red Crescent Youth movement.

In terms of social problems there is still inequality between male and female volunteers from the organization and in society. Women and girls are invaluable in disaster risk reduction and climate change adaptation processes if real community resilience and significant reduction of disaster impacts are to be achieved. Women must always be part of policy, planning and implementation processes.

It was clear from discussion that female volunteers were less involved in emergency disaster response. Although there are remarkable contributions by courageous Youth's UNESCO Club female volunteers, until now, not many women are included in this work. This is due to the nature of the work, long hours away from home and lack of training in emergency response. The barrier is from both sides; from the families of the women as well the organization. Women in the groups expressed their high interest in working in challenging situations. They are currently mainly involved in organizing cultural events, blood donation camps etc. There is no clear guideline in Youth's UNESCO Club in regards to gender roles in volunteer involvement in disaster situations. This is an area that the organization can look into and involve female volunteers in challenging work that they can do. There is a high demand for female volunteers in emergency response in regards to providing support to women, children, adolescent girls, elderly and differently able people. They are good in proving psychosocial support, engaging children in different activities, looking after misplaced children & adolescent girls, women and the elderly.

It is important to receive recognition and respect. Awareness raising about volunteer's humanitarian work should be increased. Through raising awareness people will realize importance of the work. More media coverage to let people know what volunteers do.

One female volunteer expressed to perform her duties sincerely it is important that the Club is more sensitive towards female volunteers. Being a woman volunteer she has to go through many restrictions. Especially, her mobility and working hours. Another female volunteer

expressed that volunteers need to be more motivated and inspired. There should be respect for women's dignity. While doing voluntary work they face many problems. These problems need to be informed to all concerned. There should be recreational arrangements for volunteers.

10. Conclusions

The willingness of volunteering is critical for the success of disaster risk reduction projects. While much literature documents the challenges of participation in community based projects, very little has been written on the motivations of those who volunteer, and even less on the incentives and barriers to youth volunteers in less developed countries.

Disasters are on the rise and youths in the communities are the first ones to respond. Youth in Nepal have played a crucial role in responding to the earthquake from clearing rubble to mobilizing their networks to support relief efforts and providing emotional support. They present their potential in building the community in terms of response, preparedness and recovery are crucial for the successful Disaster Risk Reduction Projects. Comprehensive disaster management and emergency preparedness should be based on the concept of active young people's participation in all phases of the disaster cycle. Rather than seeing disaster-affected youth as victims or passive recipients of outside assistance, good disaster management must recognize the value of including them in the planning process.

There is no better resource in a community than young people. It may be easier to obtain funding for projects and related disaster preparedness programs, but without sufficient community resources in place, disaster preparedness and risk reduction are not possible. Resource building enhances community capability and provides positive response to various emergencies; reduce disaster risks, and helps foster confidence, dignity, and resilience. In this regard volunteer work requires further attention to contribute in the disaster management in a more efficient way.

While searching for information and data for this research it was found there is lack of data on volunteers in disaster risk reduction. It is time the country to start initiating a centralized and coordinated data base system for the government to develop policy and strategy and guidelines. This should be carried out in consultation with local, national and international concerned agencies. Further research in this sector is needed for future planning, designing and implementation of comprehensive disaster management programmes. The vigilance and determination of the volunteers to save lives reminds us how the timely and skillful response of the youth volunteers made a difference in one of the history's worst disasters and how well they were appreciated by the people they have helped. Volunteers should be rewarded for such heroic work they do. It does not necessarily have to be monetary; there are various ways to rewarding. Promoting their contribution through media, organizing award-giving ceremonies, certificates, sending them to other countries to share their stories and learning etc.

As the response for why youth choose to become volunteers, what were the real motivating factors for becoming a volunteer? What are the barriers and what is their expectation from the organization, families, general people and the government. It is important to recognize them and address issues that need attention.

Available time, easy access to clear information about opportunities and what they involve and the recognition that they are doing something useful are important in enabling and encouraging volunteering. It can build on what is known to be effective, for instance if volunteers are most often recruited through word of mouth, a programme could be run to train existing volunteers as ambassadors for volunteering.

It was great to see the high spirit of the volunteers at the same time this is actually the expected spirit of volunteers. It was touching when they expressed that "We are more fortunate than others and feel responsible to contribute in helping the less fortunate or people in crisis. No other people feel that way."

Quality, duration/number and practical training are limited for the Youth's UNESCO Club volunteers as the respondents mentioned. Although Youth's UNESCO Club Training Department is facilitating various training maybe due to the huge numbers of volunteers 'adequate appropriate training is still to grow. It is important that Youth's UNESCO Club conduct training needs assessment for the volunteers; review their current training courses, course curriculum for further advancement of training. These can be done through a series of workshops, consultations with volunteers, experts, trainers and the concerned authorities.

Additionally, the volunteers wished for skill development training in different trades/areas for future career opportunities. My understanding on this issue is that Youth's UNESCO Club may not have the scope of directly providing technical skills development training as this not their area of business. In this regard, there are agencies providing skill development training as well as professional development programmes. Youth's UNESCO Club can facilitate linking the interested volunteers with technical skill development agencies through a special Memorandum of Understanding (MoU) with the concerned agencies. Also, there should be provision of clear understanding among the volunteers what/how the organization can add value to their future career development. Normally, people with volunteer background tend to have better career chances than non-volunteers of similar education and social background. As mentioned earlier volunteer experience has the possibility of serving as a stepping stone to employment.

The leadership in volunteer organization needs to be active in recruiting volunteers, inspire and persuade them to get involved. Each leader needs to mentor their replacement for the continued success of the organization. Volunteer recruitment should be a constant activity and be an important element of the agenda. A planned, organized look of the recruitment package reassures the potential volunteer that the organization is reliable, solid, capable, to put their time and talents to good use. There was a significant positive influence of the training provided by the Youth Looking Beyond Disaster (LBD) program on some senior club

members prior to the earthquake, that led to enhanced effectiveness of the whole club's response.

Visibility of their work is important for their own satisfaction, sense of achievements and informing public about actually what and how they work. A motivated, reliable team of volunteers is not something that just happens; it is the product of a focused, well-planned recruitment and development effort. A strong brand reassures potential volunteers that the organization they are considering is reliable and worthy of their services. Although, Red Crescent/Red Cross Society is well known Youth's UNESCO Club volunteers. However, there are areas needing improvement. There are various ways of raising media coverage in this era of media, communication and advocacy. There is huge opportunity in using print, electronic and social media appropriately by utilizing professional expertise in this area.

Many women were included in emergency disaster response to work. According to the groups this is due to the nature of the work, long hours away from home and lack of receiving skills training in emergency disaster response. The barrier is from both sides; from the families of the women as well organization still not well prepared to involve women in the work due to high risk. The women in the groups expressed high interest in working in challenging situations. They are mostly involved in organizing cultural events, blood donation camps etc. There is no clear guideline in Youth's UNESCO Club in regards to gender roles in volunteer involvement in disaster situations. This is an area the organization can look into and involve female volunteers in challenging work that they can do. There is high demand of female volunteers in emergency response in regards to providing support to women, children, elderly and differently able people. They are good in providing psychosocial support, engaging children in different activities, looking after misplaced children, adolescent girls, women and the elderly and food distribution along with other work.

It is important to understand and recognize the contribution and economic value of volunteers. The volunteers themselves should have the understanding about the value of their contribution as well.

Finally, findings from this study indicate high motivation and dedication in the Youth's UNESCO Club volunteers. They are proud to be Youth's UNESCO Club volunteers. Although, they shared constraints in different aspects of their work they are proud of their logo and their identity. They feel, their training, discipline, attitude and behavior make them unique. They are well aware about Youth's UNESCO Club volunteers renowned worldwide for disaster management and other voluntary work. It makes them proud to be part of this famous global team. This is essential for any volunteer, any organization involving volunteer and nation in contributing humanity.

There is a strong call for a bottom-up process in which young people's voices are included and youth are actively engaged in the process, and volunteering is a viable mechanism for this. It is now a matter of combined responsibility, mutual action and collective accountability that volunteers are recognized for their contributions. Their needs are addressed for them to accomplish their efforts successfully.

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