Roots of Population Aging and Gerontology: An Asian Perspective

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Abstract
The present research indicates how indispensably change in population variables takes place; the trend that eventually leads to longer life expectancy and as a result aging. Out of such constant change’s gerontology emerged the science evolving out of the improvement in longevity. So, we must always be prepared for more aging people. Countries like US in the year 1900 had only 4% of people aging 65+, and in 2000 the country had 14% of aging people. Public policies, medical services, improvement in food items, education, safe piped water and many more contributed to declining death rate; resulting in longer chance of life. Though aging increase first happened in advanced world, yet it has emerged in Asia in the past few decades too. However, though aging is increasing, yet many Asian countries are facing age-related issues shortage of pensions for the elderly people, shortage of nursing homes, lack of knowledge of the science of gerontology etc. What the Asian countries need is getting identified with behavioral gerontology and application of behavior analysis. What many aging people face at this stage of life is dementia and Alzheimer’s disease. They show aggressive behavior in many instances too. The method of research used in the present paper is of qualitative type. Similarly, it is concluded that due to the inevitable changes constantly appearing, change in population patterns appears too.

Keywords: Population variables; Longevity; Gerontology; Aging; Public policies

Introduction
Change is an inevitable part of our lives through different stages. In population science, change is through childhood, teenage, adulthood and old age. and through such process, people usually access primary, secondary, and partly tertiary education. Such developments bring about further changes for the population. Likewise, human population has witnessed the transformation of human society from preliterate to modern literate societies. Human societies have also evolved from primitive hunting and gathering stages to agrarian industrial societies followed by the stage of post-modern society. Cultural change and civilizations have also appeared and disappeared throughout the history, or so to say, history has witnessed a large number of rises and falls. Human beings have widely witnessed changes in their productivity and childbearing increasing births, in creasing deaths and migrations. Therefore, human society has ever almost been dynamic and not static. The entire such process has always been accompanied by social problems for the human society. Thus, the human society ever needs adaptive strategies to solve the created problems. Here in the current research, some of the population problems will be analyzed in sociological terms. Tough first the social or population change occurred to the Western Europe in the 18th and 19th centuries, yet later it happened to Asia as well. However, it should be kept in mind that the study of population helps the improvement of many other disciplines. Updated data of surveys and censuses help educationists, food suppliers, housing planners, environmentalists and many more areas.

Method of Research
Methodology used in the current research is a combination of procedures in qualitative context. More broadly, qualitative method which is increasingly a popular method of research in social sciences has been applied to do the research. To conduct the present research, the following techniques and tools have been employed:

A. Books, documents and other relevant sources of information.

B. Observation: The researcher used this method too, through visiting people and institutions to delve the data needed to build up the article.
Another problem originating from population large size is known societies are not able to cover the educational needs of some parts certain groups of population in Asian societies. Many such would include de-schooling and de-skilling observed within poor housing, poor health, and access to inferior education. appeared [5]. Thus, low income or unemployment would culminate or so to say, an inequality of access to social goods and services (Wrong, 1966); [4]. So, after the population increase, deprivation the declining death rate, rapid increase in population size emerge. In the first stage death rate began to fall, followed by improvements in nutrition, food supply, food distribution, and improvements in health standards and sanitation. Since the birth rate continues to remain high relative to the declining death rate, rapid increase in population size emerge (Wrong, 1966); [4]. So, after the population increase, deprivation or so to say, an inequality of access to social goods and services appeared [5]. Thus, low in come or unemployment would culminate in poor housing, poor health, and access to inferior education.

Other problems emerging from increasing population size would include de-schooling and de-skilling observed within certain groups of population in Asian societies. Many such societies are not able to cover the educational needs of some parts of their populations, and that would lead to a cycle of poverty which ultimately leads to not having access to professional skills. Another problem originating from population large size is known as deviance. Creation of a spiral of deviance increasingly becomes problematic and repeated in an amplifying manner. Therefore, population needs to be controlled quantitatively and qualitatively [6]. Deviant behavior also as observed in the society as a result of deviant behavior could be reflected in drug offenders. Countries with a surplus population generally face a problem [7].

Economic phenomena
Economic sociology as a broad field of sociology covers many substantive economic phenomena, is widely related to quantitative and qualitative population. It includes all aspects of the economic activities of individuals and groups, consumption, leisure, economic effects of different cultures, markets, economic institutions etc. Size and structure of population is highly related to the nature of economic life. At present, and in consuming societies, countries need to have the population that can be materially and non-materially fed and adjusted to the economic construct of the relevant society. However, contemporary economic sociologists advocate a sociological analysis of all economic issues. Similarly, a comparison of economic sociology with economics helps define the sociological approach.

Fertility
Natural fertility is the fertility which exists in the absence of any deliberate birth control. On the other hand, the fertility which involves a deliberate use of birth control, is the practice currently taking place. After industrialization increasing number of methods of birth control have emerged, and by the means of which a great number of births have been prevented such as abortions, sterilization etc. Many of such methods have been used in Asian countries since 1950, and if not, population would have been much more, while death rate has highly fallen. Therefore, fertility refers to the actual reproductive performance applied to an individual or a group. On the other hand, fecundity refers to capacity of a man, a woman, or a couple to participate in reproduction (i.e. the reproduction of a live child). Fertility can be measured through birth rate. Fecundity however cannot be measured. It refers to the maximum fertility level that can be attained. However, those who have not produced any child are called sterile. In modern time, as many young people marry late, the rate of sterility has gone up in many parts of Asia. Family size was large in the past and in previous generations since more fertility used to happen and the average marriage age was lower than the current time.

Death rate
Crude death rate is the number of deaths per 1000 population per year. In modern time, due to improvements in medical sciences and medical services, death rate has decreased. Under such a situation, people have found better chance to live longer. This is the main root of increasing life expectancy, and as a result, increasing aging people emerge. Now that the birth rate and death rate have mainly narrowed, many countries are facing low rate of natural population increase. This phenomenon happened to the Western world earlier than Asia. The result of the phenomenon is higher...
quality of life for them, and increase in per capita of many items and essentials from food to housing etc.

Migration

The most important component of population change, other than mortality and fertility, is migration. Migration mainly happens due to economic reasons followed by political reasons. Currently other reasons have contributed to migration to take place such as environmental, drought and the like. Migration increases with industrialization and improvement in transportation the main cause being economic. Migration is a consequence of (negative) push and (positive) pull factors. Migration is intensifying due to population increase in the Third World countries. It has persuaded the political decision-makers to gather and decide about it. Low wages in developing countries is motivating increasing number of people to migrate to the industrial countries as a pull factor.

However, the character of migration is changing with globalization, labor market, and the graying of population of the advanced countries. The study of migration is important due to the following reasons:

A. It determines the size and rate of population growth as well as its structure and characteristics.
B. It decreases or increases the size and structure of any population drastically.
C. It plays an important role in the distribution of population of any country. Thus, it is useful in preparing regional projections.
D. It determines the growth of labor force in any area.
E. It is the symptom of basic social change in any country.
F. It is related to business cycle, supply of skilled and unskilled workers.
G. It is the basis for the analysis and solution of social and psychological problems arising out of population changes, particularly large-scale migration.

According to United Nations Multilingual Demographic Dictionary, "Migration is a form of geographical mobility or spatial mobility between one geographical unit and another generally involving a change in residence from the place of origin or place of departure to the place of determination or place of arrival" [8]. Migration defined here is permanent type as distinguished from other forms of movement future status. The above-mentioned countries of Asia and many more will be facing increasing problems of housing, employment, food supply, environmental degradation, migration, family breakdown and many more socio-economic problems. However, many more unpredicted problems may emerge for the increasing populations of those countries (Table 1). What such countries need is futurology to look at the future possibilities based on current trends. At the time being, countries must see their positions for the mid of 21st century, and if not, they will face various challenges and hardships at that time.

Table 1: Selected population variables of some Asian countries 2019.

| Continent/Countries | Population (Millions) Mid-2019 | Births Per 1000 Population | Deaths Per 1000 Population | Rate of Natural Increase (%) | Population (Millions) Mid 2050 | % Population Ages 65+ | % Urban |
|---------------------|-------------------------------|---------------------------|---------------------------|----------------------------|-------------------------------|----------------------|--------|
| Asia                | 4.587                         | 19                        | 6                         | 1.3                        | 5.344                         | 9                    | 49     |
| Saudi Arabia        | 34.2                          | 16                        | 3                         | 1.3                        | 47                            | 3                    | 84     |
| Turkey              | 82.6                          | 15                        | 5                         | 1                          | 104.6                         | 9                    | 75     |
| Afghanistan         | 38                            | 33                        | 7                         | 2.7                        | 70.7                          | 3                    | 25     |
| India               | 1.391.9                       | 20                        | 6                         | 1.3                        | 1.669.7                       | 6                    | 31     |
| Iran                | 83.9                          | 19                        | 5                         | 1.5                        | 113.3                         | 6                    | 74     |
| Pakistan            | 216.6                         | 29                        | 7                         | 2.2                        | 368.9                         | 4                    | 37     |
| Philippines         | 108.1                         | 11                        | 6                         | 1.5                        | 144.5                         | 5                    | 47     |
| China               | 1.398.0                       | 11                        | 7                         | 0.4                        | 1.367.4                       | 12                   | 60     |
| Korea S             | 51.8                          | 6                         | 6                         | 0.1                        | 47.7                          | 15                   | 82     |

*Source: 2019 World Population Data Sheet.

One of the most important institutions of mankind has been family during the human history. So, if conditions and settings are not favorable, the stability of institution will be in danger, and so poverty and deviance will emerge leading to other issues. Such circumstances will not only happen to Asia with 60% of the world population, but to Africa to a larger extent. Therefore, countries need to pay high attention to their population trends. Countries like China and South Korea have well planned their populations and attained their goals. So, other countries in Asia may follow suit. Sociology as the basic study of society emphasizes on attaining social order, and it could be achieved only if we have an orderly stable population, stable families and satisfactory economic patterns. Sociology of development involves the perfect perspective of population in Asia. So, the application of sociological concepts
and methods to the analysis of the production, exchange, and consumption of goods and services is highly related to population quality and quantity [9,10].

Conclusion

As inevitably changes emerge in human life, population policies and plans are needed to be put into action. Dynamism of human society needs populations adaptive to resources, and if not, the human population will face challenges and poverty in various contexts. Population patterns always need to be monitored, appraised and analyzed especially when electronics is substituting the human power and skills. Asia currently having over 4.5 billion population, is facing increasing problems of employment, food supply, shortage of water resources, inevitable migration, environmental degradation, pollution and many more problems. Other issues faced by Asia include aging, early marriages, and late marriages in increasing instances. Social pathologists are concerned about the problems and abnormalities emerging in these countries due to speedy cultural change, and the gap created between generations. In the course of demographic transition in Asia, death rate is declining while birth rate is almost at a static rate. Therefore, adaptive strategies need to be adopted. Migration too due to economic reasons is largely taking place in Asia creating densely urban areas with increasing socio-environmental problems. The only countries well planned in terms of population are China and South Korea in Asia.

References

1. Turner BS, Chris R (2001) Society and culture: Principles of scarcity and solidarity. Sage, London, UK.
2. Wrigley EA, Schofield R (1981) The population history of England 1541-1871: A reconstruction, London, Arnold. Medical History, Cambridge University Press, UK.
3. Coleman D, Salt J (1992) The British population. Martin Robertson, Oxford, Cambridge, UK.
4. Andorka R (1978) Determinants of fertility in advanced societies. Free Press, New York, USA.
5. Brown M, Madge N (1982) Despite the welfare state. Heinemann Educational Books, London, UK.
6. Ditton J (1979) Contrology: Beyond the new criminology. Macmillan, London, UK, p. 124.
7. Lemert EM (1951) Social pathology: A systematic approach to the theory of sociopathic behavior. In: Graw Hill (Ed.), (1st edn), New York, USA.
8. Sharma RN, Sharma PK (1991) Demographic and population problems. Rajhans Publications, Meerut, India.
9. Britannica (2019).
10. World Population Data Sheet (2019) PRB. New York, USA.