



High Incidence and Mortality Diseases Control is more Imperative Apart from COVID-19 in China

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Abstract

Objective: In order to enhance the health level, treat and cure well all the diseases, especially the high incidence and mortality diseases. So as to save the life and promote the quality of life. The research has been done to find the facts that that much more death caused diseases apart from the COVID-19 have been killing the people even worse at the COVID-19 pandemic time.

Methods: Summarized the data extracted from three public official internets, the National Bureau of Statistics of China, the WHO and the International Diabetes Federation. Found out the health problems and health influenced diseases data apart from the COVID-19 in China. And analysing the data and facts.

Results: Based on the three channels of official internet, check and look up the valuable data, find out the demanded data and reorganize, build new tables. So the concrete facts to show the critical Chinese health problems apart from COVID-19 have been found.

The 12 tables have been created and found that in China, the leading causes of death are Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, injuries. The diseases have not been prevented and cured. The total death in China has been being more and more. The communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis have been being the No.1 and No.2 incidences in Chinese communicable infections. The mortality of Heart Diseases in Chinese rural areas has been being in fast trend of heavier and heavier, from 87.10 in 2008 to 171.36 in 2020 and in recent three years the No. 1 killer in Chinese rural areas. The explosively developed incidence of diabetes mellitus from the year 2000 in 22564.80 cases (in 1000s) exploded into 90045.10 cases (in 1000s) at 2011, and much too more cases developed up to now.

Conclusion: In China, much more works must be done to control the leading causes of death, the diseases incidence and prevalence undermining health, including the Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, injuries apart from COVID-19, especially the heart diseases in Chinese rural areas has been being the No. 1 killer in recent three years. The communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis must be controlled and prevented.

The urgently needed actions to control the leading causes of death, incidence and prevalence apart from COVID-19 in China may be referenced by other countries and international health organizations.

Keywords

Statistics, Death Control, Disease Control, Public Health, Health Promotion, Health Administration, COVID-19

Introduction

Now, the COVID-19 development had been being the everyday national news in China, even around the world. The medical workers and social workers have been striving for controlling the COVID-19. But much more death caused diseases apart from the COVID-19 have been killing the people even worse. According to the Statistical Communiqué of the People's Republic of China on the 2021 National Economic and Social Development [1], by the end of 2021, in China, there were 10.14 million deaths with a crude death rate of 7.18 per thousand. While by the end of 2021, a total of 102,314 confirmed cases of COVID-19 had been reported nationwide, 94,792 infected had been cured and discharged from hospital, and 4,636 people died. A total of 2,835.33 million doses of COVID-19 vaccines have been administered nationwide. A total of 11,937 medical and health institutions across the country provided nucleic acid testing services, with daily nucleic acid testing capacity reached 41.68 million. Therefore, comparing the total 10.14 million deaths in 2021, the 4,636 people died from COVID-19 totally in China is much too small, only 0.00045719921%. The 10.14 million deaths in 2021 in China nearly all died from cancer or malignant tumour, heart trouble, cerebrovascular diseases, respiratory diseases, apart from COVID-19.

As the China has been broadcasting the development of COVID-19, emergency treatment and prevention of COVID-19 every day. And the total of 2,835.33 million doses of COVID-19 vaccines, averagely nearly one person two does vaccines, have been administered nationwide. A total of 11,937 medical and health institutions across the country provided nucleic acid testing services, with daily nucleic acid testing capacity reached 41.68 million. But all other diseases apart from COVID-19 which have caused 10.14 million deaths last year seems have been forgotten. And should do more works to control and must be paid more and more attention to and should be to save more life considering their 10.14 million deaths in one year behind the broadcasting the development of COVID-19 every day.

As the health promotion works have been being on COVID-19 more than two years. We must know how worse the situation about the other diseases apart from COVID-19 in China. In this research, the author has the evidences based on statistics how imperative to control the other diseases apart from COVID-19 in China and to save as more as possible to reduce next year deaths of 10.14 million further.

Methods

All the data have been extracted from three public official internet. The first and the main data are coming from the National Bureau of Statistics of China, the China official Statistical Communiqué of the People's Republic of China on the National Economic and Social Development every year and China Statistical Yearbook. Which can be found in its official internet, <http://www.stats.gov.cn/> in Chinese and <http://www.stats.gov.cn/english/> in English.

The second channel of data are coming from World Health Organization(WHO), the official internet [2].

The third channel of data are coming from The International Diabetes Federation(IDF) and its official internet [3]. The data from the three channels are all free resource sharing and official reliable data for mankind health promotion.

Based on the three channels of official internet, check and look up the valuable data, find out the demanded data and reorganize, build new tables. So the concrete facts to show the critical Chinese health problems apart from COVID-19 have been found.

The Statistics Method:

The statistics method is simple. Which are only recording the related official statistical numbers and tables from the three public official internet. Only need to calculate simply the demanded numbers.

Data Extraction and Quality Assessment:

Because all the data are official statistical numbers and tables from the three public official internet. So

the data extraction and quality assessment are easy to do. As the data extraction and quality assessment have been done by proving the data are right and originals.

How to Analyse and use the New Tables:

The extracted data have been reorganized as new tables. By every new table, we can directly and macroscopically observe the target disease death trend or incidence, prevalence trend under the table with continuing recording of every year. Also, we can directly observe the situations with the judgement of high level or No.1 killer, etc.

Results

The research results will be outlined and expressed in five aspects following the article text. The first one

aspect is the of tables about the Death Rate, Percentage, and Rank of major diseases, or the first three high in death, in urban areas and in rural areas in China from the year of 1998 to 2020. The major diseases include Malignant Tumour, Heart trouble and Cerebrovascular Disease.

The second one aspect is the Incidence and Rank of major Infectious Diseases from the year of 1998 to 2020 in China in one table.

The third one aspect is Estimated Death of Leading causes by WHO in the year of 2000, 2010, 2015 and 2019 in China in one table. The leading causes of death are Cardiovascular diseases(CD), Malignant neoplasms(MN), Respiratory diseases(RD), Diabetes mellitus(DM), Injuries in all causes death.

Table-1: Death Rate, Percentage, and Rank of Malignant Tumour in Urban Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		22.58	1		25.33	1		19.22	2
1999		23.89	1		26.70	1		20.42	2
2000		24.38	1		27.23	1		20.88	2
2001		24.93	1		27.64	1		21.55	1
2002		23.5	1		26.38	1		19.66	1
2003		25.4	1		28.78	1		21.62	1
2004		23.9	1		27.23	1		20.37	2
2005		2294	1		2605	1		1836	3
2006		27.25	1		30.45	1		23.02	1
2007		28.53	1		32.04	1		25.04	1
2008	166.97	27.12	1	204.00	30.00	1	129.22	23.49	1
2009	158.67	27.0	1	207.79	29.60	1	114.99	23.66	1
2010	169.22	26.3	1	225.91	28.77	1	119.26	22.99	2
2011	172.33	27.7	1	215.19	30.70	1	128.86	23.95	1
2012	164.51	26.8	1	208.11	29.64	1	120.12	22.95	2
2013	157.77	25.4	1	198.22	27.94	1	116.27	22.06	2
2014	161.28	26.1	1	203.37	28.82	1	117.88	22.49	2
2015	164.35	26.4	1	207.22	29.11	1	120.56	22.77	2
2016	160.07	26.0	1	200.97	28.73	1	118.05	22.42	2
2017	160.72	26.1	1	201.53	28.76	1	118.68	22.48	2
2018	163.18	25.9	1	205.00	28.72	1	120.01	22.23	2
2019	161.56	25.7	1	203.01	28.37	1	118.95	22.13	2
2020	161.40	25.4	1	202.00	28.06	1	119.53	21.86	3

The fourth one aspect is a table about the explosive incidence, prevalence and health expenditure of diabetes in China by International Diabetes Federation(IDF).

The fifth one aspect is the table of Total deaths, crude death rate, births, crude birth rate, the ratio of deaths to birth from the year of 1982 to 2021 in China.

Death Rate, Percentage, and Rank of Major Diseases, The First Three High in Death, in Urban Areas and in Rural Areas in China Expressed on 6 Tables:

The **Table-1** is the Death Rate, Percentage, and Rank of Malignant Tumour in urban areas from the year of 1998 to 2020 in China. From the table, the facts tell us that there are at least three health problems in China urban areas. One is that the malignant neoplasms have

been being the No.1 killer in Chinese urban areas. The second fact is that the malignant neoplasms have not been prevented or cured. The third fact is that the mortality of malignant neoplasms has been keeping on in higher level up to present, more than 160.00(1/100000).

The **Table-2** is the Death Rate, Percentage, and Rank of Malignant Tumour in rural areas from the year of 1998 to 2020 in China. From the table, the facts tell us that there are at least three health problems in China rural areas. One is that the malignant neoplasms have been being the No.1, No.2 or No. 3 killer in Chinese rural areas. The second fact is that the malignant neoplasms have not been prevented or cured in Chinese rural areas. The third fact is that the mortality of malignant neoplasms has been keeping on in higher level up to present, 160.00 or so (1/100000).

Table-2: Death Rate, Percentage, and Rank of Malignant Tumour in Rural Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		17.01	3		19.49	2		13.43	4
1999		18.40	2		20.87	1		15.30	3
2000		18.40	2		20.82	2		15.12	3
2001		17.73	3		20.61	1		14.68	4
2002		20.6	1		23.83	1		16.53	3
2003		25.2	1		23.33	1		18.50	3
2004		23.7	1		24.60	1		14.22	4
2005		20.29	3		23.05	1		15.93	3
2006		25.14	1		28.93	1		21.79	1
2007		24.80	1		28.05	1		20.26	2
2008	156.73	25.39	1	204.59	29.32	1	107.06	20.06	2
2009	187.05	24.2	1	259.73	27.49	1	121.49	19.72	2
2010	169.53	23.1	2	239.09	26.14	1	109.64	18.81	3
2011	150.83	23.6	1	196.39	26.75	1	103.12	19.15	3
2012	151.47	22.9	1	198.65	25.91	1	102.78	18.71	3
2013	146.65	22.3	2	189.16	25.00	1	102.26	18.62	3
2014	152.59	23.0	1	196.32	25.66	1	106.87	19.23	3
2015	153.94	23.2	1	198.07	26.07	1	108.20	19.24	3
2016	155.83	22.9	2	199.41	25.73	1	110.45	19.02	3
2017	156.70	23.0	2	200.80	25.83	1	111.06	19.22	3
2018	158.61	22.9	3	202.86	25.76	1	112.71	19.09	3
2019	160.96	23.2	2	206.64	26.18	1	113.78	19.26	3
2020	161.85	23.1	3	206.72	25.93	1	115.51	19.25	3

The **Table-3** is about the Death Rate, Percentage, and Rank of Cerebrovascular Disease in urban areas from the year of 1998 to 2020 in China.

From the **table-3**, the facts tell us that there are at least three health problems in China urban areas. One is that the cerebrovascular diseases have been being the No.2 or No. 3 killer in Chinese urban areas. The second fact is that the cerebrovascular diseases have not been prevented or cured in Chinese urban areas. The third fact is that the mortality of cerebrovascular diseases has been keeping on in higher level up to present, near 130.00 or so (1/100000).

The **Table-4** is the Death Rate, Percentage, and Rank of Cerebrovascular Disease in rural areas from the year

of 1998 to 2020 in China.

From the **table-4**, the facts tell us that there are at least three health problems in China rural areas. One is that the cerebrovascular diseases have been being the No.1, No.2 or No. 3 killer in Chinese rural areas. The second fact is that the cerebrovascular diseases have not been prevented or cured in Chinese rural areas. The third fact is that the mortality of cerebrovascular diseases has been keeping on in higher level up to present, near 156.00 or so (1/100000) and in the trend of heavier and heavier.

The **Table-5** is about the Death Rate, Percentage, and Rank of Heart Trouble in urban areas from the year of 1998 to 2020 in China.

Table-3: Death Rate, Percentage, and Rank of Cerebrovascular Disease in Urban Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		22.32	2		22.02	2		22.69	1
1999		21.63	2		21.11	2		22.25	1
2000		21.28	2		20.81	2		21.86	1
2001		20.41	2		19.97	2		20.97	2
2002		17.4	2		17.11	2		18.01	2
2003		19.9	2		19.23	2		20.79	2
2004		19.0	2		18.47	2		19.89	3
2005		21.23	2		19.01	2		21.82	1
2006		17.66	2		16.34	2		18.11	3
2007		18.04	2		16.82	2		20.17	2
2008	120.79	19.62	3	127.78	18.79	2	113.66	20.66	3
2009	123.04	20.3	3	145.56	19.56	2	102.92	21.39	3
2010	143.54	20.2	3	171.89	19.55	2	118.61	21.15	3
2011	125.37	20.2	3	135.74	19.37	3	114.85	21.35	3
2012	120.33	19.61	3	130.68	18.61	3	109.80	20.97	3
2013	125.56	20.2	3	139.12	19.61	2	111.65	21.18	3
2014	125.78	20.4	3	139.60	19.78	3	111.53	21.27	3
2015	128.23	20.6	3	141.54	19.89	2	114.64	21.65	3
2016	126.41	20.5	3	139.50	19.94	3	112.95	21.46	3
2017	126.58	20.5	3	139.11	19.85	3	113.68	21.53	3
2018	128.88	20.5	3	141.63	19.84	3	115.72	21.43	3
2019	129.111	20.6	3	1112.811	19.96	3	115.60	21.50	3
2020	135.18	21.3	3	149.87	20.82	3	120.02	21.94	2

Table-4: Death Rate, Percentage, and Rank of Cerebrovascular Disease in Rural Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		18.21	2		17.84	3		18.68	2
1999		18.40	2		18.20	3		18.66	2
2000		18.40	2		18.57	3		18.93	2
2001		18.95	2		19.Q.4	3		18.84	2
2002		17.3	2		16.80	2		17.97	1
2003		23.7	2		20.94	2		21.35	1
2004		14.8	2		15.06	2		20.83	1
2005		21.17	2		20.60	3		21.95	2
2006		20.36	2		19.31	2		20.03	2
2007		20.59	2		19.64	2		21.92	1
2008	134.16	21.73	2	140.76	20.17	2	127.31	23.85	1
2009	197.03	23.1	2	241.71	2i.n	2	160.98	25.17	1
2010	203.30	23.3	1	255.17	22.23	2	163.84	24.99	1
2011	138.68	21.7	2	150.69	2052	2	126.11	23.42	1
2012	135.95	20.61	2	150.62	19.65	2	120.80	21.99	1
2013	150.17	22.9	1	166.94	22.06	2	132.66	24.15	2
2014	151.91	22.9	2	169.00	22.09	2	134.04	24.12	2
2015	153.63	23.1	2	169.27	22.28	2	137.43	24.43	2
2016	158.15	23.2	1	173.81	22.42	2	141.84	24.43	2
2017	157.48	23.1	1	173.97	22.38	2	140.40	24.30	2
2018	160.19	23.1	2	176.06	22.36	2	143.73	24.34	2
2019	158.63	22.9	3	175.18	22.19	2	1111.511	23.96	2
2020	164.77	23.5	2	181.64	22.79	2	147.34	24.56	2

Table-5: Death Rate, Percentage, and Rank of Heart Trouble in Urban Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		17.28	3		16.12	3		18.69	3
1999		16.82	3		15.61	3		18.31	3
2000		17.74	3		16.49	3		19.27	3
2001		17.61	3		16.46	3		19.06	3
2002		14.6	4		13.33	4		16.39	4
2003		14.4	4		13.22	4		13.71	4
2004		18.8	3		17.23	3		20.87	1
2005		17.89	3		16.22	3		20.09	2
2006		17.10	3		16.11	3		19.71	2
2007		16.29	3		14.91	3		19.53	3
2008	121.00	19.65	2	123.45	18.15	3	118.49	21.54	2
2009	128.19	22.7	2	146.63	19.24	3	111.14	22.75	2
2010	154.75	20.8	2	177.27	19.25	3	134.43	23.12	1

2011	132.04	21.3	2	136.72	19.St	2	127.29	23.66	2
2012	131.64	21.45	2	136.38	19.42	2	126.80	24.22	1
2013	133.84	21.6	2	139.04	19.60	3	128.50	24.38	1
2014	136.21	22.1	2	140.43	19.90	2	131.85	25.15	1
2015	136.61	21.9	2	141.01	19.81	3	132.11	24.95	1
2016	138.70	22.5	2	142.30	20.34	2	135.00	25.64	1
2017	141.61	23.0	2	144.81	20.66	2	138.32	26.20	1
2018	146.34	23.2	2	150.13	21.03	2	142.42	26.38	1
2019	1118.51	23.6	2	153.116	21.11'1	2	1113.'12	26.68	1
2020	155.86	24.5	2	159.09	22.10	2	152.52	27.89	1

Table-6: Death Rate, Percentage, and Rank of Heart Diseases in Rural Areas in China

Year	Total			Male			Female		
	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank	Mortality Rate (1/100000)	Percentage (%)	Rank
1998		12.90	4		11.72	5		14.36	3
1999		12.37	4		11.31	5		13.69	4
2000		12.37	4		10.78	5		13.39	4
2001		13.08	4		11.75	5		14.80	3
2002		14.3	4		13.05	4		16.02	4
2003		12.0	4		14.87	4		18.04	4
2004		12.5	4		11.84	4		14.32	3
2005		11.77	4		10.35	4		13.75	4
2006		13.87	4		12.31	4		15.98	4
2007		14.80	4		13.28	4		16.92	4
2008	87.10	14.11	4	88.15	12.63	4	86.02	16.12	4
2009	150.16	17.2	3	180.36	15.66	3	126.19	19.38	3
2010	163.08	17.8	3	196.20	16.13	3	138.19	20.32	2
2011	123.69	19.3	3	128.13	17.45	3	119.04	22.10	2
2012	119.50	18.11	3	123.51	16.11	3	115.36	21.00	2
2013	143.52	21.9	3	149.37	19.74	3	137.42	25.02	1
2014	143.72	21.6	3	148.70	19.43	3	138.50	24.92	1
2015	144.79	21.8	3	148.22	19.51	3	141.22	25.11	1
2016	151.18	22.2	3	154.07	19.88	3	148.17	25.52	1
2017	154.40	22.7	3	157.86	20.31	3	150.81	26.10	1
2018	162.12	23.4	1	166.00	21.08	3	158.10	26.78	1
2019	16-1.66	23.8	1	167.63	21.23	3	161.59	27.36	1
2020	171.36	24.4	1	174.87	21.93	3	167.74	27.96	1

From the **table-5**, the facts tell us that there are at least three health problems in China urban areas. One is that the heart troubles have been being the No.2 or No. 3 killer in Chinese urban areas. The second fact is that the heart troubles have not been prevented or cured in Chinese urban areas. The third fact is that the mortality of heart troubles has been keeping on in

higher level up to present, near 145.00 or so (1/100000) and in the trend of heavier and heavier.

The **Table-6** is the Death Rate, Percentage, and Rank of Heart Diseases in rural areas from the year of 1998 to 2020 in China.

From the **table-6**, the facts tell us that there are at least four health problems in China rural areas. One is that the Heart Diseases have been being the No.1, No.3, or No. 4 killer in Chinese rural areas. The second fact is that the heart troubles have not been prevented or cured in Chinese rural areas. The third fact is that the mortality of heart Diseases has been keeping on in higher level up to present, near 150.00 or so (1/100000). The fourth fact is the mortality of heart Diseases has been being in fast trend of heavier and heavier, from 87.10 in 2008 to 171.36 in 2020 and in recent three years the No. 1 killer in Chinese rural areas.

The Incidence and Rank of Major Infectious Diseases from the Year of 1998 to 2020 in China:

The **Table-7** is Main Incidence and Rank of Infectious Diseases from the year of 1998 to 2020 in

China.

From the **table-7**, the facts tell us that there are at least four health problems in China prevention and cure of communicable diseases. One is that the communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis have been being the No.1 and No.2 incidences in Chinese communicable infections. The second fact is that the communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis have not been prevented or cured in China. The third fact is that the communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis has been keeping on in higher level up to present. The fourth fact is that though the incidences of dysentery and gonorrhea has been reduced. But the incidence of syphilis has been heavier and heavier.

Table-7: Main Incidence and Rank of Infectious Diseases in China

Year	Viral Hepatitis		Pulmonary Tuberculosis		Dysentery		Gonorrhea / Syphilis		Note
	Incidence (1/100000)	Rank	Incidence (1/100000)	Rank	Incidence (1/100000)	Rank	Incidence (1/100000)	Rank	
1998	63.10	1	36.97		53.21	2	17.82		
1999	68.93	1	39.03	3	45.91	2	20.63	4	
2000	63.04	1	41.68	2	39.65	3	18.31	4	
2001	65.15	1	44.06	2	39.52	3	14.62	4	
2002	66.55	1	44.00	2	35.40	3	12.34	5	
2003	68.55	1	52.36	2	34.52	3	14.09	4	
2004	85.49	1	71.95	2	36.92	3	16.72	4	
2005	91.42	2	96.31	1	34.92	3	13.79	4	Syphilis in next
2006	102.09	1	86.23	2	32.36	3	12.80	4	
2007	108.44	1	88.55	2	27.99	3	15.88	4	
2008	106.54	1	88.52	2	23.65	3	19.49	4	
2009	107.30	1	81.09	2	20.45	4	23.07	3	
2010	98.74	1	74.27	2	18.90	4	26.86	3	
2011	102.34	1	71.09	2	17.74	4	29.47	3	
2012	102.48	1	70.62	2	15.40	4	30.44	3	
2013	92.45	1	66.80	2	13.93	4	30.04	3	
2014	90.25	1	65.63	2	11.33	4	30.93	3	
2015	89.47	1	63.42	2	10.20	4	31.85	3	
2016	89.11	1	61.00	2	8.99	4	31.97	3	
2017	93.02	1	60.53	2	7.93	5	34.49	3	
2018	92.15	1	59.27	2	6.56	5	35.63	3	
2019	92.13	1	SS.SS	2	S.81	s	38.37	3	
2020	81.12	1	47.76	2	4.12	7	33.08	3	

Estimated Death of Leading causes by WHO in the Year of 2000, 2010, 2015 and 2019 in China:

The **Table-8** is the Estimated Death ('000) of Leading causes by WHO in the year of 2000, 2010, 2015 and 2019 in China [2].

The leading causes of death are Cardiovascular diseases (CD), Malignant neoplasms (MN), Respiratory diseases (RD), Diabetes mellitus (DM), Injuries.

From the **table-8**, the facts tell us that there are at least three health problems in China prevention and cure of Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, Injuries and all causes death. The first fact is that the Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, Injuries and all causes death have been being heavier and heavier. The second fact is that the Cardiovascular diseases, Malignant neoplasms,

Respiratory diseases, Diabetes mellitus, Injuries and all causes death have not been prevented or cured in China. The third fact is that the death numbers in every group of people of persons, male and female have been keeping on in higher level up to present.

The Explosive Incidence, Prevalence and Health Expenditure of Diabetes in China by IDF:

The **Table-9** is the Diabetes estimates (20-79 y) in China by IDF for 2000,2011,2021,2030 and 2045 [4].

From the **table-9**, the facts tell us that there are at least six health problems in China prevention and cure of Diabetes mellitus. The first fact is that the incidence, prevalence of Diabetes mellitus have been being heavier and heavier. The second fact is that the Diabetes mellitus have not been prevented or cured in China. The third fact is that the “prediabetes”, including Impaired glucose tolerance and Impaired

Table-8: Estimated Death ('000) of Leading causes by WHO in China

Year	Persons						Male						Female					
	All Cause	CD	MN	RD	Injuries	DM	All Cause	CD	MN	RD	Injuries	DM	All Cause	CD	MN	RD	Injuries	DM
2000	8662.2	2914.1	1833.6	1363.6	823	97.7	4931.8	1568.5	1151.6	744.5	526.8	43.5	3730.4	1345.6	682.1	619.1	296.5	54.2
2010	9140.9	3647	2165.2	1080.8	772	125.3	5437.7	2055.2	1400.4	625.9	534.1	60	3703.3	1591.8	764.8	454.9	238.7	65.3
2015	9302.1	3921	2290	960.5	700	139.3	5600.5	2254.9	1497.3	571.9	484.4	69.7	3701.7	1666.1	792.7	388.6	215.7	69.6
2019	10105.6	4306.5	2574.7	1013.6	688	161.7	5972.1	2429.4	1659.7	596	469.7	80.6	4133.5	1877.1	915	417.6	219.2	81

Table-9: Diabetes estimates (20-79 y) in China by IDF

Estimated data	2000	2011	2021	2030	2045
Diabetes estimates (20-79 y): People with diabetes, in 1,000s	22564.80	90045.10	140869.60	164069.50	174433.50
Age-adjusted comparative prevalence of diabetes, %	-	8.8	10.6	11.8	12.5
Impaired glucose tolerance (IGT) estimates (20-79 y): People with IGT, in 1,000s	-	23373.00	169869.60	190686.10	196056.90
Age-adjusted comparative prevalence of IGT, %	-	2.3	13.4	14.2	14.7
Impaired fasting glucose (IFG) estimates (20-79 y): People with IFG, in 1,000s	-	-	26935.00	29517.70	29639.80
Age-adjusted comparative prevalence of IFG, %	-	-	2.2	2.3	2.4
Mortality attributable to diabetes (20-79 y): Deaths attributable to diabetes	-	1133918.00	1396661.80	-	-
People with undiagnosed diabetes, in 1,000s	-	-	72839.50	-	-
Proportion of people with undiagnosed diabetes, %	-	-	51.7	-	-
Diabetes-related health expenditure: Total diabetes related health expenditure, USD million	-	-	165304.00	185008.20	193142.70
Diabetes-related health expenditure: Total diabetes-related health expenditure, ID million	-	-	308528.50	345305.00	360487.60
Diabetes-related health expenditure per person, USD	-	194.00	1173.50	1313.30	137 1.10
Diabetes-related health expenditure per person, ID	-	-	2190.20	2451.20	2559.00

fasting glucose, have been keeping on in higher level and heavier and heavier. The fourth fact is that the people with undiagnosed diabetes and proportion of people with undiagnosed diabetes have been in higher level. The fifth fact is that the explosively developed incidence of Diabetes mellitus from the year 2000 in 22564.80 cases (in 1000s) exploded into 90045.10 cases (in 1000s) at 2011, and much too more cases developed in the later years up to now. The sixth fact is that the diabetes-related health expenditure has been being more and more.

The **Table-10** and **Table-11** from IDF Diabetes Atlas 2021 – 10th edition has also indicated that China is the top 1 country in the world for number of adults (20–79 years) with diabetes in 2021 and 2045 and is the top 2 country with the highest total health expenditure (USD) due to

diabetes (20–79 years) in 2021 [3].

Total deaths, crude death rate, births, crude birth rate, the ratio of deaths to birth from the year of 1982 to 2021 in China.

The **Table-12** is summarized table according to National Bureau of Statistics of China about the total deaths, crude death rate, births, crude birth rate, the ratio of deaths to birth from the year of 1982 to 2021 in China. Analysed the table, there are at least five health and social problems in China can be found. The first fact is that the total deaths have been increasing. The second fact is that the crude death rate has been increasing. The third fact is that the births and crude birth rate have been declining. The fourth fact is that the ratio of deaths to birth has been

Table-10: Top 10 countries or territories for number of adults (20-79 years) with diabetes in 2021 and 2045

Rank	Country or Territory	Number of people with diabetes (Millions)	Rank	Country or Territory	Number of people with diabetes (Millions)
1	China	140.9	1	China	174.4
2	India	74.2	2	India	124.9
3	Pakistan	33.0	3	Pakistan	62.2
4	United States of America	32.2	4	United States of America	36.3
5	Indonesia	19.5	5	Indonesia	28.6
6	Brazil	15.7	6	Brazil	23.2
7	Mexico	14.1	7	Bangladesh	22.3
8	Bangladesh	13.1	8	Mexico	21.2
9	Japan	11.0	9	Egypt	20.0
10	Egypt	10.9	10	Turkey	13.4

Table-11: Ten countries or territories with the highest total health expenditure (USD) due to diabetes (20-79 years) in 2021

Rank	Country or Territory	Total diabetes related health expenditure in 2021 (USD Billion) in adults (20 - 79 years)
1	United States of America	379.5
2	China	165.3
3	Brazil	42.9
4	Germany	41.3
5	Japan	35.6
6	United Kingdom	23.4
7	France	22.7
8	Mexico	19.9
9	Spain	15.5
10	Italy	14.7

increasing. Which has indicated that health level and population development have lots of problems. The fifth fact is that the following Chinese life well up in China, the total death has been increasing.

Table-12: Total deaths, crude death rate, births, crude birth rate, the ratio of deaths to birth in China

Year	Total deaths (million)	Crude death rate (per thousand)	Population (million)	Births (million)	Crude birth rate (per thousand)	The ratio of deaths to birth
1982	6.70	6.60	1015.41	21.41	21.09	0.31
1983	7.26	7.08	1024.95	19.08	18.62	0.38
1984	6.93	6.69	1036.04	18.13	17.50	0.38
1985	6.87	6.57	1046.39	18.63	17.8	0.37
1986	7.09	6.69	1060.08	22.02	20.77	0.32
1987	7.18	6.65	1080.00	22.72	21.04	0.32
1988	7.21	6.58	1096.14	22.78	20.78	0.32
1989	7.23	6.5	1111.91	23.16	20.83	0.31
1990	7.63	6.67	1143.33	24.08	21.06	0.32
1991	7.76	6.70	1158.23	22.79	19.68	0.34
1992	7.78	6.64	1171.71	21.37	18.24	0.36
1993	7.87	6.64	1185.17	21.44	18.09	0.37
1994	7.78	6.49	1198.50	21.21	17.7	0.37
1995	7.96	6.57	1211.21	20.74	17.12	0.38
1996	8.03	6.56	1223.89	20.78	16.98	0.39
1997	8.05	6.51	1236.26	20.48	16.57	0.39
1998	8.07	6.50	1248.10	20.01	16.03	0.40
1999	8.10	6.46	1259.09	19.18	15.23	0.42
2000	8.17	6.45	1267.43	17.78	14.03	0.46
2001	8.18	6.43	1276.27	17.08	13.38	0.48
2002	8.21	6.41	1284.53	16.52	12.86	0.50
2003	8.25	6.40	1292.27	16.04	12.41	0.51
2004	8.32	6.42	1299.88	15.98	12.29	0.52
2005	8.49	6.51	1307.56	16.17	12.40	0.53
2006	8.92	6.81	1314.48	15.84	12.09	0.56
2007	9.13	6.93	1321.29	15.94	12.10	0.57
2008	9.35	7.06	1328.02	16.08	12.14	0.58
2009	9.43	7.08	1334.74	16.15	12.13	0.58
2010	9.53	7.11	1340.91	15.96	11.90	0.60
2011	9.60	7.14	1347.35	16.04	11.93	0.60
2012	9.66	7.15	1354.04	16.35	12.10	0.59
2013	9.72	7.16	1360.72	16.40	12.08	0.59
2014	9.77	7.16	1367.82	16.87	12.37	0.58
2015	9.75	7.11	1374.62	16.55	12.07	0.59
2016	9.77	7.09	1382.71	17.86	12.95	0.55
2017	9.86	7.11	1390.08	17.23	12.43	0.57
2018	9.93	7.13	1395.38	15.23	10.94	0.65
2019	9.98	7.14	1400.05	14.65	10.48	0.68
2020	9.98	7.07	1412.12	12.03	8.52	0.83
2021	10.14	7.18	1412.60	10.62	7.52	0.95

Discussion and Conclusion

As the China has been developing. The Chinese life has been being well up. But now, the medical worker's social workers, ordinary people and the administrators in China have been paying more attention to and striving for controlling the COVID-19. We must not forget the more important works and jobs to control, treat and cure the leading causes of death, including the diseases of Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, injuries and the communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis, etc. apart from COVID-19. Because comparing the total 10.14 million deaths in 2021, the 4,636 people died from COVID-19 totally in China is much too small, only 0.00045719921%. So we must save next 10.14 million deaths besides saving COVID-19.

In this research, the author has summarized the data extracted from three public official internet, the National Bureau of Statistics of China, the WHO and the International Diabetes Federation. Found out the health problems and health influenced diseases data apart from the COVID-19 in China. And analysing the data and facts. The 12 tables have been created and found that in China, the leading causes of death, incidences and prevalence are Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, injuries. The diseases have not been prevented and cured. The total death in China has been being heavier and heavier. The communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis have been being the No.1 and No.2 incidences in Chinese communicable infections. The mortality of heart Diseases in Chinese rural areas has been being in fast trend of heavier and heavier, from 87.10 in 2008 to 171.36 in 2020 and in recent three years the No. 1 killer in Chinese rural areas. The explosively developed incidence of diabetes mellitus from the year 2000 in 22564.80 cases (in 1000s) exploded into 90045.10 cases (in 1000s) at 2011, and much too more cases developed in later years up to now.

This research has some limitations. First, the mortality of some years extracted from the National Bureau of Statistics of China are crude, not international standard ones. So the crude mortality is

usually lower than the international standard mortality. Therefore, National Bureau of Statistics of China published total death number may be lower than the real number. Second, the leading causes of death have been divided by urban areas and rural areas and the cardiovascular diseases have been divided into heart diseases and cerebrovascular diseases by National Bureau of Statistics of China, which are not international standard. Third, data extracted from WHO and IDF are estimated and the IDF data are adults aged 20-79 years. So the data may be conservative from the real data. Because the life span has been being long. The age above 80 years old can be in more percent in total population. So there can be more diabetes cases in above 80 years old persons who have not been estimated.

In conclusion, in China, much more works must be done and great efforts must be made to control the leading causes of death, the diseases incidence and prevalence undermining people's health, including the Cardiovascular diseases, Malignant neoplasms, Respiratory diseases, Diabetes mellitus, Injuries apart from COVID-19 disturbing, especially the heart diseases in Chinese rural areas has been being the No. 1 killer. The communicable diseases of Viral Hepatitis and Pulmonary Tuberculosis must be controlled and prevented. We must control the COVID-19 pandemic and its social influences. At the same time, we should do a good job to control the other diseases well under the solid foundations.

The urgently needed actions to control the leading causes of death, the diseases incidence and prevalence undermining health apart from COVID-19 in China may be referenced by other countries and international health organizations.

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Ethics Statement

This study did not receive nor require ethics approval, as it does not involve human & animal participants.

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