One of the great challenges of global healthcare is non-communicable diseases (NCD's). They are the number one cause of death worldwide (63%) and become more and more of a problem as nations develop. In low-income countries 37% of deaths are caused by NCD's because communicable diseases, malnutrition and similar problems are still the main cause of deaths, but high-income countries can have death rates of 87% from NCD's.

In Pakistan, which is still developing, 50% of deaths are caused by non-communicable disease, but this number is rising as care for other diseases improves. Historically, diseases such as malaria, cholera, leprosy, HIV, AIDS, and nutritional issues were the most major causes of death in Pakistan but now together they comprise only 38% of total deaths, while cardiovascular disease, cancers, diabetes, and chronic respiratory diseases, as well as other NCD's cause half. In general women have higher rates of diabetes, cardiovascular diseases, and cancer, but men have significantly higher rates of respiratory disease (nearly three times as much). This can be related to the cause of NCD's: alcohol consumption, tobacco, obesity, and high blood pressure.

Because 97% of the population of Pakistan is Muslim, alcohol consumption is extremely low. Obesity is also a very minor issue for most people. High blood pressure not unusually large by international standards, as opposed to tobacco, which is smoked by 38% of the male population (as opposed to 7% of the female). This accounts for the discrepancy between rates of respiratory disorders between males and females.

In the past, the United Nations has supported preventive measures for dealing with NCD's, such as public health campaigns encouraging people to exercise, restrictions on advertising of alcohol and tobacco, improving the quality of food (by reducing trans fat

and salt content), and educating the population on the effects of disease-causing agents. Such measures have worked in the past by preventing diseases before they occur and continued use of them would increase life expectancy in Pakistan and other countries like it.

Gender differences in health care are an issue caused by traditional male and female roles, social perceptions, treatment infrastructure, and biological differences. In many places men are encouraged to be stronger and less fallible than women, who are expected to be weaker and spend more time in the home. These beliefs can have repercussions on how they seek and receive care.

In many places, contraception and abortion are frowned upon, which can make it difficult for women to have planned families. In Pakistan abortion before the fetus's organs have developed is legal only to protect the woman's life or for necessary treatment. After the organs have developed, it is only legal for the first reason. The laws are structured this way in order to provide a balance between the Qur'an, which forbids the killing of children because the parents cannot provide for them and respects the sanctity of life above all else; and the safety of the mother. Abortion is allowed when continuing the pregnancy would endanger the mother because her death would almost always kill the baby as well, and because she has other responsibilities such as a family. Contraception is disapproved of in Islam, for similar reasons to abortion.

The best way to bring down the fertility rate, which Pakistan cannot truly support would be to space out births by two to three years. The Qur'an supports mothers nursing their children for two years, and if women and their husbands were to not have children more often than that, many people would have significantly fewer children. Family planning in this manner could help the country without violating religious teachings.

Another opportunity for progress in maternal care is the portion of births with a skilled attendant present. From 2008 to 2012 only 43% of births had such a person present. Programs to train midwives would make it possible for women to have an affordable attendant instead of having to pay for a hospital, in a country where most people are in poverty and health care is expensive.

In terms of pharmaceuticals, there are two types: patented drugs, and generic drugs. Patents are often the only possibility for patients, and thus companies can hugely inflate their prices, sometimes dozens of times the international reference price. A study by Medecins sans Frontiers showed that the introduction of a generic into a market which previously had only patents reduced the price of the patent from a little over \$10 000 to a mere \$556. Government health programs have a tendency to purchase costly patent drugs as opposed to cheap generics, which makes such programs inefficient and unhelpful for bring needed medicines to people. Educating the population and their physicians about the presence of generics would bring more affordable medication to developing countries.

In the discussion of prices of pharmaceuticals, intellectual property rights always come up. Companies want to make a profit, recoup for the money spent on developing their drug, and make more for creating new ones. To do this they patent their creation, and then sell it for a high price, often to people who cannot afford it. Pricing schemes based on the purchasing power of the countries themselves would be an excellent solution, because it would match the high prices with those who could afford them, such as the United States and Japan. This system would benefit three quarters of the world's population, who live i less developed countries by allowing them access to the medicines necessary for their lives.

Another issue with the way pharmaceutical industry is currently structured is the fact that, because 15% of the world's population pays for 90% of the drugs, there is a strong

incentive for companies to cater to rich countries such as the United States while ignoring less fortunate countries like Pakistan. This means that they will focus R&D on drugs that will solve the problems of richer countries instead of making previously developed drugs available for the people who need them.

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