Editorial

Low Health Literacy: Treacherous Foe of Patient Compliance in Developed Countries

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Health literacy enhances a population's self-care capacity and helps to reduce health inequalities. Low health literacy (LHL) is associated mostly with mature patients with chronic health conditions, who have limited education, not necessarily from a lower income group, and those who cherish superstitions and stigma inside their preset narrow mind that prevents them from gathering some relevant information about health or health system access, diseases, and drugs from their surroundings, with a few exceptional cases. Also, being generally literate does not automatically make one to be health literate. LHL is not uncommon among patients with a high level of education or with well-off patients [1].

The cost of illiteracy to the global economy is estimated at $1.19 trillion [2] but LHL alone costs the US economy more or less $200 billion every year [3]. Only12% Americans have adequate health literacy and according to the US Centers for Disease Control and Prevention (CDC), improving health literacy could prevent nearly 1 million hospital visits and save over $25 billion a year [4]. LHL influences a lot of patients' treatment guideline compliance or more directly medication adherence leads to poorer health outcomes, higher healthcare expenditures, increased hospitalizations, and even higher mortality rates in patients with chronic diseases [5]. Individuals with poor health literacy often incur higher medical costs. Medication non-adherence contributes around 60% of the $500 billion total avoidable costs attributed to suboptimal medicine use globally each year [6].

Evidence shows that LHL is significantly associated with economic ramifications at the individual, employer, and healthcare system levels. But it is common to both developed and under-developed countries around the world and socio-economic conditions are not at all the sole factor of LHL. Surprisingly, close to 40% of the US and the UK adults have LHL [7, 8], which is around 60% in Canada [9], Australia [10], UAE's adult population [11], and the European older population [12]. Even China, home of the world's greatest scientists and inventors issued "Health China 2030" in 2016, planning the rate of national health literacy is aimed to increase to 30% by 2030 [13]. The GDP per capita of these countries ranges from $11,800 to $62,200, based on Trading Economics-2022 data.

Many studies reveal that patients from high-income countries are not adequately adherent to medications as they are prescribed. Forgetfulness, confusion about the duration required for medication use, and mistrust about the overall efficacy of medication are among the reasons for non-adherence to diabetes management protocols in Middle Eastern countries [14]. After World War II, Taiwan faced severe poverty which is now the 8th largest economy in Asia and also home of T2DM patients with 82% health literacy [15].

Canada is the top most educated country with a GDP close to 2 trillion and a GDP per capita of more than $44,000--a recent survey granted by the Royal University Hospital Foundation in two urban tertiary care hospitals in Saskatoon shows that around 50% of the patients admitted to the general internal medicine unit had LHL. Moreover, patients with LHL, but with high education, had a higher probability of emergency department re-visits [16].

A cross-sectional study of 259 school leaders in Hong Kong carried out during the COVID-19 pandemic between April 2021 and February 2022 shows that more than 50% of participants had LHL and their LHL was strongly associated with a negative attitude about vaccination, low information, confusion about COVID-19-related information and secondary symptoms of burnouts [3].

In the USA, a cohort study by Vanderbilt Center for Health Services Research (Nashville, Tennessee) of over 46,000 hospitalized patients showed that hypertension was more common in people with LHL. Also, authors of Hamburg Diabetes Prevention Survey, a population-based cross-sectional study in Germany concluded that LHL is an important factor in the 3 conditions of metabolic syndrome--obesity, diabetes, and hypertension [17].

Finally, it can be said that LHL is associated with patient non-compliance but it warrants further studies to judge whether it is the top-most reason for the same or not, as many studies conducted in developed countries revealing a high prevalence of cost-related patient non-adherence. Nevertheless, it can be said beyond reason health literacy provides a benefit in addressing the health needs of even the most disadvantaged and marginalized communities. To improve adherence, patients need to clearly and appropriately understand health information related to their specific illness or disease. This understanding may be essential to helping patients generate the motivation, beliefs, and appropriate health behaviors needed to improve overall adherence behaviors. LHL is a curse, it has to be minimized. All healthcare providers, stakeholders and even government and community authorities should work on it.

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