



• THREE students from Evelyn Hone College want to come up with a cheaper version of a ventilator.

• GEORGE Pule is the team leader of the Vent Splitting Device.

Lusaka students offer cheaper ventilator

By JOWIT SALUSEKI

AS the world battles various ailments afflicting mankind, healthcare technology has become an increasingly visible policy issue that needs urgent attention.

It goes without saying that world over, investment in technology vis-a-vis medical equipment have repeatedly come under the spotlight in recent years. For instance the COVID-19 pandemic has even increased demand for ventilators in hospitals in

developing countries such as Zambia. Last year saw how countries around the world scrambled to buy life saving equipment as the pandemic placed unprecedented demand on hospitals. With healthcare systems still buckling under the pressure of the virus, which has continued to claim a lot of lives, experts warn ailments such as COVID-19 and others that require patients to be put on ventilators could devastate the countries that lack healthcare equipment and infrastructure. This therefore calls for individuals with innovative minds to step the game and become more innovative in this era of fast improving

technological world. While the need for improved medical equipment management practice has long been recognised and addressed at numerous international forums, health facilities in many countries are still burdened with many problems, including non-functioning medical equipment. Clear policy, technical guidance, and practical tools are needed for effective and efficient management of healthcare technology for it to impact on priority health problems and the health system's capacity to adequately respond to health needs and expectations. Apart from problems of human resources and the need to finance recurrent

costs, more important issues concerning the administrative, economic and political environments in Zambia impinge on the sustainability of technologies and equipment. A medical equipment management system

are not available in health facilities. The World Health Organisation (WHO) estimates that up to 60 per cent of medical equipment in developing countries may not be in service at any given time. A baseline study of the Ministry of Health

explanations have been offered, it was commonly expressed that better equipment management would improve usage in developing countries. With recent indicators according to the WHO revealing that around one in every five people who catch the COVID-19

organs functioning. Arising from the above scenario, a group of students from Evelyn Hone College in Lusaka have come up with a technological innovation that involves inventing cheaper versions of ventilators. A ventilator is a machine that helps a patient to breathe when they are sick, injured, or sedated for an operation. It pumps oxygen-rich air into the lungs and also helps one breathe out carbon dioxide, a harmful waste gas the body needs to get rid of.

The Evelyn Hone College's project is called Vent Splitting Device (VSD). According to George Pule, a biomedical student, he together with his colleagues Mbita Mbao and Themba Malunga came up with the idea of inventing a ventilator that can accommodate more than one patient after the COVID-19 pandemic brought to the fore the demand for ventilators in hospitals. "The COVID-19 pandemic respiratory

illness has resulted in an increased need for ventilators and notwithstanding medical ethical issues, healthcare personnel were forced to choose patients to be on a ventilator, depending on their probability of surviving. Arising from the above we thought of coming up with a vent splitting device" Pule explained in an interview recently. He said the high market cost of ventilators is around \$50,000 (about K900,000) which is less accessible by developing countries such as Zambia. "It is against this backdrop that my team and I have decided to develop a cost effective ventilator sharing device using open source materials. The VSD is in line with the United Nations Sustainable Development Goal number three which anchors on good health and well-being", he said. Pule added that VSD will be life-saving as it will help support more patients on a single ventilator. "It will be a life saver, especially in rural

settings where such medical equipment are limited. The device will mitigate the ventilator shortage in the country and it will bring economic empowerment and development for a third world nation like Zambia," he said. Pule and his colleagues' project has since been awarded a K25,000,000 by the Government through the Science and Technology Innovation Youth Fund (STIYF) implemented by the National Science and Technology Council (NSTC) to develop the VSD project. The team is happy that their project will aim to motivate other Zambian youths to develop scientific or technological innovations, with specific focus on innovations that are relevant to the creation of wealth and employment. "It is gratifying that the Government spelled out the conditions that only eligible applicants who are Zambians aged 35 years of age or below were targeted for the grants," Pule said.

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assists with the management of medical equipment, from initial purchase through to decommissioning and replacement. It has been widely reported that a significant proportion of healthcare equipment in developing countries is not available because such equipment

and Japan International Cooperation Agency (JICA) Health Capital Investment Support Project finds that 30 per cent of the medical equipment needs repair, are out of order, not available or uncommissioned, which need immediate attention. Although many

need hospital care, the need for vital equipment such as ventilators cannot be underestimated. Countries worst affected by the pandemic are trying to procure lung ventilation equipment, which assists or replaces breathing for critically-ill patients, pumping oxygen into the blood to keep

Intellectualism in politics: The Grade 12 requirement

By DAVE CHIBESA

RECENTLY, the European Union (EU) raised a political concern over the Grade 12 requirement for one to become Member of Parliament (MP) in Zambia.

It is ironic that the issue had been raised after the exit of the previous regime which had instituted it.

Proponents of the current practice contend maintenance of the standing requirement had helped to avoid mediocrity in the governance system while critics uphold the view that the practice was a form of disenfranchisement.

While the arrangement stood, many political parties had their preferred candidates shown the door at the Electoral Commission of Zambia (ECZ) entrance!

This had also given insight into what had been taking place in constituencies as typical candidates were denied the chance to serve their electorate because they had not reached Grade 12.

Prior to this, the first batch of governance officials in the inaugural United National Independence Party (UNIP) were basically nationalists and not 'mediocre' and most of them were not even Form Five (Grade 12) beginning with the founding father Kenneth Kaunda.

But one would see how that first batch of politicians steered the country to notable achievements despite lacking the celebrated 'degrees' in question.

Later, the country realised it needed a legion of technocrats for long-term development hence the focus on intellectualism in politics.

As tertiary level output doubled over the years, the system found its own functional level by appointment of highly qualified and skilled labour. However, this should not be construed to mean that citizens should not aspire to attain the qualification under contention but to embrace all and sundry in governance issues.

On this score, one would be inclined to probe whether reaching that academic level now is

the ultimate refinement of intellect for a typical political aspirant?

In this light, it would be prudent to begin the arduous long journey of defining 'politics' in the first place.

Various definitions surround 'politics' as a discipline but on the local front, this is a study whose ambit falls under the School of Humanities and Social Sciences at the first tertiary level institution - University of Zambia (UNZA).

Is politics a profession or vocation? Several definitions come to mind and the leading one is the conventional dictionary.

"Politics is the way that people living in groups make decisions.

Politics is about making agreements between people so that they can live together in groups such as tribes, cities, or countries. ...

Politicians, and sometimes other people, may get together to form a Government."

This also includes activities associated with governance of a country or area, especially the debate between parties having political power, e.g "the party quickly gained influence in French politics."Synonyms: Government, local government, affairs of state, public affairs, diplomacy, party politics".

Activities aimed at improving someone's status or increasing power within an organisation. e.g. "yet another discussion of office politics and personalities."

The preceding definitions point to the conclusion that principally, there exists 'office politics' 'workplace politics' and so on.

But placing a premium on who is best suited in these 'politics at large' implies imposing a major limitation in the process of choosing a typical candidate in an election and for instance the Grade 12 requirement.

At the underclass level, opinion seems divided with the advent of school going youth one of whom thought reaching Grade 12 was a ploy for the upper

class to keep themselves in key decision making positions.

'Politics is also the method of rulership over a national Government, state Government and local government in groups, or other forms of ruling power relations.'

Politics (from Greek: Πολιτικά, politiká, 'affairs of the cities') is the method of rulership over a national Government, state Government and local government in groups, or other forms of ruling power relations among individuals, such as the distribution of resources or status.

Politics is also a branch of social science that studies rulership, law making and Government is referred to as 'political science.'

A political system is also a framework which defines acceptable political methods within a society.

The history of political thought can be traced back to early antiquity, with seminal works such as Plato's Republic and Aristotle's Politics in the West, and Confucius's political manuscripts and Chanakya's Arthashastra in the East.

What about vocation? Definition of vocation 1a: a summons or strong inclination to a particular state or course of action especially: a divine call to the religious life b: an entry into the priesthood or a religious order

2a: the work in which a person is employed: Occupation b: the persons engaged in a particular occupation

3: the special function of an individual or group. As can be seen, vocation or occupation does not specify particular qualifications of partakers in these undertakings but may demand skilled genius.

Still, on the local terrain, politicians like Nevers Mumba, President of the Movement for Multiparty Democracy (MMD), insisted recently that the Grade 12 requirement ought to stay because any occupation had qualifications attached to it.

Electoral expert, McDonald Chipenzi also opposed recommendations by the European Union (EU) Observer Mission that Zambia phases out the grade

12 qualification requirement for one to stand as a Member of Parliament (MP).

He said the country should actually be looking at upgrading the qualification for an MP to a degree level as a way of ensuring the relevance of parliament giving the United Kingdom as an example where parliamentarians mostly flaunted tertiary level qualifications.

Perhaps, the definition of politics to determine its distinct features may not be relevant to a voter in a particular situation but 'a clause in the statutes that 'disenfranchises' a local citizen' (removal of franchise) may matter.

What may also seem apparent could be the perception of 'intellectualism' or 'intellectuals' disenfranchising who in the First Republic was known as 'the common man'.

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