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Better data on unmet healthcare need can strengthen global monitoring of universal health coverage

Megumi Rosenberg and colleagues argue for standardised survey questions and improved data collection on unmet need, particularly in lower income countries

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During the covid-19 pandemic, nearly one fifth of households in 39 low and middle income countries did not access healthcare when needed because of fear of contracting covid-19, movement restrictions, or financial constraints.[1] Even in high income settings, estimates suggest almost half of young Europeans aged 18-29 had unmet needs for mental healthcare during the pandemic.[2] We define unmet need as the presence of healthcare needs for which people do not or cannot receive quality healthcare.[3] This may lead to poor health outcomes, high spending, and productivity loss to individuals and society.

Despite its importance for ensuring people's right to health, current efforts to measure how well a health system is delivering services do not include unmet need. In 2023, the 76th World Health Assembly adopted a resolution requesting the WHO's director general to review the importance and feasibility of using unmet need for healthcare services as an additional indicator to monitor universal health coverage (UHC) nationally and globally.[4]

UHC is achieved when all people have access to the full range of quality health services they need without financial hardship[5] and is one of 12 targets of the sustainable development goal on health and wellbeing (SDG 3).[6] Two indicators are used to track progress toward UHC (health service coverage and catastrophic health spending), but neither measures unmet need as they only include people who have actually received care. A measure is thus needed that captures the experience of people who needed healthcare but could not receive it because of limited availability, affordability, or quality.

Challenges of defining and measuring unmet healthcare need

There is no globally agreed definition of unmet healthcare need, and the complexities with its definition and measurement are well documented.[3,7,8] Whether someone receives appropriate care is determined by many intersecting causal factors. Social determinants of health strongly influence the likelihood of having unmet healthcare needs as they affect both healthcare need and access to services. At the same time, individual values, health literacy, expectations, preferences, prior experiences, and current symptoms shape whether someone has an unmet healthcare need.[9] In other words, people who do not recognise a healthcare need (such as those with an undiagnosed or asymptomatic condition) because of lack of screening and diagnosis, those who have a health concern but do not seek care, and people who receive inappropriate care can all be considered to have unmet healthcare needs.[3] Supply side limitations, quality issues, and cost also drive unmet healthcare need.

A single definition of unmet need is also challenging because, conceptually, it includes the spectrum of people's healthcare needs that are not optimally met and does not have to be service or disease specific. Measures of unmet need for a defined health service or condition—such as diagnosis of hypertension or treatment for diabetes—can be used to identify bottlenecks at various stages of a care cascade[10] and guide the development of specific policy interventions and responses. However, access and coverage indicators that are specific to a condition, service, or population subgroup are inadequate as indicators of aggregate unmet healthcare need in a population. For example, SDG indicators such as the "proportion of women of reproductive age (15–49 years) who have their need for family planning satisfied with modern methods" reflect only a subset of unmet healthcare need in a subset of the population. A general measure of unmet need for healthcare (such as self-reported forgone care for any perceived health issue) can detect problems with access to care across a broad range of health services. To the extent that the decision to forgo care is influenced by a person's negative experience with the healthcare system, it can also be an indicator of problems with quality of care.

Complexities in defining unmet need also make its measurement challenging. Methods of assessing unmet need include self-report of forgone care, administrative health records, and patient satisfaction surveys. Although patient records and surveys may yield details about when a loss to follow-up occurred or what aspects of the care were unsatisfactory to the patient, only self-reported forgone care captures unmet need in the general population (including those who have never had contact with the healthcare system). Forgone care is usually captured in health surveys and household expenditure surveys with questions that ask respondents to recall a recent episode when they needed a medical examination or treatment for a health problem (without specifying a disease or condition) but did not receive it; these surveys also often ask respondents to list the reasons for not receiving care.

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Deficiencies of current UHC measures

The service coverage index (SCI) used to track progress on achieving UHC is a composite index with a 0-100 scale.[11] The index comprises 14 indicators across four broad categories of health services (reproductive, maternal, newborn, and child health; infectious diseases; non-communicable diseases; and service capacity and access) that evaluate service coverage, such as percentage of births attended by skilled health workers. Some are not direct measures of essential health service coverage (such as age-standardized mean fasting plasma glucose (mmol/L) for adults aged 18 years and older), and the measures do not reflect a complete list of health service requirements to achieve UHC. Intuitively, when SCI values are high, unmet need for healthcare should be low. However, even in countries with high SCI values, unmet need can be high for people with conditions that are not captured by the indicators included in the index, such as mental health or other chronic conditions,[12] and can also be high among marginalised populations, who face greater barriers to accessing care.[13] For example, a cross sectional study using 2019 data from the European Union Income and Living Conditions survey shows that migrants have higher unmet healthcare needs than non-migrants.[14]

In many countries, over half of older adults have chronic conditions and disabilities that health systems are poorly equipped to manage, giving rise to unmet need.[15] A WHO Kobe Centre analysis of survey data in 2021-22 from 83 countries showed that the prevalence of self-reported unmet healthcare needs of adults aged 60-69 tends to be lower in countries with higher SCI values, but outliers like the US have both high SCI and high unmet need.[16] Since SCI is not sufficiently sensitive to measure unmet need in population groups that are in some way disadvantaged or marginalised, better measures are needed to account for unmet need.[17]

Another way to measure UHC is by considering the affordability of care. SDG indicator 3.8.2 measures the prevalence of catastrophic health expenditure,[18] where low prevalence means use of services does not cause financial hardship to households. However, this metric captures only financial hardship that results from the use of healthcare and misses other dimensions of financial hardship among people who forgo, delay, or are not using healthcare because of various barriers, including cost. In fact, because forgone care is likely to be associated with zero or low household spending on health, low prevalence of catastrophic health spending could obscure high levels of unmet need and give a false sense of progress towards UHC. In Bangladesh, for example, a cross sectional study using household income and expenditure survey data from 2016-17 reported lower levels of catastrophic health spending but higher levels of forgone care among households in the poorest quintile compared with those in the richest quintile.[19] This suggests that measuring unmet healthcare needs can improve the interpretation of data on healthcare spending and affordability of care to track progress toward UHC more precisely.

Improving global monitoring of unmet healthcare need

Information on self-reported unmet need is mostly available from high income countries through surveys such as the European Union Statistics on Income and Living Conditions (EU-SILC), the European Health Interview Survey, and the Commonwealth Fund International Health Policy Survey.[20] The World Values Survey (2017-21) includes self-reported unmet healthcare need from 64 countries of all income levels.[21] Drawing from existing surveys, we can estimate the prevalence of unmet healthcare need in nearly 100 countries. There is, however, limited data on unmet need from low and middle income countries because of the relative shortage of relevant population based data sources compared with higher income countries as well as the absence of questions about unmet need in routine national health surveys. Considering that unmet need is likely to be higher in lower income countries, it is even more important to identify and tackle unmet needs in these settings.

The substantial variation across surveys in definitions, recall periods, and reasons for unmet need should also be reconciled.[3 7 8 16 20 22 23] In the EU-SILC, for example, respondents are asked, "Was there any time during the last 12 months when you personally, really needed a medical examination or treatment for a health problem but you did not receive it?" Those who respond "yes" are asked to give the main reason for not receiving care from options including cost, waiting time, and distance. The Commonwealth Fund survey, on the other hand, focuses only on cost, asking respondents whether they have not consulted a doctor, skipped a doctor recommended visit, or not taken medicines as prescribed because of cost. Survey samples should also ensure the inclusion of vulnerable populations, which are often missing from population surveys, as they may have higher unmet needs.

Although including unmet healthcare need in UHC monitoring increases the burden of data collection on low and middle income countries, this could be minimised by adding a short survey module on unmet need to existing routine health surveys. In Thailand, the National Statistical Office has been conducting the Health and Welfare Survey since 2003 to monitor the effects of establishing universal coverage with public health insurance in 2002. In 2011, six questions were added to the survey to assess unmet need for outpatient, inpatient or dental health services, respectively, in the preceding 12 months and, if applicable, the reasons for not receiving that care.[24]

Another concern about adding unmet healthcare need to global UHC monitoring indicators is the limitation of using a standardised measure of unmet healthcare needs to understand a highly complex and context dependent phenomenon. Even if the questions are asked in the same way, the interpretation and response to questions about unmet healthcare need is influenced by personal characteristics. A longitudinal study in Canada linking Canadian Community Health Survey data to public hospital discharge records from 2001 to 2013 found that the likelihood of reporting unmet need systematically differed by a person's socioeconomic and demographic status, independent of their health status and care received,[25] with higher educated people being more likely to report unmet need. A clear understanding therefore requires disaggregation of data on unmet need by sociodemographic strata as well as validation and calibration of survey questions to identify and control for response biases.

Moreover, the specificities of unmet need can be better understood by analysing covariates like health beliefs and attitudes, or qualitatively studying contextual factors such as cultural norms and institutional discrimination. Given the limitations of current UHC monitoring indicators, an additional metric to provide more direct estimates of the prevalence of unmet healthcare needs, who is affected, and its drivers and determinants may be useful.

Policy applications of unmet healthcare need

The response of policy makers to evidence of unmet healthcare should be to investigate who is left behind and what services are not available, accessible, acceptable, or of high enough quality. As with other indicators used for monitoring UHC, such as childhood vaccination coverage, the prevalence of unmet need alone is not sufficient for setting specific priorities for tackling the problem, and the contributing factors may vary widely depending on context.

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To make the information more useful, additional data and analysis on population characteristics, service type, reasons for unmet need (including both supply-side and demand-side factors), and people's interpretation of unmet need will be essential. Research that further specifies and contextualises unmet need, its causes, and who is affected can also contribute to designing solutions.[3 17 22] An analysis of data from the 2021 Survey on Healthcare Access and Pharmaceuticals During the Pandemic in Canada shows that Indigenous people had higher prevalence of chronic conditions and thus greater needs for healthcare but were more likely to experience unmet healthcare needs, lack of services, and discrimination by healthcare workers, compared with non-Indigenous people. Such findings could be used to strengthen national policies on health equity by addressing the institutional and structural barriers experienced by Indigenous people in Canada.[26]

Decision makers can also use data on unmet need to adjust budget allocations for health services to ensure that resources reflect the population's need.[7] For example, the report on the alarmingly high prevalence of unmet needs for mental healthcare among young Europeans contributed to an increase in the provision of mental health services for youth in Europe.[2] In Thailand, indications of an increasing trend in unmet need for dental care led the Ministry of Public Health to expand its training and deployment of dental nurses to sub-district health centres along with technical support from the district hospital dentists.[24]

Conclusion

The World Health Assembly 2023 resolution provides an opportunity for WHO to review the availability of data on unmet need globally and develop recommendations for data collection and analysis that can feed into monitoring of UHC at global and national levels.[4] For global monitoring and cross country comparability, a standard operational definition of unmet healthcare need and reasons for it should be developed. It should not be bound to a single health intervention or disease or to a specific access barrier such as cost. Measuring general unmet healthcare need is important so that unmet need experienced by people with conditions not captured by current UHC indicators or which occurs for reasons other than cost is not missed.

Key messages

- Current indicators for global monitoring of universal health coverage (UHC) do not capture levels of unmet healthcare need
- A measure of unmet need for healthcare that is not bound to a single health intervention or disease and that explains access barriers would add considerable value to global UHC monitoring
- Existing survey data on self-reported unmet need for healthcare could be used to estimate the prevalence of unmet need but have technical limitations
- Standardised survey questions on unmet healthcare needs will facilitate comparability for global monitoring

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