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The monkeypox case definition in the UK is broad

Daniel Pan and colleagues¹ were concerned that the definition of a probable case of monkeypox infection we use at the UK Health Security Agency (UKHSA) is too constrained, resulting in missed diagnoses in the wider community.

Since May 20, 2022, the UKHSA has also included the case definition of possible monkeypox infection in its testing guidance. One of the criteria used to identify possible cases of monkeypox infection is “an illness where the clinician has a suspicion of monkeypox”.² This intentionally broad definition is aimed at capturing the scenarios raised by Pan and colleagues. As of Sept 16, 2022, the UKHSA's Rare and Imported Pathogens Laboratory tested more than 650 women and approximately 250 children for monkeypox infection. Women and children are 15% of all people tested; however, where gender is known, 99% of confirmed cases are male adults.

Although Pan and colleagues assert that “Transmission within the community is already taking place”,¹ they do not provide evidence for this statement except for the known transmission within the main at-risk groups. We would urge caution in drawing this conclusion without first doing serological tests in different cohorts or PCR tests, or both.

In short, all clinicians should be aware that the UKHSA's case definitions ensure that anyone with symptoms consistent with monkeypox infection can be tested for it. However, notably, most cases continue to be identified within the subgroups of individuals outlined in the probable case definition. Therefore, targeting public health interventions and case definitions towards these subgroups, while remaining vigilant for a potential wider spread of infection in other subgroups, remains an appropriate course of action.

We are lead consultants and senior trainees running the Rare and Imported Pathogens Laboratory for the UK Health Security Agency (UKHSA). This is the national reference laboratory for rare and imported infections, including poxviruses, and, until recently, was the only diagnostic laboratory in England for monkeypox virus. We also run the UKHSA clinical cell for the monkeypox national enhanced incident response.

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- 1 Pan D, Sze S, Nazareth J, et al. Monkeypox in the UK: arguments for a broader case definition. *Lancet* 2022; **399**: 2345–46.
- 2 UK Government. Monkeypox: case definitions. May 20, 2022. <https://www.gov.uk/guidance/monkeypox-case-definitions> (accessed June 24, 2022).

Authors' reply

We thank Hellen Callaby and colleagues for responding to our Correspondence.¹ We welcome the broadened case definition of possible monkeypox infection and were encouraged to hear the diversity of testing that has been done to date. The most recent version of the UK Health Security Agency's guidance, published on Aug 9, 2022, describes case definitions to inform the testing and reporting of suspected cases of monkeypox infection, with strata based on risk of monkeypox infection (possible, probable, highly probable, and confirmed). The guidance allows for the inclusion of all population groups at risk of infection, but maintains a measure of likelihood of infection.

We continue to caution against classifying individuals with a rash and who identify as gay, bisexual, or other men who have sex with men (MSM) in the same risk category (probable case) as those who have had new sexual partners in the 21 days before symptom onset, or those who have had an epidemiological link to a confirmed, probable, or highly probable case of monkeypox infection in the 21 days before symptom onset. We believe such distinctions between MSM and the general population are unnecessary,

especially when subsequent recommended management of both possible and probable cases is the same (eg, take samples to test for monkeypox infection, take a relevant sexual and travel history, and, if admission to hospital is required, give access to a negative pressure isolation ward with adequate personal protective equipment). Although MSM are the majority of confirmed cases in the UK, monkeypox is not a disease that occurs only in MSM, nor are all MSM engaged in high amounts of sexual activity. Physicians and the public might make generalisations on the basis of these definitions, which could further stigmatise the MSM community, similar to previous experiences with HIV.²

We agree with Callaby and colleagues that evidence is required for monkeypox transmission beyond the MSM community; such evidence is emerging. A recent cohort study of 181 patients from Spain with PCR-confirmed human monkeypox infection found that 15 (8%) patients identified as heterosexual men or women.³ This study, together with another modelling analysis,⁴ found that the transmission of monkeypox virus is likely to have a strong behavioural component, with transmission occurring through networks where there is a high amount of both MSM and non-MSM sexual contact. Furthermore, there is now strong evidence from both the USA and the UK for fomite and potential aerosol transmission of monkeypox virus. Studies have identified culturable monkeypox virus from high-touch surfaces in the household of individuals with confirmed monkeypox infection, for at least 15 days after symptom onset.^{5–7} Preliminary findings from one of these studies⁷ showed that viable virus was also detected from an air sample in an infected individual's room. Together, these data suggest spillover in similar high-contact networks, such as public gyms, or in the social circles of people who engage in many close-contact (touching and non-touching) activities or are sexually very active, or

For more on the UK Health Security Agency's guidance see <https://www.gov.uk/guidance/monkeypox-case-definitions>

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both. Risk of spillover is increased in crowded households, where, as was seen in the UK and the USA during the COVID-19 pandemic, Black and Asian communities, as well as other minority ethnic groups—particularly migrant populations—are at the highest risk of acquiring infection.^{8,9}

We believe that greater public awareness of the transmission modes of monkeypox virus will allow clinicians and public health specialists to realise that transmission can easily occur in non-MSM communities as this outbreak evolves. This consideration is especially important because vertical transmission of monkeypox virus has been associated with adverse fetal outcomes and congenital infection.¹⁰ We also hope this debate will raise awareness of the broader case definitions of monkeypox infection in the UK so that physicians will be more likely to test individuals for suspected infection, regardless of their sexual orientation.

We declare no competing interests.

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Algorithm-based care after pancreatic resection

F Jasmijn Smits and colleagues¹ concluded that algorithm-based care considerably improved clinical outcomes compared with usual care during the management of complications after pancreatic resection. It was, however, not clear whether usual care among different centres was standardised. This information could be essential and affect the interpretation of the results, as centres that treat higher numbers of patients might be more active in usual care than centres that treat fewer patients.

Baseline pancreatic duct diameters were larger in patients in the algorithm-based care group (median 4 mm [IQR 2–5]) than in the usual care group (3 mm [2–5]). A main pancreatic duct diameter of 3 mm or less has been

found to significantly increase the risk of clinically relevant postoperative fistula after pancreatic resection compared with duct sizes greater than 3 mm.² I believe that mismatched preoperative pancreatic duct sizes could affect the primary outcome, such that its reduced occurrence in patients in the algorithm-based care group (8%) relative to the usual care group (14%) might be correlated with the larger pancreatic duct sizes of patients in the algorithm-based care group. The advantage achieved in terms of primary outcome might therefore not necessarily be a result of algorithm-based care.

I note that patients and investigators were not masked to treatment. This lack of masking could result in more proactive treatment of patients in the algorithm-based care group than patients in the usual care group as a result of delivering more focused during management. A double-blinded design would be preferable for future studies.

The evidence therefore seems limited and should not be overinterpreted.

I declare no competing interests.

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F Jasmijn Smits and colleagues report the significant improvement in clinical outcomes for algorithm-based care compared with usual care in the PORSCHE trial.¹ The multi-modal, multidisciplinary algorithm