Dr Mary Mwanyika Sando

PERSONAL PROFILE

Dr. Mary Mwanyika Sando is the Chief Executive Officer for the Africa Academy for Public Health (AAPH) -Tanzania. Dr. Sando holds a medical degree (MD) from Muhimbili University of Health and Allied Sciences, Tanzania (1999-2004) and a Master of Public Health (MPH) from Harvard School of Public Health, Harvard University, USA (2012-2013). With over 15 years of public health experience, Dr. Sando has been extensively involved the design, implementation and evaluation of MNCAH and nutrition interventions within both national and international organizations. She is currently leading efforts at AAPH to advance implementation science research, support capacity building for research and evidence translation into policy and practice. Dr Sando is an advocate for improvement of women's health including designing of women-centered care to promote the provision of more respectful and dignified health care including respective maternity care (RMC). Prior to her current position Dr Sando worked with UNICEF Tanzania (2014-2015) as a Health Systems Strengthening Specialist for MNCH and the Maternal and Child Health Coordinator with Management and Development for Health (MDH) 2007-2012.

Education

Harvard School of Public Health

Master of Public Health, Global Health & Population

2013

Muhimbili University of Health and Allied Sciences

Doctor of Medicine 2004

Positions and Employment

Africa Academy for Public Health

January 2017 - Date

Serving as Chief Executive Officer;

- Creating, communicating and integrating the AAPH's vision, mission, and overall direction by leading the development and implementation of its overall strategy.
- Overseeing the complete operational plan of AAPH in accordance with the direction established in the strategic plan.
- Enforcing adherence to legal guidelines and internal policies to maintain AAPH's legality and ethics.
- Reviewing financial and non-financial reports to devise solutions or improvements.
- Leading, guiding, directing, and evaluating the success of AAPH in reaching its goals and provide solutions to problematic situations to ensure survival and growth of the organization.
- Leading and motivating subordinates to advance employee engagement to enhance the development of a high performing team.
- Building trusted relations with key partners and stakeholders while maintaining awareness of both the external and internal competitive landscape and opportunities for expansion.
- Represent AAPH for civic and professional association responsibilities and activities in the local community, the state, and at the national and international levels.

Served as Deputy Chief Executive Officer where I;

- Led development of AAPH Strategic plan & the development and implementation of operational plans and goals.
- Executed all board-approved policies.
- Provided overall technical and administration leadership to the organization's personnel.
- Led the organization in pursuing funding opportunities.
- Led implementation of research & capacity building activities and ensure correct and timely recording and reporting of key activities.

UNICEF Maternal, Newborn & Child Health

April 2014 - March 2015

While serving as Health Systems Strengthening Specialist, I was responsible for;

- Formulation, design, planning, implementing monitoring & evaluation of cost-effective health programs.
- Providing technical and operational guidance to Maternal and Newborn Health partners on programme implementation in UNICEF supported regions and districts.
- Participating and supporting SWAp mechanisms including the Development Partners Group-Health group, Basket Fund committees, Audit Sub Committee, Maternal, Newborn and Child Health Steering Committee, Monitoring and Evaluation TWG, Public Private Partnership TWG and Health Care Financing TWG.
- Contributing to the development and implementation of detailed sectoral work-plans and budgets for specific Health interventions.

Management and Development for Health

2009 - 2014

Being the Maternal and child health coordinator, I successfully;

- Initiated and implemented the universal scale up Prevention of Mother-To-Child Transmission of HIV (PMTCT) and HIV Early infant diagnosis services in Dar es Salaam region.
- Initiated the integration of comprehensive HIV care and treatment with RMNCH through PMTCT.
- Supervised and provided technical assistance to district MNCH teams.
- Initiated other MNCH services outside of the scope of PMTCT eg family planning integration.
- Fostered collaborations with the Ministry of Health and Social Welfare as well as with national and international RMNCH implementing partners.

Management and Development for Health

Dar es Salaam 2007 - 2009

Serving as a Medical Monitor and Clinical Coordinator for the Trial of Vitamins 3 study (TOV3), together with the team, I:

- Planned and supervised the implementation of clinical activities and provided technical
 assistance working with nursing, pharmacy, patient tracking, data, and clinical units to ensure
 timely preparation of the study regimen for all participants, consenting of clients, follow up and
 retention of enrolled clients, accurate collection of clinical data from the seven study sites,
 completing verbal autopsies for death confirmation and worked with data team to ensure data
 completion and accuracy.
- Created project specific standard operating procedures (SOPs) and clinic flow charts
- Reviewed death charts and documented possible causes of deaths and reported any adverse events
- Supervised project quality improvements activities such as the patient chart reviews.

PASADA

Dar es Salaam 2005 - 2007

Served as a Medical Officer.

Muhimbili National Hospital Served as House Officer.

Dar es Salaam 2004 - 2005

Professional activities

Principle and Co Principal Investigator

- Adolescent Health Survey: Harnessing longitudinal data and digital technologies to improve adolescent health in Burkina Faso, China, Ethiopia, Ghana, India, Nigeria, South Africa, Tanzania, and Uganda. The study aims to lay the groundwork for sustainable repeated collection of adolescent health indicators to inform interventions aimed to improve adolescent health. In Tanzania, while implementing this proposed study in collaboration with the Tanga City Medical Officer's office as well as the Muhimbili University of Health and Allied Sciences (MUHAS), AAPH has aligned this study with the Tanzanian government efforts to improve adolescent health and wellbeing as stated in the National Accelerated Action and Investment Agenda for Adolescent Health and Wellbeing (NAIA 2020/21 – 2023/24). Specifically, the study intends to develop a standardized survey instrument that can be implemented in communities and schools to collect key adolescent health indicators related to nutrition, sexual and reproductive, mental and physical health, WASH, substance use and health services utilization; evaluate effectiveness of digital approaches in collecting key adolescent health indicators; and conduct a mixed-methods assessment of the school health environment and out of school adolescent with a focus on nutrition, sexual and reproductive, mental and physical health, WASH, substance use and health services utilization. 2021 – to date
- Scaling-up high-impact micronutrient supplementation interventions to improve adolescents' nutrition and health in Tanzania and Burkina Faso. This study aims to implement and evaluate school-based micronutrient supplementation and educational interventions to improve adolescent nutrition, health and education in Tanzania and Burkina Faso. Findings from this study will clarify the optimal supplementation strategy (iron and folic acid alone or adding other essential nutrients) and provide a basis for scale up of national school-based micronutrient supplementation programs to benefit the adolescent population as a whole in Tanzania and Burkina Faso. **2020 to date**

- The goal of the Meals, Education, and Gardens for In-School Adolescents (MEGA) project is to study the effects of the integrated intervention on the nutrition and health of adolescents and their families in Tanzania. Our study seeks to assess the impact of the full intervention package (school meal, garden, and education), compared to the partial intervention package (school garden and education only), compared to control (standard of care) on participating adolescents, parents, and teachers.
 2020 – to date
- Calcium Supplementation Clinical Trial. In charge of data management in this ongoing trial funded by the Bill & Melinda Gates Foundation aimed at generating causal evidence for decision-making on the potential non-inferiority of a lower dose of calcium (500 mg) in preventing preeclampsia and preterm birth and to understand the acceptability, uptake, and adherence to the WHO recommended 1500 mg calcium supplementation among pregnant women in Tanzania. We are conducting, individually randomized, double blind trials in Dar es Salaam, Tanzania. Each woman will be randomized to either standard dose (1500 mg) or low dose (500 mg) calcium supplementation. A parallel, mixed-methods implementation cohort study is also being conducted at one additional health facility in India and Tanzania to assess the barriers and enablers of health system implementation and individual acceptability and compliance of the WHO-recommended 1500 mg calcium supplementation regimen.

2019 – to date

 Engaging Fathers For Effective Child Nutrition (EFFECT) and Nurturing Care (EFFECT+) in Tanzania (EFFECTS). Lead the evaluation team in Tanzania supporting Harvard and Purdue Universities in data collection systems preparation, field survey and preliminary data cleaning. Overall, this will be a five-arm study design for EFFECT (3 arms) and EFFECT+ (2 arms). The trial is being implemented in the Mara region – Tanzania, with PCI as the lead implementing partner.

2017 – to date

Diet, Environment, and Choices of positive living (DECIDE study): Evaluating personal and
external food environment influences on diets among PLHIV and families in Dar es Salaam,
Tanzania. Oversee the qualitative evidence synthesis (QES) on food choice among people living
with HIV and bring together three methodologies (qualitative, survey, and geo-spatial mapping)
to comprehensively characterize external and personal FEs including food choice and nutrient
adequacy of diets among people living with HIV and their households as guided by Turner's food
environment framework and Giddens's structuration theory.

2018 - to date

Research Design and Coordination

Lead AAPH in implementation of the National Food Fortification Assessment Survey in Tanzania mainland and Zanzibar (FACT 2015, Survey). The Fortification Assessment Coverage Tool (FACT) is a survey instrument developed by the Global Alliance for Improved Nutrition (GAIN) for carrying out coverage assessments of large-scale food fortification programs. The survey was successfully conducted, and final report was launched by the Permanent Secretary of the Ministry of Health, Community Development, Gender, Elderly and Children Dr Mpoki Ulisubisya, in July 2016. It is also published by the National Bureau of Statistics nbs.go.tz.

 Evaluation of Management and Development for Health (MDH) HIV/AIDS Programs. Lead AAPH team in conducting formal evaluation of various MDH ongoing interventions to identify the best models and key gaps that will inform improvement and increase program performance of its HIV care & treatment programs in Dar es Salaam and Kagera regions.

2017 - 2018

• Dodoma Demographic & Health Surveillance System (DHSS): In collaboration with the University of Dodoma and the Dodoma Regional Health Management Team, I lead AAPH as we established the DHSS in Chamwino district, Dodoma. The aims of establishing this cohort study is to track health related indicators and study the impact of health interventions among residents of all ages in Dodoma region. Baseline data collection for this rural cohort within Chamwino district was implemented between July and December 2016 and has enrolled about 23,785 individuals within 5,266 households. The Dodoma HDSS team is now on the planning phase for round one data collection that will focus on early child development and an adolescent health survey using the standard tool shared within the ARISE partners.

2015 – to date

Lead coordination of the Africa Research Implementation Science and Education (ARISE)
 Network formation. Arise is a network for collaborative education and research activities
 (Research projects and grant writing) in Africa established by Harvard T.H. Chan School of Public
 Health in partnership with AAPH and leading institutions and organizations across the African
 region including Botswana, Ethiopia, Ghana, Nigeria, South Africa, Tanzania and Uganda. Five
 out of the seven network members have successfully implemented an adolescent health survey
 using a standard tool; findings from this baseline will form a foundation for a larger study in
 future.

2014 - to date

Capacity building and mentorship

Established a successful internship program for undergraduate students who are in their middle to senior years and interested in practical experience in public health and research. AAPH offers an opportunity to pair each student with two mentors, one in Tanzania and one from Harvard T.H. Chan School of Public Health. MDH supported Public health HIV Care and Treatment clinics as well as the Reproductive and Child Health Clinics that provide Prevention of Mother To Child Transmission of HIV (PMTCT), provide an opportunity for the interns to participate in real fieldwork. Additionally, the Dar es Salaam Urban Cohort Study (DUCS) that is jointly implemented by MUHAS and the Harvard T.H. Chan School of Public Health with administrative support from AAPH as well as the Dodoma Demographic & Health Surveillance System (DHSS) offer an opportunity for interns to experience community health. To date, AAPH has currently hosted over 11 interns within four years from different universities and will be expanding its program to attach more students within and outside Tanzania through the ARISE network partners.

2015 - to date

Selected National Committees and Professional activities

• Member – National Immunization Technical Advisory Group (NITAG Tanzania)

- Member & former Publicity Secretary and Executive Committee member: Medical Women Association of Tanzania (MEWATA 2007 to March 2011).
- Former member & co-chair of PMTCT treatment guideline review team: National PMTCT Implementing Partners Technical Working Group.
- Member: National Safe Motherhood Initiative, under Ministry of Health, Community Development, Gender, Elderly and Children
- Member: Tanzania National Food Fortification Alliance

Honors

- Sandoz Prize, by Mr. Chris Winter, for the 2nd best MD final year student in MD course in Psychiatry (Nov 2004).
- The Albert Schweitzer Award at Harvard School of Public Health (May 2013).
- New Voices Fellow with the Aspen Institute Global Health & Development Program Inaugural class member (2013 2014).

Relevant publications

- 1. Finlay JE, Assefa N, **Mwanyika-Sando M**, et al. Sexual and reproductive health knowledge among adolescents in eight sites across sub-Saharan Africa. *Tropical Medicine & International Health* 2019;25(1):44-53. doi: 10.1111/tmi.13332
- Design and Field Methods of the ARISE Network COVID-19 Rapid Monitoring Survey Elena C. Hemler, Michelle L. Korte, Bruno Lankoande, Ourohire Millogo, Nega Assefa, Angela Chukwu, Firehiwot Workneh, Amani Tinkasimile, Isaac Lyatuu, Abdramane Soura, Dongqing Wang, Isabel Madzorera, Said Vuai, Till Barnighausen, Mary Mwanyika Sando, Japhet Killewo, Ayoade Oduola, Ali Sie, Yemane Berhane, and Wafaie W. Fawzi https://doi.org/10.4269/ajtmh.20-1618
- Community health workers to improve uptake of maternal healthcare services: A cluster-randomized pragmatic trial in Dar es Salaam, Tanzania. Pascal Geldsetzer, Eric Mboggo, Elysia Larson, Irene Andrew Lema, Lucy Magesa, Lameck Machumi, Nzovu Ulenga, David Sando, Mary Mwanyika-Sando, Donna Spiegelman, Ester Mungure, Nan Li, Hellen Siril, Till Bärnighausen. Published: March 29, 2019. https://doi.org/10.1371/journal.pmed.1002768
- 4. Risk factors for overweight and obesity among women of reproductive age in Dar es Salaam, Tanzania Dominic Mosha^{1,2*}, Heavenlight A. Paulo^{3,4}, **Mary Mwanyika-Sando¹**, Innocent B. Mboya^{3,5}, Isabel Madzorera⁶, Germana H. Leyna^{4,7}, Sia E. Msuya³, Till W. Bärnighausen⁸, Japhet Killewo⁴ and Wafaie W. Fawzi^{6,9} Mosha et al. BMC Nutrition (2021) 7:37 https://doi.org/10.1186/s40795-021-00445-z
- 5. The prevalence of disrespect and abuse during facility-based childbirth in urban Tanzania. David Sando, Hannah Ratcliffe, Kathleen McDonald, Donna Spiegelman, Goodluck Lyatuu, Mary Mell Wegner, Guerino Chalamilla & Ana Langer. BMC Pregnancy and Childbirth volume 16, Article number: 236 (2016)
- Prevalence, Awareness, Treatment, and Control of Hypertension among Young and Middle-Aged Adults: Results from a Community-Based Survey in Rural Tanzania. Volume 2020 | Article ID 9032476 | https://doi.org/10.1155/2020/9032476

- 7. Alfa J. Muhihi, ^{1,2,3} Amani Anaeli, ⁴ Rose N. M. Mpembeni, ⁵ Bruno F. Sunguya, ¹Germana Leyna, ⁵ Deodatus Kakoko, ⁶ Anna Tengia Kessy, ¹ **Mary Mwanyika Sando**, ² Marina Njelekela, ^{7,8} and David P. Urassa ¹
- 8. Evaluation of a community health worker intervention and the World Health Organization's Option B versus Option A to improve antenatal care and PMTCT outcomes in Dar es Salaam, Tanzania: study protocol for a cluster-randomized controlled health systems implementation trial. David Sando, Pascal Geldsetzer, Lucy Magesa, Irene Andrew Lema, Lameck Machumi, Mary Mwanyika-Sando, Nan Li, Donna Spiegelman, Ester Mungure, Hellen Siril, Phares Mujinja, Helga Naburi, Guerino Chalamilla, Charles Villewo, Anna Mia Ekström, Wafaie W Fawzi & Till W Bärnighausen. Trials Volume 15, Article number: 359 (2014)
- 9. Ambikapathi R, Shively G, Leyna G, Mosha D, Mangara A, Patil CL, Boncyk M, Froesea SL, Verissimo CK, Kazonda P, **Mwanyika-Sando M**, Killewo J, Gunaratna NS. (2021). "Informal food environment is associated with household vegetable purchase patterns and dietary intake in the DECIDE study: Empirical evidence from food vendor mapping in peri-urban Dar es Salaam, Tanzania." Global Food Security, 28, 100474, in press.
- 10. Sando D, Geldsetzer P, Magesa L, Andrew I, Machumi L, Sando MM, Li N, Speiegelman D, Mungure E, Siril H, Mujinja P, Naburi H, Chalamilla G, Kilewo C, Ekstrom AM, Fawzi WW, Bärnighausen TW. Evaluation of a community health worker intervention and the World Health Organization's Option B versus Option A to improve antenatal care and PMTCT outcomes in Dar es Salaam, Tanzania: study protocol for a cluster-randomized controlled health systems implementation trial. Trials 2014, 15:359 doi: 10.1186/1745-6215-15-359
- 11. Women's Preferences Regarding Infant or Maternal Antiretroviral Prophylaxis for Prevention of Mother-To-Child Transmission of HIV during Breastfeeding and Their Views on Option B+ in Dar es Salaam, Tanzania Matilda Ngarina, Edith A. M. Tarimo, Helga Naburi, Charles Kilewo, Mary Mwanyika-Sando, Guerino Chalamilla, Gunnel Biberfeld, Anna Mia Ekstrom. Published: January 22, 2014. https://doi.org/10.1371/journal.pone.0085310
- Maternal Dietary Diversity and Growth of Children Under 24 Months of Age in Rural Dodoma, Tanzania.
 <u>Megan Huang</u>, MS, <u>Christopher Sudfeld</u>, MS, ScD, <u>Abbas Ismail</u>, MS, <u>Said Vuai</u>, MS, PhD, <u>Julius Ntwenya</u>, PhD, <u>Mary Mwanyika-Sando</u>, MD, MPH, <u>Wafaie Fawzi</u>, MBBS, MS, MPH, DrPH.First Published March 21, 2018 Research Article <u>Find PubMed https://doi.org/10.1177/0379572118761682</u>.
- 13. Public knowledge of risk factors and warning signs for cardiovascular disease among young and middle-aged adults in rural Tanzania. <u>Alfa J. Muhihi, Amani Anaeli, Rose N. M. Mpembeni, Bruno F. Sunguya, Germana Leyna, Deodatus Kakoko, Anna Tengia Kessy, Mary Mwanyika Sando, Marina Njelekela & David P. Urassa. <u>BMC Public Health volume 20</u>, Article number: 1832 (2020).</u>
- 14. A Rapid Review of Available Evidence to Inform Indicators for Routine Monitoring and Evaluation of Respectful Maternity Care. Patience A. Afulani, Laura Buback, Brienne McNally, Selemani Mbuyita, Mary Mwanyika-Sando, Emily Peca Global Health: Science and Practice 2020 | Volume 8 | Number 1
- 15. Li N, Matchi E, Spiegelman D, Chalamilla G, Hertzmank E, Sando D, **Sando MM**, Liu E, Muya A, Fawzi WW. Maternal Mortality among HIV-infected Pregnant Women in Tanzania. Acta Obstet Gynecol Scand, 2014; 93(5):463-8.
- 16. Design and field methods of the ARISE Network Adolescent Health Study. Anne Marie Darling ¹, Nega Assefa ², Till Bärnighausen ¹³⁴, Yemane Berhane ⁵, Chelsey R Canavan ¹, David Guwatudde ⁶, Japhet

- <u>Killewo ⁷</u>, <u>Ayoade Oduola ⁸</u>, <u>Mary M Sando ⁹</u>, <u>Ali Sie ¹⁰</u>, <u>Christopher Sudfeld ¹</u>, <u>Said Vuai ¹¹</u>, <u>Richard Adanu ¹²</u>, <u>Wafaie W Fawzi ¹</u> Trop Med Int Health. 2020 Jan;25(1):5-14. doi: 10.1111/tmi.13327. Epub 2019 Nov 26.PMID: 31691409
- 17. Prevalence and risk factors associated with malnutrition among adolescents in rural Tanzania. <u>Abbas Ismail ¹</u>, <u>Anne Marie Darling ²</u>, <u>Dominic Mosha ³</u>, <u>Wafaie Fawzi ² ⁴, Christopher Sudfeld ²</u>, <u>Mary Mwanyika Sando ³, Ramadhani Abdallah Noor ² ³, James Charles ⁶, <u>Said Vuai 1</u> https://pubmed.ncbi.nlm.nih.gov/31693787/</u>
- 18. Ngarina M, Tarimo EAM, Naburi H, Kilewo C, **Sando MM**, Chalamilla G, Biberfeld G, Ekstrom AM. Womens' preferences regarding infant or maternal antiretroviral prophylaxis for prevention of mother-to-child transmission of HIV during breastfeeding and their views on Option B+ in Dar es Salaam, Tanzania. PLoS One 2014 22; 9(1):e85310. Epub 2014 Jan 22.
- Sando D, Kendall T, Lyatuu G, Ratcliffe H, McDonald K, Mwanyika-Sando M, Emil F, Chalamilla G, Langer A. Disrespect and abuse during child birth in Tanzania: are women living with HIV more vulnerable? J Acquir Immune Defic Syndr. 2014 Dec 1;67 Suppl 4:S228-34. doi: 10.1097/QAI.000000000000378. PMID: 25436822
- 20. Lema I, Sando D, Magesa L, Machumi L, Mungure E, **Sando MM**, Geldsetser P, Foster D, Kajoka D, Naburi H, Ekstrom AM, Spiegelman D, Li N, Chalamilla G, Fawzi W, Bärnighausen TW. Community Health Workers to Improve Antenatal Care and PMTCT Uptake in Dar es Salaam, Tanzania: A Qualitative Performance Evaluation. J Acquir Immune Defic Syndr. 2014 Dec 1;67 Suppl 4:S195-201. doi: 10.1097/QAI.000000000000371. PMID:25436818
- 21. Applying a participatory approach to the promotion of a culture of respect during childbirth. Hannah L Ratcliffe 12, David Sando 34, Mary Mwanyika-Sando 5, Guerino Chalamilla 45, Ana Langer 3, Kathleen P McDonald. PMID: 27424514.
- 22. Disrespect and abuse during childbirth in Tanzania: are women living with HIV more vulnerable? <u>David Sando ¹</u>, <u>Tamil Kendall, Goodluck Lyatuu, Hannah Ratcliffe, Kathleen McDonald, Mary Mwanyika-Sando, Faida Emil, Guerino Chalamilla, Ana Langer. PMID: **25436822**. PMCID: PMC4251905</u>
- 23. The prevalence of disrespect and abuse during facility-based childbirth in urban Tanzania. <u>David Sando 12</u>, <u>Hannah Ratcliffe 34</u>, <u>Kathleen McDonald 35</u>, <u>Donna Spiegelman 5</u>, <u>Goodluck Lyatuu 7</u>, <u>Mary Mwanyika-Sando 8</u>, <u>Faida Emil 7</u>, <u>Mary Nell Wegner 3</u>, <u>Guerino Chalamilla</u>, <u>Ana Langer 3 PMID: **27543002**. PMCID: PMC4992239.</u>
- 24. The effect of a community health worker intervention on public satisfaction: evidence from an unregistered outcome in a cluster-randomized controlled trial in Dar es Salaam, Tanzania. Elysia Larson 1, Pascal Geldsetzer 2, Eric Mboggo 3, Irene Andrew Lema 3, David Sando 2, Anna Mia Ekström 4, Wafaie Fawzi 2, Dawn W Foster 5, Charles Kilewo 6, Nan Li 7, Lameck Machumi 3, Lucy Magesa 3, Phares Mujinja 6, Ester Mungure 3, Mary Mwanyika-Sando 8, Helga Naburi 6, Hellen Siril 3, Donna Spiegelman 2 10, Nzovu Ulenga 3, Till Bärnighausen 11 PMID: 30922341.
- 25. Antiretroviral Therapy in Relation to Birth Outcomes among HIV-infected Women: A Cohort Study. Nan Li¹, Mary Mwanyika Sando², Donna Spiegelman³, Ellen Hertzmark⁴, Enju Liu¹, David Sando², Lameck Machumi², Guerino Chalamilla², Wafaie Fawzi⁵ PMID: 26265780. DOI: 10.1093/infdis/jiv389.
- 26. The complexity of scaling up an mHealth intervention: the case of SMS for Life in Tanzania from a health systems integration perspective. Carmen Sant Fruchtman ¹², Selemani Mbuyita ³, Mary Mwanyika-Sando ³, Marcel Braun ⁴, Don de Savigny ^{# 5 6}, Daniel Cobos Muñoz [#].PMID: 33853601. http://www.ncbi.nlm.nih.gov/pmc/articles/pmc8048333