

Activity Theory Model in Information Systems Research in Practice: Theoretical Framework for Information Communication during Management of Intrapartum

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Background and Purpose: Intrapartum period is defined as the period from the diagnosis of labour to one hour after the delivery of the placenta, also known as fourth stage of labour. Information communication during intrapartum management is vital for the continuation of care. This paper focuses on how the Activity Analysis and Development (ActAD) framework and the Activity-Driven Information Systems Development (AD-ISD) model can be practically used in the analysis of the information communication processes. The practical application for work-oriented information communication research in practice is discussed. The dimensions, levels and phases of the AD-ISD model are elaborated on their application in analysis as a theoretical framework, for information communication by skilled birth attendants during the intrapartum period of pregnancy.

Method: The ActAD framework views work activities as an integration of systems with its elements and activity networks forming information communication. Within these levels there are barriers of communication and enablers which require identification in order to enhance work activities.

The AD-ISD model then provides methods and techniques for 1) understanding the present state of an activity; 2) describing the goal state of the activity; and 3) planning for the transformation to the goal state through planned changes.

Results: We provide an ActAD analysis of the current state of activities during the intrapartum period in a case Maternal and Obstetrics Unit (MOU) in Cape Town, South Africa, focusing particularly on the information communication within the MOU and between the MOU and its referral hospital. We then describe the goal state of the intrapartum activities by applying AD-ISD. The plans of change and the practical application of the model will be elaborated on after the completion of the research data collection.

Conclusion: The current engagement results and pilot study experiences have been very reassuring on the applicability of the ActAD framework and the AD-ISD model to analysing the current state and drafting the goal state of information communication in healthcare activities in an African context.

Keywords: Activity Theory, Information systems, Intrapartum period, Meaning

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